



# Common Reference Data Management

## User Detailed Functional Specifications

R2024.JUN

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| Version | R2024.JUN  |
| Date    | 22/02/2024 |

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|  |            |
|--|------------|
| <b>INTRODUCTION .....</b>  | <b>10</b>  |
| <b>READER'S GUIDE.....</b>                                       | <b>15</b>  |
| <b>1. GENERAL FEATURES OF CRDM .....</b>                         | <b>18</b>  |
| 1.1 INTRODUCTION TO CRDM.....                                    | 18         |
| 1.2 ACCESS TO CRDM .....   | 20         |
| <b>1.2.1 Connectivity .....</b>                                  | <b>20</b>  |
| <b>1.2.2 Access rights .....</b>                                 | <b>25</b>  |
| 1.2.2.1 Access rights concepts.....                              | 25         |
| 1.2.2.2 Access rights configuration .....                        | 100        |
| 1.2.2.3 Configuration of secured objects and secured groups..... | 114        |
| 1.2.2.4 Access rights configuration process .....                | 116        |
| <b>1.2.3 Message subscription .....</b>                          | <b>124</b> |
| 1.2.3.1 Message subscription configuration .....                 | 124        |
| 1.2.3.2 Message subscription parameter types .....               | 124        |
| 1.2.3.3 Message subscription examples .....                      | 133        |
| <b>1.2.4 Graphical user interface.....</b>                       | <b>140</b> |
| <b>1.2.5 Security .....</b>                                      | <b>150</b> |
| 1.2.5.1 Confidentiality .....                                    | 150        |
| 1.2.5.2 Integrity .....  | 150        |
| 1.2.5.3 Monitoring.....  | 151        |
| 1.2.5.4 Availability.....  | 151        |
| 1.2.5.5 Auditability .....                                       | 151        |
| 1.3 REFERENCE DATA MODEL.....                                    | 151        |
| <b>1.3.1 Common information.....</b>                             | <b>152</b> |
| <b>1.3.2 Party data management .....</b>                         | <b>155</b> |
| 1.3.2.1 Data Model of the component .....                        | 155        |
| 1.3.2.2 Description of the component.....                        | 156        |
| 1.3.2.3 Description of the entities .....                        | 156        |
| <b>1.3.3 Cash account data management.....</b>                   | <b>164</b> |
| 1.3.3.1 Data model of the component .....                        | 164        |
| 1.3.3.2 Description of the component.....                        | 165        |
| 1.3.3.3 Description of the entities .....                        | 165        |
| <b>1.3.4 Securities Data Management.....</b>                     | <b>177</b> |
| 1.3.4.1 Data model of the component .....                        | 177        |
| 1.3.4.2 Description of the component.....                        | 178        |
| 1.3.4.3 Description of the entities .....                        | 178        |
| <b>1.3.5 Securities Account Data Management .....</b>            | <b>182</b> |
| 1.3.5.1 Data model of the component.....                         | 182        |
| 1.3.5.2 Description of the component.....                        | 183        |
| 1.3.5.3 Description of the entities .....                        | 183        |
| <b>1.3.6 Access rights management .....</b>                      | <b>186</b> |
| <b>1.3.7 Message subscription configuration.....</b>             | <b>190</b> |
| <b>1.3.8 Network configuration .....</b>                         | <b>193</b> |

|  |            |
|--|------------|
| <b>1.3.9 Report configuration .....</b>                          | <b>195</b> |
| <b>1.3.10 Restriction type management .....</b>                  | <b>197</b> |
| <b>1.3.11 Conditional Securities Delivery .....</b>              | <b>201</b> |
| <b>1.3.12 Attribute Domain .....</b>                             | <b>205</b> |
| <b>1.3.13 Market-specific attributes .....</b>                   | <b>207</b> |
| <b>1.3.14 Configuration parameters .....</b>                     | <b>209</b> |
| <b>1.3.15 Business Day Management configuration .....</b>        | <b>213</b> |
| <b>1.4 CRDM FEATURES .....</b>                                   | <b>216</b> |
| <b>1.4.1 Concept .....</b>                                       | <b>216</b> |
| <b>1.4.2 Overview .....</b>                                      | <b>216</b> |
| <b>1.4.3 Common reference data maintenance process .....</b>     | <b>217</b> |
| 1.4.3.1 Common reference data objects .....                      | 217        |
| 1.4.3.2 Reference data maintenance types .....                   | 225        |
| 1.4.3.3 Validity of common reference data objects .....          | 227        |
| 1.4.3.4 Common reference data archiving and purging .....        | 239        |
| 1.4.3.5 Lifecycle of common reference data objects .....         | 244        |
| 1.4.3.6 Reference data maintenance instructions processing ..... | 256        |
| 1.4.3.7 Reference data status management .....                   | 262        |
| 1.4.3.8 Common reference data propagation .....                  | 263        |
| <b>1.4.4 TIPS Directory .....</b>                                | <b>270</b> |
| 1.4.4.1 Purpose .....  | 270        |
| 1.4.4.2 Structure .....  | 270        |
| 1.4.4.3 Generation .....   | 272        |
| 1.4.4.4 Distribution .....                                       | 272        |
| 1.4.4.5 XML Envelope .....                                       | 273        |
| <b>1.4.5 RTGS Directory .....</b>                                | <b>273</b> |
| 1.4.5.1 Purpose .....  | 273        |
| 1.4.5.2 Structure .....  | 274        |
| 1.4.5.3 Generation .....   | 276        |
| 1.4.5.4 Distribution .....                                       | 276        |
| 1.4.5.5 XML Envelope .....                                       | 277        |
| 1.4.5.6 Example .....  | 278        |
| <b>1.4.6 CLM Repository .....</b>                                | <b>280</b> |
| 1.4.6.1 Purpose .....  | 280        |
| 1.4.6.2 Structure .....  | 280        |
| 1.4.6.3 Generation .....   | 281        |
| 1.4.6.4 Distribution .....                                       | 281        |
| 1.4.6.5 XML Envelope .....                                       | 281        |
| <b>1.5 INTERACTIONS WITH OTHER SERVICES .....</b>                | <b>282</b> |
| <b>1.5.1 TARGET2-Securities .....</b>                            | <b>282</b> |
| <b>1.5.2 TARGET2 .....</b>                                       | <b>283</b> |
| <b>1.5.3 TARGET Instant Payment Settlement and T2 .....</b>      | <b>284</b> |
| <b>1.5.4 Eurosystem Collateral Management System .....</b>       | <b>285</b> |
| <b>1.5.5 ECONS2 .....</b>  | <b>285</b> |
| <b>1.6 OPERATIONS AND SUPPORT .....</b>                          | <b>285</b> |

|   |            |
|---|------------|
| <b>1.6.1 Data configuration</b> .....                                       | <b>285</b> |
| <b>1.6.2 Business and operations monitoring</b> .....                       | <b>286</b> |
| <b>1.6.3 TARGET Services calendar management</b> .....                      | <b>287</b> |
| <b>1.6.4 Archiving management</b> .....                                     | <b>287</b> |
| <b>1.6.5 Data Migration management overview</b> .....                       | <b>288</b> |
| 1.7 LIMITATIONS OF THE SYSTEM .....   | 289        |
| <b>1.7.1 Rule-based configurations</b> .....                                | <b>289</b> |
| <b>2 DIALOGUE BETWEEN CRDM AND CRDM ACTORS</b> .....                        | <b>290</b> |
| 2.1 INTRODUCTION .....  | 290        |
| 2.2 A2A COMMON REFERENCE DATA MAINTENANCE AND QUERY PROCESS .....           | 290        |
| <b>2.2.1 Reference data maintenance process</b> .....                       | <b>290</b> |
| 2.2.1.1 Reference data maintenance processing steps .....                   | 290        |
| <b>2.2.2 Common reference data query</b> .....                              | <b>294</b> |
| 2.2.2.1 Reference data query processing steps.....                          | 294        |
| 2.3 DATA MIGRATION TOOL FILE UPLOAD .....                                   | 296        |
| <b>2.3.1 Data Migration Tool File Upload processing steps</b> .....         | <b>296</b> |
| 2.4 MAINTAIN REFERENCE DATA OBJECT FOR T2S.....                             | 299        |
| <b>2.4.1 Introduction</b> .....   | <b>299</b> |
| <b>2.4.2 Activity Diagram</b> .....   | <b>299</b> |
| 2.4.2.1 Reference Data Consistency check .....                              | 300        |
| 2.4.2.2 Reference Data Maintenance Execution .....                          | 301        |
| 2.5 RESTRICT REFERENCE DATA OBJECT .....                                    | 301        |
| <b>2.5.1 Introduction</b> .....   | <b>301</b> |
| <b>2.5.2 Activity Diagram</b> .....   | <b>302</b> |
| 2.5.2.1 Reference Data Consistency check .....                              | 303        |
| 2.5.2.2 Reference Data Restriction Execution .....                          | 303        |
| 2.6 BULK LOAD SECURITIES VALUATIONS.....                                    | 304        |
| <b>2.6.1 Introduction</b> .....   | <b>304</b> |
| <b>2.6.2 Activity Diagram</b> .....   | <b>304</b> |
| 2.6.2.1 Reference Data Valuations File Check .....                          | 304        |
| 2.7 BULK LOAD SECURITIES SUBJECT TO CASH PENALTIES.....                     | 305        |
| <b>2.7.1 Introduction</b> .....   | <b>305</b> |
| <b>2.7.2 Activity Diagram</b> .....   | <b>305</b> |
| 2.7.2.1 Reference Data Securities Subject to Cash Penalties File Check..... | 305        |
| 2.8 BULK LOAD DAILY PRICES FOR PENALTIES .....                              | 306        |
| <b>2.8.1 Introduction</b> .....   | <b>306</b> |
| <b>2.8.2 Activity Diagram</b> .....   | <b>306</b> |
| 2.8.2.1 Reference Data Daily Prices File Check .....                        | 306        |
| <b>3 CATALOGUE OF MESSAGES</b> .....  | <b>307</b> |
| 3.1 LIST OF MESSAGES .....  | 307        |
| <b>3.1.1 Cash Management (camt)</b> .....                                   | <b>307</b> |
| 3.1.1.1 ModifyStandingOrder (camt.024).....                                 | 307        |
| 3.1.1.2 GetStandingOrder (camt.069) .....                                   | 312        |
| 3.1.1.3 ReturnStandingOrder(camt.070) .....                                 | 318        |



|   |            |
|---|------------|
| 3.1.1.4 DeleteStandingOrder (camt.071) .....                    | 333        |
| 3.1.1.5 GetLimit (camt.009) .....                               | 334        |
| 3.1.1.6 ReturnLimit (camt.010).....                             | 338        |
| 3.1.1.7 ModifyLimit (camt.011).....                             | 341        |
| 3.1.1.8 DeleteLimit (camt.012) .....                            | 344        |
| 3.1.1.9 ModifyReservation (camt.048).....                       | 347        |
| 3.1.1.10 Receipt (camt.025).....                                | 349        |
| 3.1.1.11 DirectDebitMandateQuery (camt.099).....                | 351        |
| 3.1.1.12 DirectDebitMandateReport (camt.100) .....              | 353        |
| <b>3.1.2 Account Management (acmt) .....</b>                    | <b>355</b> |
| 3.1.2.1 AccountQueryList (acmt.025) .....                       | 355        |
| 3.1.2.2 AccountListReport (acmt.026) .....                      | 359        |
| 3.1.2.3 AccountOpeningRequest (acmt.007) .....                  | 362        |
| 3.1.2.4 AccountRequestAcknowledgement (acmt.010).....           | 366        |
| 3.1.2.5 AccountRequestRejection (acmt.011) .....                | 367        |
| 3.1.2.6 AccountExcludedMandateMaintenanceRequest (acmt.015)...  | 368        |
| 3.1.2.7 AccountClosingRequest (acmt.019) .....                  | 372        |
| <b>3.1.3 Reference Data Management (reda).....</b>              | <b>373</b> |
| 3.1.3.1 PartyQuery(reda.015) .....                              | 373        |
| 3.1.3.2 PartyReport(reda.017) .....                             | 376        |
| 3.1.3.3 CashAccountAuditTrailQuery (reda.039).....              | 379        |
| 3.1.3.4 CashAccountAuditTrailReport (reda.040).....             | 381        |
| 3.1.3.5 PartyAuditTrailQuery (reda.042) .....                   | 383        |
| 3.1.3.6 PartyAuditTrailReport (reda.043) .....                  | 384        |
| 3.1.3.7 CalendarQuery(reda.064) .....                           | 387        |
| 3.1.3.8 CalendarReport(reda.065).....                           | 388        |
| 3.1.3.9 PartyCreationRequest(reda.014) .....                    | 391        |
| 3.1.3.10 PartyStatusAdvice (reda.016) .....                     | 393        |
| 3.1.3.11 PartyModificationRequest (reda.022) .....              | 396        |
| 3.1.3.12 PartyDeletionRequest (reda.031).....                   | 399        |
| 3.1.3.13 SecurityCreationRequest (reda.006).....                | 400        |
| 3.1.3.14 SecurityMaintenanceRequest (reda.007) .....            | 404        |
| 3.1.3.15 SecurityCreationStatusAdvice (reda.008) .....          | 409        |
| 3.1.3.16 SecurityActivityAdvice (reda.009) .....                | 412        |
| 3.1.3.17 SecurityQuery (reda.010).....                          | 414        |
| 3.1.3.18 SecurityReport (reda.012).....                         | 419        |
| 3.1.3.19 SecurityDeletionRequest (reda.013).....                | 427        |
| 3.1.3.20 SecuritiesAccountCreationRequest (reda.018).....       | 428        |
| 3.1.3.21 SecuritiesAccountQuery (reda.019) .....                | 430        |
| 3.1.3.22 SecuritiesAccountStatusAdvice (reda.020) .....         | 435        |
| 3.1.3.23 SecuritiesAccountReport (reda.021) .....               | 437        |
| 3.1.3.24 SecuritiesAccountModificationRequest (reda.023).....   | 441        |
| 3.1.3.25 CollateralValueCreationRequest (reda.024).....         | 444        |
| 3.1.3.26 EligibleSecuritiesCreationRequest (reda.025) .....     | 446        |
| 3.1.3.27 EligibleCounterpartCSDCreationRequest (reda.026) ..... | 447        |

|   |            |
|---|------------|
| 3.1.3.28 CloseLinkCreationRequest (reda.027) .....          | 449        |
| 3.1.3.29 CollateralDataStatusAdvice (reda.028).....         | 450        |
| 3.1.3.30 SecurityMaintenanceStatusAdvice (reda.029) .....   | 452        |
| 3.1.3.31 SecurityDeletionStatusAdvice (reda.030).....       | 455        |
| 3.1.3.32 SecuritiesAccountDeletionRequest (reda.032) .....  | 457        |
| 3.1.3.33 SecuritiesAuditTrailQuery (reda.033) .....         | 458        |
| 3.1.3.34 SecuritiesAuditTrailReport (reda.034) .....        | 459        |
| 3.1.3.35 SecuritiesAccountActivityAdvice (reda.035).....    | 461        |
| 3.1.3.36 SecuritiesAccountAuditTrailQuery (reda.036) .....  | 463        |
| 3.1.3.37 SecuritiesAccountAuditTrailReport (reda.037) ..... | 464        |
| 3.1.3.38 CashAccountActivityAdvice (reda.038) .....         | 466        |
| 3.1.3.39 PartyActivityAdvice (reda.041) .....               | 467        |
| 3.1.3.40 EligibleCounterpartCSDStatusAdvice (reda.044)..... | 469        |
| 3.1.3.41 SecurityCSDLinkCreationRequest (reda.045) .....    | 471        |
| 3.1.3.42 SecurityCSDLinkMaintenanceRequest (reda.046).....  | 474        |
| 3.1.3.43 SecurityCSDLinkStatusAdvice (reda.047).....        | 475        |
| 3.1.3.44 AccountLinkCreationRequest (reda.049).....         | 478        |
| 3.1.3.45 AccountLinkMaintenanceRequest (reda.050) .....     | 480        |
| 3.1.3.46 AccountLinkStatusAdvice (reda.051) .....           | 481        |
| 3.1.3.47 EligibleSecuritiesDeletionRequest (reda.075).....  | 484        |
| 3.1.3.48 CloseLinkDeletionRequest (reda.077) .....          | 485        |
| <b>3.1.4 Headers (head) .....</b>                           | <b>487</b> |
| 3.1.4.1 BusinessApplicationHeader (head.001) .....          | 487        |
| 3.1.4.2 BusinessFileHeader (head.002) .....                 | 489        |
| <b>3.1.5 Administration (admi) .....</b>                    | <b>491</b> |
| 3.1.5.1 ReceiptAcknowledgement (admi.007.001.01).....       | 491        |
| <br>  |            |
| <b>4 DATA MIGRATION TOOL FILES .....</b>                    | <b>494</b> |
| 4.1 INTRODUCTION .....                                      | 494        |
| 4.2 TECHNICAL SPECIFICATION .....                           | 494        |
| <b>4.2.1 Data Record Definition.....</b>                    | <b>494</b> |
| 4.2.1.1 Rows and Columns.....                               | 494        |
| 4.2.1.2 Header .....  | 494        |
| 4.2.1.3 Records .....                                       | 494        |
| 4.2.1.4 Record Type .....                                   | 494        |
| 4.2.1.5 Record Identification .....                         | 495        |
| 4.2.1.6 Default Values .....                                | 495        |
| 4.2.1.7 Format Types .....                                  | 495        |
| 4.2.1.8 EPC SCT Inst Charset Interoperability .....         | 496        |
| 4.2.1.9 Timezones.....                                      | 496        |
| 4.2.1.10 Character Set .....                                | 496        |
| 4.2.1.11 Filenames.....                                     | 496        |
| 4.3 TECHNICAL SPECIFICATION OF THE EXCEL FILE .....         | 497        |
| <b>4.3.1 Excel Version.....</b>                             | <b>497</b> |
| <b>4.3.2 Restrictions .....</b>                             | <b>497</b> |

|   |            |
|---|------------|
| 4.3.2.1 Worksheets .....  | 497        |
| 4.3.2.2 Number of Rows .....                                    | 497        |
| 4.3.2.3 Size limits .....                                       | 497        |
| 4.4 TECHNICAL SPECIFICATION OF THE FLAT FILE .....              | 498        |
| 4.4.1.1 Compliancy to RFC 4180.....                             | 498        |
| 4.4.1.2 Definition of the CSV Format (RFC 4180) .....           | 498        |
| 4.4.1.3 Control Characters .....                                | 498        |
| 4.4.1.4 Encoding .....  | 499        |
| 4.4.1.5 Number of Rows .....                                    | 499        |
| 4.4.1.6 Size limits .....                                       | 499        |
| 4.5 FORMAT OF STRUCTURED FILES.....                             | 500        |
| <b>4.5.1 Format of Excel and Flat Files.....</b>                | <b>500</b> |
| <b>4.5.2 Technical Prerequisites .....</b>                      | <b>500</b> |
| 4.5.2.1 Record Type Identifier .....                            | 500        |
| <b>4.5.3 Common Reference Data .....</b>                        | <b>501</b> |
| 4.5.3.1 Party Reference Data - New .....                        | 501        |
| 4.5.3.2 T2S Party Reference Data - New.....                     | 504        |
| 4.5.3.3 Technical Address Network Service Link - New .....      | 506        |
| 4.5.3.4 Additional Party Market Specific Attributes - New ..... | 506        |
| 4.5.3.5 Securities Account - New.....                           | 507        |
| 4.5.3.6 Securities - New .....                                  | 510        |
| 4.5.3.7 Securities Market Specific Attributes - New .....       | 512        |
| 4.5.3.8 Investor CSD Security Restrictions - New .....          | 513        |
| 4.5.3.9 CSD Account Link - New.....                             | 514        |
| 4.5.3.10 Securities CSD Link - New .....                        | 515        |
| 4.5.3.11 CMB Securities Account Links - New .....               | 517        |
| 4.5.3.12 User - New.....  | 519        |
| 4.5.3.13 Roles - New .....                                      | 520        |
| 4.5.3.14 T2S Secured Group - New.....                           | 520        |
| 4.5.3.15 Grant Roles - New .....                                | 522        |
| 4.5.3.16 Grant System Privilege - New .....                     | 523        |
| 4.5.3.17 Grant Object Privilege - New .....                     | 524        |
| 4.5.3.18 Grant Object Privilege (Secured Group) - New .....     | 528        |
| 4.5.3.19 Message Subscription Rule Set – New .....              | 532        |
| 4.5.3.20 T2S Message Subscription Rule Set – New .....          | 532        |
| 4.5.3.21 Message Subscription Rule - New.....                   | 533        |
| 4.5.3.22 Restriction Type - New .....                           | 538        |
| 4.5.3.23 Restriction Type Rule - New .....                      | 540        |
| 4.5.3.24 Conditional Securities Delivery Rule Set - New .....   | 545        |
| 4.5.3.25 Conditional Securities Delivery Rule - New.....        | 546        |
| 4.5.3.26 Report Configuration - New .....                       | 551        |
| 4.5.3.27 T2S Report Configuration - New .....                   | 554        |
| 4.5.3.28 Eligible Counterpart CSD - New.....                    | 556        |
| 4.5.3.29 Certificate Distinguished Name .....                   | 558        |
| 4.5.3.30 User Certificate Distinguished Name Link.....          | 559        |

|  |            |
|--|------------|
| 4.5.3.31 Restrictions on Securities Account – New .....                        | 559        |
| 4.5.3.32 Restrictions on T2S Dedicated Cash Accounts – New .....               | 561        |
| 4.5.3.33 Euro Foreign Exchange Reference Rate – New .....                      | 562        |
| 4.5.3.34 Cash Account .....  | 563        |
| 4.5.3.35 Limit .....   | 570        |
| 4.5.3.36 Authorised Account User .....   | 571        |
| 4.5.3.37 Party Service Link .....  | 572        |
| 4.5.3.38 DN-BIC Routing .....  | 575        |
| 4.6 FORMAT OF “ENRICHED FILES” .....   | 576        |
| <b>4.6.1 Further Notifications for Static Data records .....</b>               | <b>576</b> |
| <b>4.6.2 Statistical Information .....</b>                                     | <b>577</b> |
| <b>5 APPENDICES .....</b>  | <b>578</b> |
| 5.1 BUSINESS RULES .....   | 578        |
| 5.2 SECURITIES VALUATION BULK FILE FORMAT SPECIFICATIONS .....                 | 655        |
| <b>5.2.1 Introduction .....</b>  | <b>655</b> |
| 5.2.1.1 Context .....  | 655        |
| 5.2.1.2 Purpose .....  | 655        |
| <b>5.2.2 Files technical Specification .....</b>                               | <b>655</b> |
| 5.2.2.1 Identification and routing .....                                       | 656        |
| 5.2.2.2 Structure .....  | 656        |
| <b>5.2.3 Format of Structured Files .....</b>                                  | <b>661</b> |
| 5.2.3.1 Format types .....   | 661        |
| 5.2.3.2 Format of records .....  | 662        |
| 5.2.3.3 Format of “Enriched Files” from CRDM to NCBs .....                     | 665        |
| 5.3 SECURITIES SUBJECT TO CASH PENALTIES BULK FILE FORMAT SPECIFICATIONS ..... | 667        |
| <b>5.3.1 Introduction .....</b>  | <b>667</b> |
| 5.3.1.1 Context .....  | 667        |
| 5.3.1.2 Purpose .....  | 667        |
| <b>5.3.2 Files technical Specification .....</b>                               | <b>667</b> |
| 5.3.2.1 Identification and routing .....                                       | 668        |
| 5.3.2.2 Structure .....  | 669        |
| <b>5.3.3 Format of Structured Files .....</b>                                  | <b>672</b> |
| 5.3.3.1 Format types .....   | 672        |
| 5.3.3.2 Format of records .....  | 673        |
| 5.3.3.3 Format of “Enriched Files” from CRDM to CSDs .....                     | 675        |
| 5.4 DAILY PRICES BULK FILE FORMAT SPECIFICATIONS .....                         | 679        |
| <b>5.4.1 Introduction .....</b>  | <b>679</b> |
| 5.4.1.1 Context .....  | 679        |
| 5.4.1.2 Purpose .....  | 680        |
| <b>5.4.2 Files technical Specification .....</b>                               | <b>680</b> |
| 5.4.2.1 Identification and routing .....                                       | 680        |
| 5.4.2.2 Structure .....  | 681        |
| <b>5.4.3 Format of Structured Files .....</b>                                  | <b>684</b> |
| 5.4.3.1 Format types .....   | 684        |

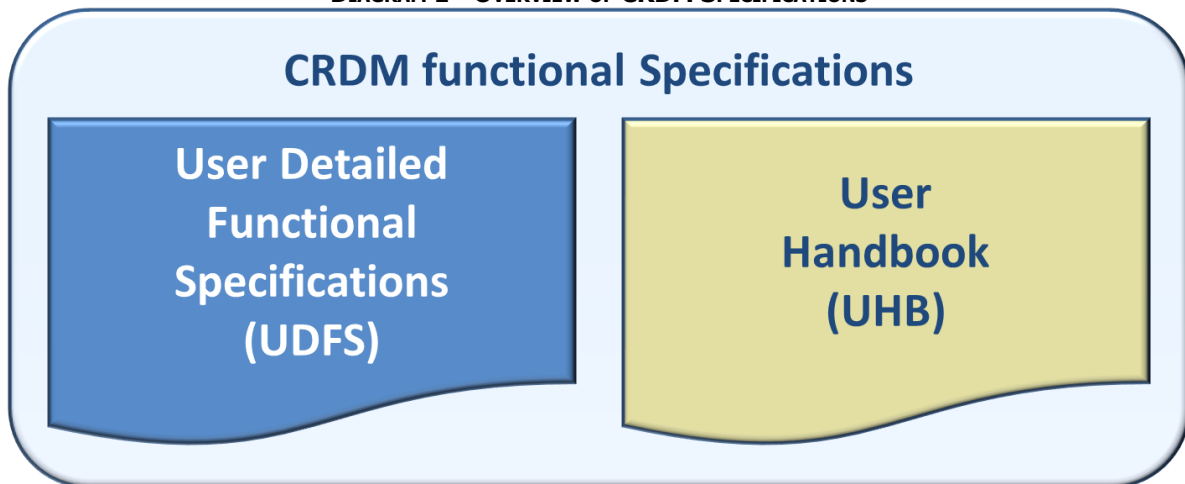
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|  |     |
|--|-----|
| 5.4.3.2 Format of records .....                            | 685 |
| 5.4.3.3 Format of "Enriched Files" from CRDM to CSDs ..... | 689 |

## Introduction

The User Detailed Functional Specifications (UDFS) of the Common Reference Data Management (CRDM) common component are part of the component's functional specifications. The diagram below presents an overview of all the documents foreseen to allow CRDM Actors to understand how requirements described in the User Requirements Document (URD) for the Common Reference Data Management common component are implemented.

**DIAGRAM 1 - OVERVIEW OF CRDM SPECIFICATIONS**



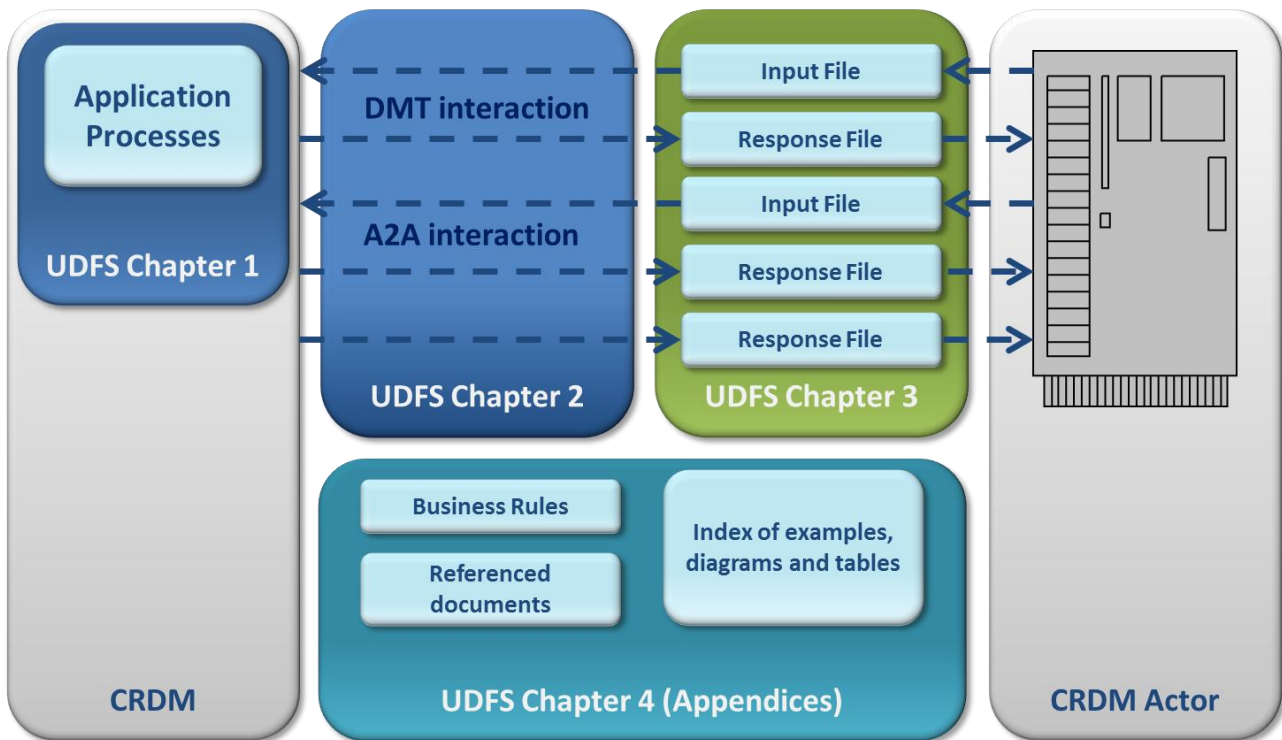
The UDFS focus on the provision of information to CRDM Actors to design and build the interface of their business applications with the Common Reference Data Management common component (A2A and Data Migration Tool), while the UHB describes the Graphical User Interface (GUI) screens in detail.

The UDFS provide information to:

- | Business analysts of the CRDM Actors, who find in the UDFS a description of the application processes and the information flows between their own business applications and the CRDM common component;
- | Developers, who find in the UDFS the necessary information to design and build the interface of the CRDM Actors' business applications with CRDM.

The UDFS is a self-contained document, structured along 4 different but complementary Chapters.

**DIAGRAM 1 - SCOPE OF UDFS CHAPTERS**



Chapter 1: General features of the Common Reference Data Management

UDFS chapter 1 provides concise and descriptive information on the Common Reference Data Management component behaviour as it is seen from a CRDM Actor point of view. The background information provided in Chapter 1 on the CRDM internal behaviour facilitates the understanding of Chapters 2, 3 and 4 (in particular to understand the information flows described in Chapter 2).

Information provided in Chapter 1 on the CRDM application processes is user-oriented and does not include detailed descriptions of the internal CRDM processes. It neither provides descriptions of the internal behaviour of CRDM Actors interacting with CRDM: it is not the purpose of the UDFS to predicate the business conduct of CRDM users.

The following table presents the scope and user objective for each section of UDFS Chapter 1:

**TABLE 1 - STRUCTURE OF UDFS CHAPTER 1**

| SECTION                  | SCOPE   | USER OBJECTIVE  |
|--------------------------|---|---|
| 1.1 Introduction to CRDM | Overall presentation of the CRDM business functionalities | To understand the general behaviour of CRDM.  |
| 1.2 Access to CRDM       | CRDM Interface  | To understand the main principles for the exchange of information between CRDM and CRDM Actors. |
| 1.3 Reference data model | Common reference data structure                           | To understand how reference data structures can be organised in CRDM.                           |

| SECTION                              | SCOPE  | USER OBJECTIVE  |
|--------------------------------------|--|---|
| 1.4 CRDM features                    | Common reference data maintenance                                    | To understand how reference data can be managed in CRDM.  |
| 1.5 Interactions with other services | Interactions between CRDM and other Eurosystem services              | To understand the links in place between CRDM and other existing and planned Eurosystem market infrastructure services.   |
| 1.6 Operations and support           | Operational aspects and actions to be performed by the CRDM Operator | To understand the features supporting operational activities and the actions the CRDM Operator can perform for CRDM configuration and CRDM operations monitoring. |
| 1.7 Limitations of the system        | Features and processes that are not covered by CRDM                  | To understand the exact perimeter of CRDM and what processes should not be expected from CRDM.  |

Chapter 2: Dialogue between CRDM and CRDM Actors

Chapter 2 of the UDFS provides a formalised description of the dialogue between CRDM users and CRDM through the Application-to-Application (A2A) and Data Migration Tool (DMT) channels, which allow CRDM Actors to interact with CRDM. The objective of this Chapter is to describe the behaviour of CRDM regarding the interactions with CRDM Actors, i.e. when sending/receiving messages or files to/from the latter. Consistently with the approach of Chapter 1, UDFS Chapter 2 does not enter into any description of the behaviour of Actors’ systems interacting with CRDM.

Each section of Chapter 2 describes the dialogue between CRDM and a CRDM Actor triggered by a particular inbound message or file in the form of a “Universal Use Case”.

The following use cases are described in UDFS Chapter 2:

**TABLE 2 - STRUCTURE OF UDFS CHAPTER 2**

| SECTION | USE CASE                                       |
|---------|--|
| 2.2.1   | A2A Common reference data maintenance process  |
| 2.2.2   | A2A Common reference data query                |
| 2.3     | Data Migration Tool file upload                |
| 2.4     | Maintain Reference Data Object for T2S         |
| 2.5     | Restrict Reference Data Object                 |
| 2.6     | Bulk Load Securities Valuation                 |
| 2.7     | Bulk Load Securities Subject to Cash Penalties |
| 2.8     | Bulk Load Daily Prices for Penalties           |



### Chapter 3: Catalogue of messages

Chapter 3 of the UDFS provides a detailed description of the messages to be used to run application-to-application communication with CRDM. It describes the entire set of messages which are processed by CRDM, i.e. which can be exchanged between CRDM and the business application of a CRDM Actor directly connected to CRDM. The following information is provided:

- | Description of the XML structure with mandatory/optional fields, validation rules and purpose of each field in the context of CRDM;
- | Possible usages of the message in the context of CRDM, including when relevant specific rules for the population of the message fields for a given usage;
- | Business rules applicable for message processing.

This Chapter includes links to a set of files available on the MyStandards message documentation website provided by Swift.

The objective of the Chapter is to allow the reader to find all the necessary information related to messaging needed to establish a functioning system of application-to-application communication between CRDM and its users.

Information in Chapter 3 results from the customization of the enriched ISO 20022 schemas for the specific purpose of CRDM.

Chapter 3 of the UDFS groups the descriptions of messages according to the classification of the ISO 20022 message repository:

**TABLE 3 - STRUCTURE OF UDFS CHAPTER 3**

| CATEGORY OF MESSAGE | PREFIX |
|---------------------|--------|
| Account Management  | acmt   |
| Cash Management     | camt   |
| Headers             | head   |
| Reference data      | reda   |

### Chapter 4: Data Migration Tool Files

Chapter 4 of the UDFS is only relevant for CSDs and Central Banks and provides a detailed description of the file specifications to be used to communicate with the Data Migration Tool. It describes the entire set of reference data objects which are processed by the DMT, in the form of structured files which can be exchanged between CRDM and the CRDM Actors. The initial subsections describe general structure, format and processing rules valid for all objects, while the following subsections describe, for each object, the structure of the relevant file with mandatory/optional fields, rules and purpose of each field in the context of the DMT.

The objective of the Chapter is to allow the reader to find all the necessary information related to DMT communications which are needed to establish a functioning communication between CRDM and its users.

### Chapter 5: Appendix

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The UDFS appendix provides information on the CRDM business rules applying to incoming messages, with the respective messages and error codes associated. In addition, the appendix contains the file format specifications for bulk files for specific object data loading which foresee this channel.

## Reader's guide

The UDFS document is available for the whole community of CRDM Actors: in order to ensure the same level of information for all CRDM Actors, information relevant for CSD, CBs, CSD Participants, External CSDs, Payment Banks and Ancillary Systems is contained in one single book of UDFS.

Nevertheless, different readers may have different needs and priorities. For instance, "business" readers interested mainly in organisational issues may not wish to enter into the full details of each and every message description, while technical readers involved in the specification of technical interfaces to CRDM may not be interested in the thorough description of the CRDM application processes that are leading to the sending of a given message. Not every reader wants to read the entire UDFS, or even want to follow the same reading plan.

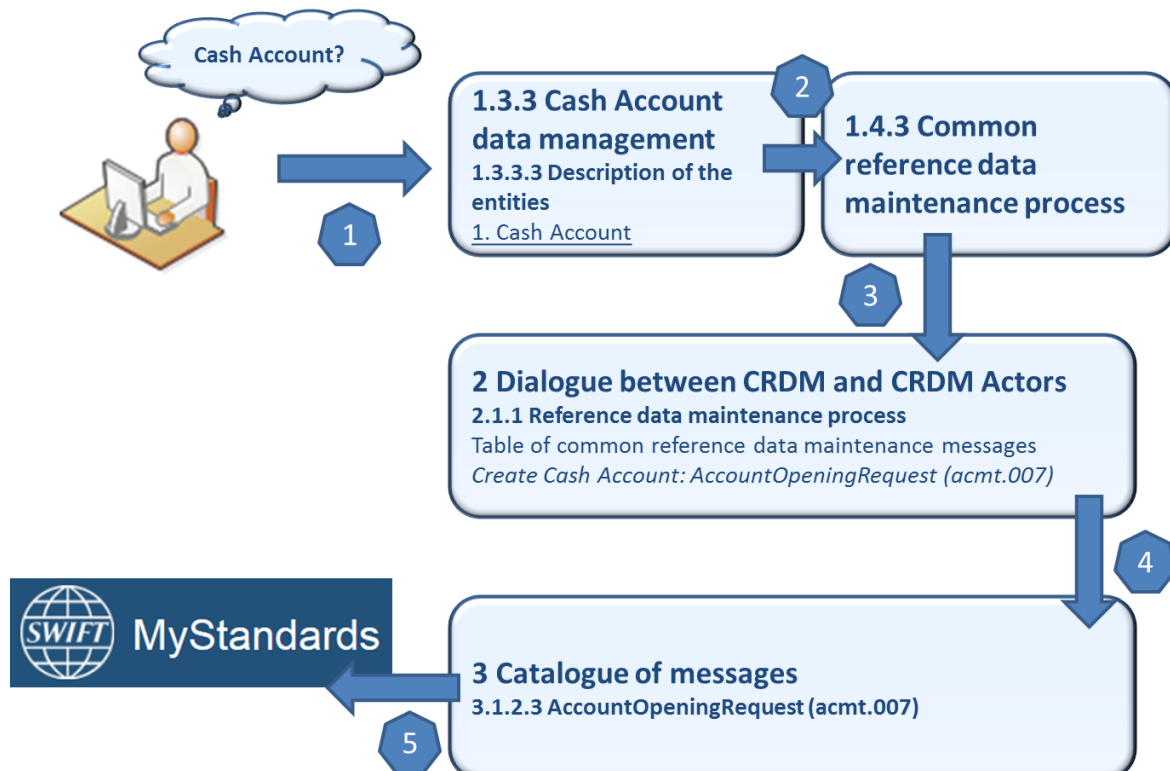
However, all readers, whether "business" or "technical", may find it useful to read the following UDFS sections, which are providing a background to the understanding of any other UDFS section:

- I 1.1 "Introduction to CRDM", which is a summary providing the basis for the understanding of the main CRDM concepts.
- I 1.3 "Reference data model", which provides the basis for data organisation in CRDM.

### "Business Oriented" perspective

The business reader may be interested in the way information is structured in the UDFS. This user may want to follow the reading plan described below to find information about the operations that can be performed, for example, on a cash account in CRDM:

**EXAMPLE 1 - "CRDM DATA AND RELATED PROCESSING" READING PLAN**



- 1 The business reader finds in section 1.3.3 Cash account data management a general description of Cash Accounts specifying the different attributes that make up this object in CRDM.
- If the reader requires more information on the Reference data management process, they can refer to section 1.4.3 Common reference data maintenance process 2 which offers a general description applicable to all reference data objects.
- From this point, they may jump to section 2.2.1 Reference data maintenance process 3 to find a description of the maintenance process which can be carried out via A2A. This process is the same for all reference data objects available in A2A.
- Should the reader need to enter into further details, they may access through a hyperlink section 3.1.2.3 AccountOpeningRequest (acmt.007) 4 to find the detailed description of the message used to create a cash account in CRDM.
- From this point, they may continue through another hyperlink to the schema description available on the MyStandards website to find all the details regarding a particular field of the message. 5

#### "Technical oriented" perspective

For a technical reader, it is more likely that the reading plans would start either:

- From Chapter 2 "Dialogue between CRDM and CRDM Actors", when a complete overview of the possible A2A dialogue with CRDM is required, e.g. when structuring the interface of a CRDM Actor directly connected to CRDM.
- From Chapter 3 "Catalogue of Messages", when a detailed description of the content of a given CRDM A2A message is needed, e.g. when specifying the details of the interface of a CRDM Actor directly connected to CRDM.

Due to the nature of CRDM as a Common Component for the configuration of reference data used in multiple Services, most of the information presented in this document is applicable to all such Services, while some of it is specifically relevant only to individual Services. Readers who aim to use CRDM for configuring data for all Services will find the entire document relevant. On the other hand, readers who are only interested in the configuration of data for a specific Service or component may find the following sections particularly relevant.

**TABLE 4 – UDFS SECTIONS CONTAINING SERVICE-SPECIFIC INFORMATION**

| SECTION  | RELEVANT SERVICE/COMPONENT         | NOTES  |
|--|------------------------------------|--|
| 1.2.2.1.2 Privilege                                | T2S, TIPS, CLM, RTGS, ECONS2, ECMS | When indicated in the table header, the tables contain privileges relevant exclusively for each Service/component. |
| 1.2.2.2.2 Configuration of privileges              | T2S, TIPS, CLM, RTGS, ECONS2, ECMS | Clarification about granting privileges in each Service/component.   |
| 1.2.3.2 Message subscription parameter types       | T2S, TIPS, CLM, RTGS               | Message types that can be subscribed to in each Service/component, with related configuration parameters.          |
| 1.3.2.3 Description of the entities (Party)        | T2S, TIPS, CLM, RTGS, ECONS2       | Reference data model section listing Service Party Types applicable to each Service/component.                     |
| 1.3.3.3 Description of the entities (Cash Account) | T2S, TIPS, CLM, RTGS, ECONS2       | Reference data model section listing Cash Account Types applicable to each Service/component.                      |
| 1.4.3.8 Common reference data propagation          | T2S, TIPS, CLM, RTGS, ECONS2, ECMS | Description of the data propagation process with relevant reference data objects for each Service/component.       |
| 1.4.4 TIPS Directory                               | TIPS                               | Section only relevant for TIPS.  |
| 1.4.5 RTGS Directory                               | RTGS                               | Section only relevant for RTGS.  |
| 1.4.6 CLM Repository                               | CLM                                | Section only relevant for CLM.   |
| 1.5.3 TARGET Instant Payment Settlement and T2     | TIPS, CLM, RTGS                    | Interaction between CRDM and other Services/component that receive reference data propagation.                     |
| 1.5.4 Eurosystem Collateral Management System      | ECMS                               | Interaction between CRDM and ECMS for the data propagation process.  |
| 1.5.5 ECONS2                                       | ECONS2                             | Interaction between CRDM and ECONS2 for the data propagation process.  |
| 5.1 Business Rules                                 | T2S, TIPS, CLM, RTGS, ECONS2       | Business rules listed for each Service/component.  |

# 1. General features of CRDM

The present chapter, after a short introduction of the Common Reference Data Management component, describes all the features it provides. Section 1.2 Access to CRDM introduces the details regarding the access of CRDM Actors to CRDM, covering the different modes of connectivity, the access rights model, the configuration of message subscriptions as well as security aspects and an introduction to the Graphical User Interface (GUI). Section 1.3 Reference data model describes the CRDM reference data model, including a description of all the relevant entities and relationships. Section 1.4 CRDM Features describes the various features of CRDM, such as the structure of reference data objects, the different types of available maintenance operations, the management of objects with limited and unlimited valid period, the archiving and purging processes, the life-cycle management of reference data objects and the principles for the propagation of common reference data to other Eurosystem Market Infrastructure Services. Section 1.5 Interactions with other services describes the interactions that CRDM, as a shareable component, has with other services and shareable components provided by the Eurosystem, whereas section 1.6 Operations and support describes functions supporting the CRDM Operator in the management of the component.

## 1.1 Introduction to CRDM

CRDM provides a common reference data management feature that allows all CRDM Actors to create and maintain common reference data for the configuration of data related to parties, securities, securities accounts, cash accounts, rules and parameters. The following list shows the main configuration areas for common reference data in CRDM:

- | Party reference data;
- | Securities reference data;
- | Securities accounts reference data;
- | Cash account reference data;
- | Access rights management;
- | Message subscription configuration;
- | Network configuration;
- | Report configuration;
- | Attribute domains management;
- | Business day management configuration;
- | Market-specific attributes configuration;
- | Restriction type management;
- | Conditional securities delivery configuration;
- | Billing configuration;

## I Configuration parameters.<sup>1</sup>

CRDM Actors set up the appropriate configuration by creating and maintaining common reference data objects in CRDM. A common reference data object is a set of logically related, self-consistent information (see section 1.4.3.1 [Common reference data objects](#)). Parties, securities, securities accounts and cash accounts are examples of common reference data objects.

CRDM allows CRDM Actors to create, update and delete common reference data objects in CRDM. Deletion of a common reference data object is always on logical level and it is possible, for a duly authorised user, to restore a previously deleted common reference data object (see section 1.4.3.2 [Reference data maintenance types](#)).

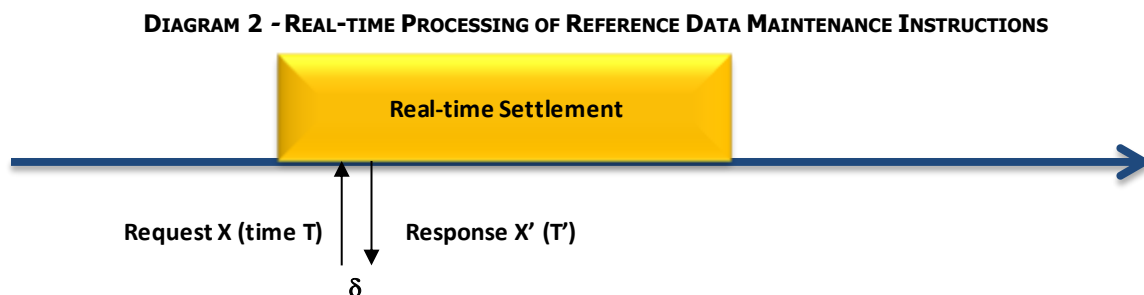
CRDM allows full maintenance of all reference data objects in U2A mode, whereas it provides only a sub-set of functions in A2A and DMT mode on a limited number of reference data objects (see section 1.4.3.2 [Reference data maintenance types](#) for an exhaustive list of these reference data objects and functions).

CRDM provides versioning facilities and validity periods allowing the implementation of data revision and data history features, in order to keep track of all past data changes, to enter changes meant to become effective as of a future date and to define common reference data objects with limited or unlimited validity (see sections 1.4.3.1 Common reference data objects and 1.4.3.3 Validity of common reference data objects).

All types of CRDM Actors, i.e. CSDs, Central Banks, CSD participants, payment banks, ancillary systems and the Operator have access to the common data management, each of them to different functions and data, according to the access rights granted to their users (see section 1.2.2 [Access rights](#)).

Duly authorised users can create and maintain common reference data objects in CRDM submitting common reference data maintenance instructions.

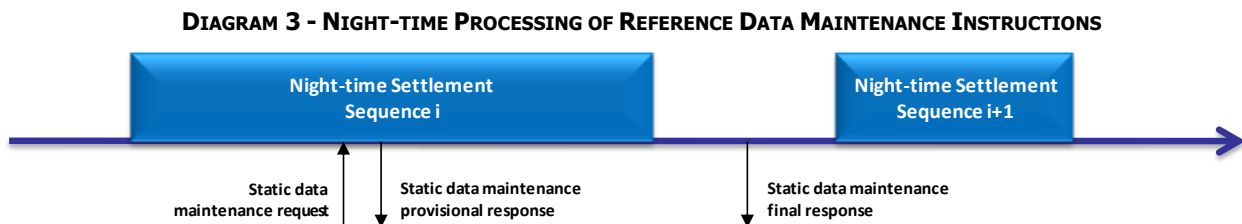
Reference data management immediately processes each reference data maintenance instructions and provides a reference data maintenance response including information on the result of the processing (e.g. the reference data maintenance instruction was successfully processed or rejected owing to a business validation error). The following diagram shows the two messages exchanged in this case between a CRDM Actor and CRDM:



Specifically for T2S reference data, if a T2S night-time settlement sequence is running, CRDM temporarily stops the processing of all reference data maintenance instructions related to reference data objects used by the T2S settlement process and then resume the processing after the end of night-time settlement sequence, in order to impede any possible impact of these reference data changes on the ongoing settlement process

<sup>1</sup> This area includes reference data for countries, currencies, currency service links, system entities, services, BIC directory and reserve management parameters.

(See section 1.4.3.6 Reference data maintenance instructions processing). In this case, CRDM provides immediately a provisional static data maintenance response (to inform the relevant CRDM Actor that the initial reference data maintenance instruction is queued) and then, after the end of the current night-time time settlement sequence and before the following one, it sends another reference data maintenance response providing the final result of the processing. The following diagram shows the three messages exchanged in this case between a CRDM Actor and CRDM:



See section 1.4.3.6 Reference data maintenance instructions processing for more information on the processing of reference data maintenance instructions.

Reference data maintenance instructions submitted in U2A mode can be executed either in Two-Eyes mode or in Four-Eyes mode (See section 1.2.5 Security), according to the access rights granted to the submitting user.

Reference data management is available throughout the settlement day, with the exception of the T2S maintenance window (Please refer to the Settlement Day section in the T2S UDFS for more information).

## 1.2 Access to CRDM

### 1.2.1 Connectivity

CRDM supports the connectivity of CRDM Actors as follows:

- | communication between software applications via XML messages or files (A2A mode);
- | communication via files (DMT mode) for CBs;
- | online screen-based activities performed by CRDM Actors (U2A mode).

For the A2A communication, ISO 20022 is the single standard, for both inbound and outbound communication. Messages exchanged between CRDM and CRDM Actors are based on XML technology and comply with the ISO 20022 standards on messages and the formats and specifications defined in CRDM.

The A2A and Data Migration Tool (DMT) functionalities are described extensively in chapters 2 Dialogue between CRDM and CRDM Actors, 3 Catalogue of Messages and 4 Data Migration Tool Files. U2A connectivity to CRDM will be handled through the ESMIG Portal. Please refer to the ESMIG documentation for more details.

#### Setup of routing configurations

The setup of routing configurations includes the configuration of the following reference data objects in CRDM: network services, party technical addresses, links between network services and party technical addresses, and default and conditional routings.



The CRDM Operator is responsible for setting up and maintaining network service static data related to services of all the network services providers offering technical connectivity between users and the relevant Services and components.

Being included in the party static data, party technical addresses are setup and maintained, for each CRDM Actor connected directly, by the party responsible for defining party reference data for this CRDM Actor. After having input the party data (party technical addresses) for the directly connected CRDM Actor, the responsible party has to link each of the party technical addresses to the relevant network service(s). This step allows using one party technical address for several network services.

Each CRDM Actor connected directly is responsible for setting up and maintaining default and conditional routing static data related to its outbound communication.

The following table summarises, for each static data object related to the setup of routing configurations in T2S, the responsible T2S Actor for its configuration and it specifies which mode the T2S Actor can use for the configuration.

**TABLE 5 - SETUP OF ROUTING CONFIGURATIONS IN CRDM**

| REFERENCE DATA OBJECT                                    | RESPONSIBLE ACTOR  | MODE    |
|--|--|---------|
| Network Service  | Operator   | U2A     |
| Party (Technical Address)                                | Operator, CSD, CB  | U2A/A2A |
| Link between Network Service and Party Technical Address | Operator, CSD, CB  | U2A     |
| Default and Conditional Routing                          | CSD, CB, CSD Participant, Payment Bank, Ancillary System | U2A     |

### Network service

CRDM stores a catalogue of all the network services allowing technical connectivity between Actors and Services/components for the exchange of business data. Each network service defined in CRDM corresponds to one messaging service of one of the accredited connectivity services providers.

When defining a new network service, the CRDM Operator has to provide the following pieces of information:

- | The name of the network service;
- | The service or component for which it is used;
- | A textual description for the network service;
- | The type of technical address for the network service.

**EXAMPLE 2 - NETWORK SERVICE DEFINITION**



In addition, the CRDM Operator has to provide all the necessary data for the application to identify and to use the underlying messaging service.

### Party Technical Address

Each party that is directly connected to a Service or component has one or many technical addresses that the Service or component uses to send outgoing messages to this party.

### Links between Network Services and Party Technical Addresses

Each Network Service uses a specific type of technical address to identify the sender and the receiver for each exchange of data. Different network services may use the same technical address type, which means that the same Party Technical Address may be used to exchange data using different Network Services. Consequently, there is a many-to-many association between the catalogue of Network Services and the set of Party Technical Address defined in CRDM. For this reason, each Party Technical Address has to be linked to the relevant Network Service, so that the relevant Service or component can use them to route outbound communication.

The following table shows an example of a party having five party technical addresses linked to four different network services.

EXAMPLE 3 - PARTY TECHNICAL ADDRESS AND NETWORK SERVICES

| Party  |   |                     |  |                  |                |                  |                |                  |               |                  |                |                  |                |
|--|---|---------------------|--|------------------|----------------|------------------|----------------|------------------|---------------|------------------|----------------|------------------|----------------|
| <p> <b>Short Name:</b> <i>BK Bank</i><br/> <b>Long Name:</b> <i>Black Knight Banking Corporation</i><br/> <b>Type:</b> <i>Payment Bank</i><br/> <b>Central Bank BIC:</b> <i>BITAITRRXXX</i><br/> <b>BIC:</b> <i>BKBANKCCXXX</i><br/> <br/> <b>Opening Date:</b> <i>25-03-2015</i><br/> <b>Closing Date:</b> <i>-</i><br/> <br/> <b>Address:</b> <i>Charles Drive Square, 1</i><br/> <b>Country Name:</b> <i>Italy</i> </p> | <table border="1"> <thead> <tr> <th colspan="2">Technical Addresses</th> </tr> </thead> <tbody> <tr> <td><i>Service A</i></td> <td><i>DN=ABCD</i></td> </tr> <tr> <td><i>Service A</i></td> <td><i>DN=EFGH</i></td> </tr> <tr> <td><i>Service B</i></td> <td><i>DN=XYZ</i></td> </tr> <tr> <td><i>Service C</i></td> <td><i>DN=INTR</i></td> </tr> <tr> <td><i>Service D</i></td> <td><i>DN=OPQA</i></td> </tr> </tbody> </table> | Technical Addresses |  | <i>Service A</i> | <i>DN=ABCD</i> | <i>Service A</i> | <i>DN=EFGH</i> | <i>Service B</i> | <i>DN=XYZ</i> | <i>Service C</i> | <i>DN=INTR</i> | <i>Service D</i> | <i>DN=OPQA</i> |
| Technical Addresses  |   |                     |  |                  |                |                  |                |                  |               |                  |                |                  |                |
| <i>Service A</i>   | <i>DN=ABCD</i>  |                     |  |                  |                |                  |                |                  |               |                  |                |                  |                |
| <i>Service A</i>   | <i>DN=EFGH</i>  |                     |  |                  |                |                  |                |                  |               |                  |                |                  |                |
| <i>Service B</i>   | <i>DN=XYZ</i>   |                     |  |                  |                |                  |                |                  |               |                  |                |                  |                |
| <i>Service C</i>   | <i>DN=INTR</i>  |                     |  |                  |                |                  |                |                  |               |                  |                |                  |                |
| <i>Service D</i>   | <i>DN=OPQA</i>  |                     |  |                  |                |                  |                |                  |               |                  |                |                  |                |

### Conditional Routing

CRDM applies a mandatory routing for the following outbound communication:

- | Acknowledgment of receipt;
- | Reactions on erroneous inbound messages;
- | Query results.

In all these cases, CRDM routes the outbound communication to the same network service and party technical address which were used for sending the related inbound communication. This implies that CRDM does not allow defining different routing configurations for these kinds of messages. For details on the mandatory routing rules applied by other Services and components, refer to the relevant UDFS document.

For all other types of outbound communication, CRDM allows CSDs, CBs and directly connected participants to define specific routing configurations for their messages and files. More precisely, each of these CRDM Actors can define a default configuration (to be used by the relevant Service/component for all outbound communication of a given type of this Actor) for each type of outbound communication (with the types being message-based/file-based, real-time/store-n-forward). In addition, certain types of messages allow conditional

routing configurations (to be used by the relevant Service/component as exceptions to the default configuration).

When defining a default routing configuration, the responsible CRDM Actor (i.e. a CSD, a CB or a directly connected participant) has to provide the following pieces of information:

- | the routing description;
- | the network service to be used for the default routing (containing the indication of the Service/component it is relevant for);
- | the party technical address the Service/component has to use for the default routing;
- | if the related Service foresees it, a compression setting, specifying whether the Service must compress the relevant data before sending them to the recipient.

When defining a conditional routing, the responsible CRDM Actor (i.e. a CSD, a CB or a directly connected participant) has to provide, in addition to the data required for the setup of a default routing configuration, the type of message subject to the configuration. If foreseen by the specific Services, the following information must also be provided:

- | the sequence number of the conditional routing, specifying the order according to which the Service tries to match the current outgoing message with one of the conditional routing configuration, for a given recipient party<sup>2</sup>;
- | a set of conditions specifying the criteria on which the routing is defined: in addition to the type of the message, the size boundaries (i.e. the minimum and the maximum size of the message), the currency of the message;
- | a Boolean information specifying whether the set of conditions represents a positive or a negative list.

In addition, T2S outbound communications are bundled into files by CRDM during night-time settlement (for specific settlement-related messages) and, on an optional basis, during real-time settlement.

The list of messages subject to conditional routing is summarized below:

- | Handled by CRDM: RTGS Directory, CLM Repository.
- | Handled by CLM: camt.053 (for Account Statements and General Ledgers).
- | Handled by RTGS: camt.053 (for Account Statements).
- | Handled by T2S: all outgoing messages not covered by mandatory routing<sup>3</sup>.

When determining how to route outbound communications, CRDM applies the following rules:

- | If the type of outbound communication is an acknowledgement of receipt, a reaction on an erroneous incoming message or a query result, CRDM applies a mandatory routing, i.e. it routes the outbound

---

2 CRDM stops this process either just after having found the first matching conditional routing configuration, or after having checked all the conditional routing configurations defined for the recipient party without finding any matching configuration.

3 The exhaustive list of possible values for the type of message is given by the list of all the outbound T2S-relevant messages included in section List of Messages plus the inbound messages subject to copy, plus the value "NightTimeSettlementRelatedMessages", which refers to all the settlement-related messages (excluding copies of liquidity transfers) that, during the night-time settlement period, are sent by T2S grouped into files. For "NightTimeSettlementRelatedMessages" it is only possible to select file-based network services and it is not possible to define upper or lower bound size parameters.

communication to the same network service and party technical address which were used for sending the related inbound communication.

- I If the type of outbound communication is different from the ones mentioned in the previous point, then:
  - If the outgoing message matches one of the conditional routing configurations<sup>4</sup> and the Party has not opted to receive outbound messages bundled into files, then CRDM routes the outbound communication via the network service and to the party technical address specified in the matched routing configuration.
  - If no matching conditional routing configurations are found or the Party has opted to receive outbound messages bundled into files, then CRDM routes the outbound communication to the relevant default routing configuration.
- I As to data compression:
  - If the outbound communication is smaller than 2KB, then CRDM does not compress the data, regardless of compression setting specified in the matched routing configuration.
  - If the outbound communication is a report, then CRDM compresses the data regardless of compression setting specified in the matched routing configuration.
  - For all other types of outbound communication, CRDM compresses the data only if this is required by the compression setting specified in the matched routing configuration<sup>5</sup>.

For messages relevant for T2S, CRDM and T2S itself apply automatic bundling into files during T2S night-time settlement, while offering the possibility for each Party to opt for the bundling of outbound messages into files during the whole business day<sup>6</sup>. Exceptions during the business day are the maintenance window where no messages are sent and the period close to the DVP cut off<sup>7</sup>. During this time the file bundling is deactivated and outbound messages are sent in real time. In addition, during the NTS, messages that are already part of the NTS bundling will not be subject to this bundling feature.

For this optional T2S message bundling, CRDM and T2S will bundle messages into files based on two standard parameters, with the sending of a file triggered whenever one of the two conditions expressed by these parameters is met. The two parameters refer to the maximum number of messages that can be included in a file (set to 1000) and the maximum elapsed time defining the frequency for sending bundled files (set to 2 minutes). These parameters apply equally to all parties opting for the service.

The files are sent to the Party technical address defined as default routing configuration. Such files will always be sent via the file channel.

The optional bundling function is offered for all outbound messages, excluding the following ones:

- I Query responses;

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4 With the exception of the configurations having "NightTimeSettlementRelatedMessages" as message type, as these configurations are used during the night-time settlement period only.

5 The exhaustive list of possible values for the compression setting is as follows: "No" (CRDM does not compress data), "ZIP" (CRDM must compress data according to the ZIP algorithm).

6 The subscription to optional message bundling during the real-time period is handled by the Operator, which will manage the participants' preferences based on their specific requests.

7 The deactivation period is configured to begin half an hour before the first planned currency-dependent DVP cut-off and end with the last event for the cut-off processing.

- | Reports;
- | admi.007;
- | Inbound processing rejections;
- | Error messages sent from the backend.

## 1.2.2 Access rights

This section provides information on access rights management in the CRDM. More into detail, section 1.2.2.1 [Access rights concepts](#) presents some basic concepts (e.g. user, privilege, role and data scope) related to access rights management. On this basis, section 1.2.2.2 [Access rights configuration](#) illustrates all the available options for the configuration of access rights. Finally, section 1.2.2.4 [Access rights configuration process](#) describes the access rights configuration process that each type of CRDM Actor has to put in place in order to set up the appropriate assignment of roles and privileges for all its users.

In order to clarify the differences in data scope per type of actor, this section uses the concepts of CSD, Central Bank, CSD Participant, External CSD, Ancillary System and Payment Bank, which are introduced in section 1.2.2.1.9 [Common reference data objects and the hierarchical party model](#), as well as the concept of System Entity, which is introduced in section 1.2.2.1.10 [Data scope](#).

### 1.2.2.1 Access rights concepts

This section presents the main concepts related to access rights management in the CRDM.

#### 1.2.2.1.1 User function

DMT files, XML messages and GUI functions are the atomic elements users can trigger through the DMT and in A2A and U2A mode respectively to interact with CRDM as well as other services, common components or back-office applications. Based on these set of files, XML messages and GUI functions, it is possible to define the set of all user functions, i.e. of all the possible actions that a user can trigger in CRDM or other services, common components or back-office applications, either in the DMT or in A2A or U2A mode.

#### 1.2.2.1.2 Privilege

A privilege identifies the capability of triggering one or several user functions and it is the basic element to assign access rights to users. This means that a user  $U_x$  owns the access right to trigger a given user function  $F_y$  if and only if  $U_x$  was previously granted with the privilege  $P_y$  identifying the capability to trigger  $F_y$ .

Privileges are classified into system privileges and object privileges. A system privilege refers to a user function that does not apply to a specific static or dynamic data object (e.g. a query on the current phase of the settlement day). An object privilege refers to a user function that applies to a specific static or dynamic data object (e.g. a T2S user function to display the reference data of a securities account).

The following tables provide the exhaustive list of privileges covering all the user functions available:

- | Access rights management
- | Party data management
- | Securities data management
- | Securities Account data management

- | Cash Account data management
- | Network configuration
- | Message subscription
- | Report configuration
- | Reference data queries
- | TIPS functions
- | CLM functions
- | RTGS functions
- | T2S settlement instruction management
- | T2S cash management
- | T2S dynamic data queries
- | Billing
- | Billing configuration
- | Data Warehouse functions
- | ECONSII functions
- | Business Day Management Queries
- | Report queries
- | Message management
- | Other

**TABLE 6 – ACCESS RIGHTS MANAGEMENT**

These privileges are related to user functions within CRDM. As such, it is possible to use the same privilege(s) to maintain data related to multiple Services/components. For example, the same privileges can be used to configure a User to access different Services.

| PRIVILEGE                           | USER FUNCTION        | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|-------------------------------------|----------------------|----------------|-------------|--|
| Administer Party <sup>8</sup>       | n/a                  | System         | n/a         | n/a  |
| Create Certificate Distinguish Name | Certificate DN – New | System         | n/a         | Any Certificate DN   |
| Create DN-BIC Routing               | DN-BIC Routing - New | System         | n/a         | DN-BIC Routing data within own System entity (for CSDs and Central Banks) or for DNs linked to own Users and BICs authorised to own or co- |

<sup>8</sup> This privilege enables a User to act as Party Administrator for their own Party.  
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| PRIVILEGE                                     | USER FUNCTION                   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---|---------------------------------|----------------|-------------|---|
|   |                                 |                |             | managed Cash Accounts (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems).   |
| Create Role                                   | Role – New                      | System         | n/a         | Roles within own System Entity (for CSDs and Central Banks).  |
| Create User                                   | User – New                      | System         | n/a         | Users within own System Entity (for CSDs and Central Banks) or own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems).  |
| Create User Certificate Distinguish Name Link | User Certificate DN Link – New  | System         | n/a         | Links within own System Entity (for CSDs and Central Banks) or for own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems).  |
| Update Certificate Distinguished Name         | Certificate DN – Edit           | System         | n/a         | Certificate DN within own System Entity   |
| Delete Certificate Distinguish Name           | Certificate DN – Delete/Restore | System         | n/a         | Certificate DN within own System Entity.  |
| Delete DN-BIC Routing                         | DN-BIC Routing - Delete/Restore | System         | n/a         | DN-BIC Routing data within own System entity (for Central Banks) or for DNs linked to own Users and BICs authorised to own or co-managed Cash Accounts (for Payment Banks/Ancillary Systems). |
| Delete Role                                   | Role – Delete/Restore           | System         | n/a         | Roles within own System Entity (for CSDs and Central Banks).  |
| Delete User                                   | User – Delete/Restore           | System         | n/a         | Users within own System Entity (for CSDs and Central Banks) or own Party (for CSD Participants/External   |

| PRIVILEGE                                     | USER FUNCTION                             | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---|---|----------------|-------------|--|
|   |   |                |             | CSDs/Payment Banks/Ancillary Systems).   |
| Delete User Certificate Distinguish Name Link | User Certificate DN Link – Delete/Restore | System         | n/a         | Links within own System Entity (for CSDs and Central Banks) or for own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems).   |
| Grant Privilege                               | Grant Privilege                           | System         | n/a         | Privileges granted to Parties, Roles and Users within own System Entity (for CSDs and Central Banks) or to own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)      |
| Grant/Revoke Role                             | Grant/Revoke Role                         | System         | n/a         | Roles granted to Parties and Users within own System Entity (for CSDs and Central Banks) or to own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)                  |
| Revoke Privilege                              | Revoke Privilege                          | System         | n/a         | Privileges granted to Parties, Roles and Users within own System Entity (for CSDs and Central Banks) or to own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)      |
| Update DN-BIC Routing                         | DN-BIC Routing - Edit                     | System         | n/a         | DN-BIC Routing data within own System entity (for Central Banks) or for DN's linked to own Users and BICs authorised to own or co-managed Cash Accounts (for Payment Banks/Ancillary Systems). |



| PRIVILEGE   | USER FUNCTION | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|-------------|---------------|----------------|-------------|--|
| Update Role | Role – Edit   | System         | n/a         | Roles within own System Entity (for CSDs and Central Banks)  |
| Update User | User – Edit   | System         | n/a         | Users within own System Entity (for CSDs and Central Banks) or own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems). |

**TABLE 7 – PARTY DATA MANAGEMENT**

These privileges are related to user functions within CRDM. As such, it is possible to use the same privilege(s) to maintain data related to multiple Services/components. For example, the same Privileges can be used to configure a Party to participate in multiple Services.

| PRIVILEGE                                   | USER FUNCTION                              | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---|--|----------------|-------------|--|
| Create Ancillary System Bilateral Agreement | Ancillary System Bilateral Agreement – New | System         | n/a         | AS Bilateral Agreements for Parties within own System Entity (for Central Banks) |
| Create Ancillary System Procedure           | Ancillary System Procedure – New           | System         | n/a         | AS Procedures for Parties within own System Entity (for Central Banks)           |
| Create Banking Group                        | Banking Group – New                        | System         | n/a         | Banking Groups within own System Entity (for Central Banks)                      |
| Create Billing Group                        | Billing Group – New                        | System         | n/a         | Billing Groups within own System Entity (for Central Banks)                      |
| Create Eligible Counterpart CSD Link        | EligibleCounterpartCSDCreationRequest      | System         | n/a         | Eligible Counterpart CSD Links under own System Entity                           |
| Create Party                                | Party – New<br>PartyCreationRequest        | Object         | Party       | Parties within own System Entity (for Central Bank/CSD)                          |
| Create Party-Service Link                   | Party-Service Link - New                   | System         | n/a         | Links within own System Entity (for Central Banks)                               |

| PRIVILEGE                                     | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---|---|----------------|-------------|--|
| Create Technical Address Network Service Link | Technical Address Network Service Link – New            | System         | n/a         | Links within own System Entity (for CSDs and Central Banks)                      |
| Delete Ancillary System Bilateral Agreement   | Ancillary System Bilateral Agreement – Delete/Restore   | System         | n/a         | AS Bilateral Agreements for Parties within own System Entity (for Central Banks) |
| Delete Ancillary System Procedure             | Ancillary System Procedure – Delete/Restore             | System         | n/a         | AS Procedures for Parties within own System Entity (for Central Banks)           |
| Delete Banking Group                          | Banking Group – Delete/Restore                          | System         | n/a         | Banking Groups within own System Entity (for Central Banks)                      |
| Delete Billing Group                          | Billing Group – Delete/Restore                          | System         | n/a         | Billing Groups within own System Entity (for Central Banks)                      |
| Delete Party                                  | Party – Delete/Restore<br>PartyDeletionRequest          | Object         | Party       | Parties within own System Entity (for Central Bank/CSD) excluding own Party      |
| Delete Party-Service Link                     | Party-Service Link - Delete/Restore                     | System         | n/a         | Links within own System Entity (for Central Banks)                               |
| Delete Technical Address Network Service Link | Technical Address Network Service Link - Delete/Restore | System         | n/a         | Links within own System Entity (for CSDs and Central Banks)                      |
| Update Ancillary System Bilateral Agreement   | Ancillary System Bilateral Agreement – Edit             | System         | n/a         | AS Bilateral Agreements for Parties within own System Entity (for Central Banks) |
| Update Ancillary System Procedure             | Ancillary System Procedure – Edit                       | System         | n/a         | AS Procedures for Parties within own System Entity (for Central Banks)           |
| Update Banking Group                          | Banking Group – Edit                                    | System         | n/a         | Banking Groups within own System Entity (for Central Banks)                      |
| Update Billing Group                          | Billing Group – Edit                                    | System         | n/a         | Billing Groups within own System Entity (for Central Banks)                      |

| PRIVILEGE                 | USER FUNCTION                            | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---------------------------|--|----------------|-------------|---|
| Update Party              | Party – Edit<br>PartyModificationRequest | Object         | Party       | Parties within own System Entity (for Central Bank/CSD) excluding own Party |
| Update Party-Service Link | Party-Service Link - Edit                | System         | n/a         | Links within own System Entity (for Central Banks)                          |

**TABLE 8 - SECURITIES DATA MANAGEMENT**

| PRIVILEGE                                      | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|--|--|----------------|-------------|--|
| Create Close Link                              | Close Link – New<br>CloseLinkCreationRequest                                       | System         | n/a         | Close Links within own System Entity   |
| Create Security                                | Security – New<br>SecurityCreationRequest  | Object         | Party       | Securities within own System Entity  |
| Update Security                                | Security – Edit<br>SecurityMaintenanceRequest                                      | Object         | Security    | Securities for which own Party is responsible for its maintenance as defined in Security CSD Links |
| Delete Security                                | Security – Delete/Restore<br>SecurityDeletionRequest                               | Object         | Security    | Securities for which own Party is responsible for its maintenance as defined in Security CSD Links |
| Create Securities Valuation                    | Securities Valuation – Create<br>CollateralValueCreationRequest                    | System         | n/a         | Securities Valuation for own CB  |
| Create Auto-collateralisation Eligibility Link | Auto-collateralisation Eligibility Link - New<br>EligibleSecuritiesCreationRequest | System         | n/a         | Securities Auto-collateralisation Eligibility Links for own CB                                     |
| Create Security CSD Link                       | Security CSD Link – New<br>SecurityCSDLinkCreationRequest                          | System         | n/a         | Security CSD Links within own System Entity  |
| Update Security CSD Link                       | Security CSD Link – New  | System         | n/a         | Security CSD Links within own System Entity  |

| PRIVILEGE | USER FUNCTION                     | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE |
|-----------|-----------------------------------|----------------|-------------|--------------------|
|           | SecurityCSDLinkMaintenanceRequest |                |             |                    |

**TABLE 9 - SECURITIES ACCOUNT DATA MANAGEMENT**

| PRIVILEGE                          | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE        | DEFAULT DATA SCOPE  |
|------------------------------------|---|----------------|--------------------|---|
| Create Securities Account          | Securities Account – New<br>SecuritiesAccountCreationRequest            | Object         | Party              | Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Update Securities Account          | Securities Account – Edit<br>SecuritiesAccountModificationRequest       | Object         | Securities Account | Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Delete Securities Account          | Securities Account – Delete/Restore<br>SecuritiesAccountDeletionRequest | Object         | Securities Account | Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Create CMB Securities Account Link | CMB Securities Account Link – New<br>AccountLinkCreationRequest         | System         | n/a                | CMB Securities Account Links within own System Entity   |
| Update CMB Securities Account Link | CMB Securities Account Link – Edit<br>AccountLinkMaintenanceRequest     | System         | n/a                | CMB Securities Account Links within own System Entity   |

**TABLE 10 – CASH ACCOUNT DATA MANAGEMENT**

These privileges are related to user functions within CRDM. As such, it is possible to use the same privilege(s) to maintain data related to multiple Services/components. For example, the same privileges can be used to create and maintain all types of Cash Accounts for all Services/components.

| PRIVILEGE                       | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE  | DEFAULT DATA SCOPE  |
|---------------------------------|--|----------------|--------------|---|
| Create Account Monitoring Group | Account Monitoring Group – New                               | System         | n/a          | Account Monitoring Groups within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks)   |
| Create Authorised Account User  | Authorised Account User - New                                | System         | n/a          | Links within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks/Ancillary Systems).  |
| Create Cash Account             | Cash Account – New<br>AccountOpeningRequest                  | Object         | Party        | Cash Accounts within own System Entity (for Central Bank) or owned by own Party or TIPS CMBs linked to Cash Accounts owned by own Party (for Payment Bank/Ancillary System) |
| Create Direct Debit Mandate     | Direct Debit Mandate – New                                   | System         | n/a          | Direct Debit Mandates on Cash Accounts within own System Entity (for Central Bank)  |
| Create Limit                    | Limit – New<br>Standing Order for Limit – New<br>ModifyLimit | System         | n/a          | Limits on CMBs defined on Cash Accounts within own System Entity (for Central Bank) or linked to Cash Accounts owned by own Party (for Payment Bank/Ancillary System)       |
| Create Liquidity Transfer Order | Liquidity Transfer Order – New<br>ModifyStandingOrder        | Object         | Cash Account | Liquidity Transfer Orders on Cash Accounts within own System Entity (for Central Bank) or owned or co-managed by own Party (for Payment Banks/Ancillary Systems)            |
| Create Liquidity Transfer Group | Liquidity Transfer Group – New                               | System         | n/a          | Liquidity Transfer Groups within own System Entity (for Central Bank)   |

| PRIVILEGE                             | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE  | DEFAULT DATA SCOPE  |
|---------------------------------------|--|----------------|--------------|---|
| Create Settlement Bank Account Group  | Settlement Bank Account Group – New  | System         | n/a          | Settlement Bank Account Groups within own System Entity (for Central Banks)   |
| Create Standing Order for Reservation | Standing Order for Reservation – New   | System         | n/a          | Standing Orders for Reservation on Cash Accounts within own System Entity (for Central Banks) or owned or co-managed by own Party (for Payment Banks/Ancillary Systems)     |
| Delete Account Monitoring Group       | Account Monitoring Group – Delete/Restore<br>DeleteStandingOrder                   | System         | n/a          | Account Monitoring Groups within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks)   |
| Delete Authorised Account User        | Authorised Account User - Delete/Restore   | System         | n/a          | Links within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks/Ancillary Systems).  |
| Delete Cash Account                   | Cash Account – Delete/Restore  | Object         | Cash Account | Cash Accounts within own System Entity (for Central Bank) or owned by own Party or TIPS CMBs linked to Cash Accounts owned by own Party (for Payment Bank/Ancillary System) |
| Delete Direct Debit Mandate           | Direct Debit Mandate – Delete/Restore  | System         | n/a          | Direct Debit Mandates on Cash Accounts within own System Entity (for Central Bank)  |
| Delete Limit                          | Limit – Delete/Restore<br>Standing Order for Limit – Delete/Restore<br>DeleteLimit | System         | n/a          | Limits on CMBs defined on Cash Accounts within own System Entity (for Central Bank) or linked to Cash Accounts owned by own Party (for Payment Bank/Ancillary System)       |

| PRIVILEGE                             | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE  | DEFAULT DATA SCOPE  |
|---------------------------------------|---|----------------|--------------|---|
| Delete Liquidity Transfer Order       | Liquidity Transfer Order – Delete/Restore                       | System         | n/a          | Liquidity Transfer Orders on Cash Accounts within own System Entity (for Central Bank) or owned or co-managed by own Party (for Payment Bank/Ancillary Systems)                 |
| Delete Liquidity Transfer Group       | Liquidity Transfer Group – Delete/Restore                       | Object         | Cash Account | Liquidity Transfer Groups within own System Entity (for Central Bank)   |
| Delete Settlement Bank Account Group  | Settlement Bank Account Group – Delete/Restore                  | System         | n/a          | Settlement Bank Account Groups within own System Entity (for Central Banks)   |
| Delete Standing Order for Reservation | Standing Order for Reservation – Delete/Restore                 | System         | n/a          | Standing Orders for Reservation on Cash Accounts within own System Entity (for Central Banks) or owned or co-managed by own Party (for Payment Banks/Ancillary Systems)         |
| Update Account Monitoring Group       | Account Monitoring Group – Edit                                 | System         | n/a          | Account Monitoring Groups within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks)   |
| Update Authorised Account User        | Authorised Account User - Edit                                  | System         | n/a          | Links within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks/Ancillary Systems).  |
| Update Cash Account                   | Cash Account – Edit<br>AccountExcludedMandateMaintenanceRequest | Object         | Cash Account | Cash Accounts within own System Entity (for Central Banks) or owned by own Party, or TIPS CMBs linked to Cash Accounts owned by own Party (for Payment Banks/Ancillary Systems) |

| PRIVILEGE                             | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE  | DEFAULT DATA SCOPE  |
|---------------------------------------|--|----------------|--------------|---|
| Update Direct Debit Mandate           | Direct Debit Mandate – Edit                            | System         | n/a          | Direct Debit Mandates on Cash Accounts within own System Entity (for Central Bank)  |
| Update Limit                          | Limit – Edit<br>Standing Order for Limit – Edit        | System         | n/a          | Limits on CMBs defined on Cash Accounts within own System Entity (for Central Bank) or linked to Cash Accounts owned by own Party (for Payment Bank/Ancillary System)   |
| Update Liquidity Transfer Order       | Liquidity Transfer Order – Edit<br>ModifyStandingOrder | Object         | Cash Account | Liquidity Transfer Orders on Cash Accounts within own System Entity (for Central Banks) or owned or co-managed by own Party (for Payment Banks/Ancillary Systems)       |
| Update Liquidity Transfer Group       | Liquidity Transfer Group – Edit                        | System         | n/a          | Liquidity Transfer Groups within own System Entity (for Central Bank)   |
| Update Settlement Bank Account Group  | Settlement Bank Account Group – Edit                   | System         | n/a          | Settlement Bank Account Groups within own System Entity (for Central Banks)   |
| Update Standing Order for Reservation | Standing Order for Reservation – Edit                  | System         | n/a          | Standing Orders for Reservation on Cash Accounts within own System Entity (for Central Banks) or owned or co-managed by own Party (for Payment Banks/Ancillary Systems) |

**TABLE 11 – NETWORK CONFIGURATION**

These privileges are related to user functions within CRDM. As such, it is possible to use the same privilege(s) to maintain data related to multiple Services/components.



| PRIVILEGE      | USER FUNCTION            | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|----------------|--------------------------|----------------|-------------|--|
| Create Routing | Routing – New            | System         | n/a         | Routing configurations within own System Entity (for CSDs and Central Banks) or linked to own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Delete Routing | Routing – Delete/Restore | System         | n/a         | Routing configurations within own System Entity (for CSDs and Central Banks) or linked to own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Update Routing | Routing – Edit           | System         | n/a         | Routing configurations within own System Entity (for CSDs and Central Banks) or linked to own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |

**TABLE 12 – MESSAGE SUBSCRIPTION CONFIGURATION**

These privileges are related to user functions within CRDM. As such, it is possible to use the same privilege(s) to maintain data related to multiple Services/components.

| PRIVILEGE                            | USER FUNCTION                       | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|--------------------------------------|-------------------------------------|----------------|-------------|--|
| Create Message Subscription Rule     | Message Subscription Rule – New     | System         | n/a         | Message Subscription Rules within own System Entity (for CSDs and Central Banks) or for own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Create Message Subscription Rule Set | Message Subscription Rule Set – New | System         | n/a         | Message Subscription Rule Sets within own System Entity (for CSDs and Central Banks) or for own Party (for CSD Participants/External                                   |

| PRIVILEGE                            | USER FUNCTION                                  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|--------------------------------------|--|----------------|-------------|--|
|                                      |  |                |             | CSDs/Payment Banks/Ancillary Systems)  |
| Delete Message Subscription Rule     | Message Subscription Rule – Delete/Restore     | System         | n/a         | Message Subscription Rules within own System Entity (for CSDs and Central Banks) or for own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)     |
| Delete Message Subscription Rule Set | Message Subscription Rule Set – Delete/Restore | System         | n/a         | Message Subscription Rule Sets within own System Entity (for CSDs and Central Banks) or for own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Update Message Subscription Rule     | Message Subscription Rule – Edit               | System         | n/a         | Message Subscription Rules within own System Entity (for CSDs and Central Banks) or for own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)     |
| Update Message Subscription Rule Set | Message Subscription Rule Set – Edit           | System         | n/a         | Message Subscription Rule Sets within own System Entity (for CSDs and Central Banks) or for own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |

**TABLE 13 – REPORT CONFIGURATION**

These privileges are related to user functions within CRDM. As such, it is possible to use the same privilege(s) to maintain data related to multiple Services/components.

| PRIVILEGE                   | USER FUNCTION              | PRIVILEGE TYPE | OBEJCT TYPE | DEFAULT DATA SCOPE   |
|-----------------------------|----------------------------|----------------|-------------|--|
| Create Report Configuration | Report Configuration – New | System         | n/a         | Report Configurations within own System Entity (for CSDs and Central Banks) or for |

| PRIVILEGE                   | USER FUNCTION                         | PRIVILEGE TYPE | OBEJCT TYPE | DEFAULT DATA SCOPE   |
|-----------------------------|---------------------------------------|----------------|-------------|--|
|                             |                                       |                |             | own Party, own Cash Account or co-managed Cash Account (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)  |
| Delete Report Configuration | Report Configuration – Delete/Restore | System         | n/a         | Report Configurations within own System Entity (for CSDs and Central Banks) or for own Party, own Cash Account or co-managed Cash Account (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Update Report Configuration | Report Configuration – Edit           | System         | n/a         | Report Configurations within own System Entity (for CSDs and Central Banks) or for own Party, own Cash Account or co-managed Cash Account (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |

**TABLE 14 – REFERENCE DATA QUERIES**

These privileges are related to user functions within CRDM. As such, it is possible to use the same privilege(s) to query data related to multiple Services/components.

| PRIVILEGE                              | USER FUNCTION                      | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|--|------------------------------------|----------------|-------------|--|
| Account Monitoring Group Query         | Account Monitoring Group – List    | System         | n/a         | Any Account Monitoring Group   |
| Account Monitoring Group Details Query | Account Monitoring Group – Details | System         | n/a         | Any Account Monitoring Group (Cash Account identifiers will be displayed based on the Cash Accounts the requestor User is responsible for; the leader Party will be able to view the |

| PRIVILEGE                                  | USER FUNCTION                               | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|--|---|----------------|-------------|---|
|  |   |                |             | full list of Cash Accounts in the Account Monitoring Group)   |
| Ancillary System Bilateral Agreement Query | Ancillary System Bilateral Agreement – List | System         | n/a         | AS Bilateral Agreements within own System Entity (for Central Banks) or for own Party (for Ancillary Systems)   |
| Ancillary System Procedure Query           | Ancillary System Procedure – List           | System         | n/a         | AS Procedures within own System Entity (for Central Banks) or for own Party (for Ancillary Systems)   |
| Authorised Account User Query              | Authorised Account User – List              | System         | n/a         | Links within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks/Ancillary Systems).  |
| Banking Group Query                        | Banking Group – List                        | System         | n/a         | Any Banking Group   |
| Banking Group Details Query                | Banking Group – Details                     | System         | n/a         | Any Banking Group (Party identifiers will be displayed based on the Cash Accounts the requestor User is responsible for; the leader Party will be able to view the full list of Parties in the Banking Group) |
| BIC Query                                  | BIC Query                                   | System         | n/a         | Any BIC   |
| Billing Group Query                        | Billing Group – List                        | System         | n/a         | Any Billing Group   |
| Billing Group Details Query                | Billing Group – Details                     | System         | n/a         | Any Billing Group (Party identifiers will be displayed based on the Cash Accounts the requestor User is responsible for; the leader Party will be able to view the full list of Parties in the Billing Group) |

| PRIVILEGE                                       | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE  | DEFAULT DATA SCOPE   |
|---|---|----------------|--------------|--|
| Cash Account Audit Trail Query                  | Revisions - Selection Criteria + List<br>Cash Account Audit Trail Querydynamic da | Object         | Cash Account | Data within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)   |
| Cash Account List Query                         | Cash Account List Query   | Object         | Cash Account | Cash Accounts within own System Entity (for Central Banks) or owned by own Party (for Payment Banks/Ancillary Systems)                                 |
| Cash Account Reference Data Query               | Cash Account Reference Data Query   | Object         | Cash Account | Cash Accounts within own System Entity (for Central Banks) or owned by own Party (for Payment Banks/Ancillary Systems)                                 |
| Certificate Query                               | Certificate Query   | System         | n/a          | Any Certificate DN   |
| Country Query                                   | Countries – Select + List   | System         | n/a          | Any Country  |
| Currency Query                                  | Currencies – Select + List  | System         | n/a          | Any Currency   |
| Data Changes of a Business Object Details Query | Data Changes of a Business Object Details Query                                   | System         | n/a          | Data within own System Entity (for CSDs and Central Banks) or linked to own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Data Changes of a Business Object List Query    | Data Changes of a Business Object List Query                                      | System         | n/a          | Data within own System Entity (for CSDs and Central Banks) or linked to own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Direct Debit Mandate List Query                 | Direct Debit Mandate – List   | System         | n/a          | Direct Debit Mandates on Cash Accounts within own System Entity (for Central   |

| PRIVILEGE                            | USER FUNCTION                                 | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|--------------------------------------|---|----------------|-------------|---|
|                                      |   |                |             | Banks) or owned by own Party (for Payment Banks/Ancillary Systems)  |
| Granted Roles List Query             | Granted Roles – Search                        | System         | n/a         | Roles granted to Parties and Users within own System Entity (for CSDs and Central Banks) or to own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)   |
| Granted Roles List Query             | Grant/Revoke Role – Details                   | System         | n/a         | Roles granted to Parties and Users within own System Entity (for CSDs and Central Banks) or to own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)   |
| Granted System Privileges List Query | Grant/Revoke System Privileges List Query     | System         | n/a         | Privileges granted to Parties, Roles and Users within own System Entity (for CSDs and Central Banks) or to own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)   |
| ISIN List Query                      | ISIN List Query                               | System         | n/a         | All Securities defined in CRDM for T2S.   |
| Limit Query                          | Limit Query<br>Standing Order for Limit Query | System         | n/a         | Limits on CMB defined on Cash Accounts within own System Entity (for Central Banks) or owned by own Party (for Payment Banks)<br><br>Limits on CMB linked to one or more CMB Securities Account Links referencing Securities Accounts within own System Entity (for CSD) or owned by own Party (for |

| PRIVILEGE   | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE  | DEFAULT DATA SCOPE  |
|---|---|----------------|--------------|---|
|   |   |                |              | CSD Participant/External CSD)   |
| Liquidity Transfer Order Details Query                                | Liquidity Transfer Order – Details                                    | Object         | Cash Account | Liquidity Transfer Orders on Cash Accounts within own System Entity (for Central Banks) or owned or co-managed by own Party (for Payment Banks/Ancillary Systems) |
| Liquidity Transfer Order Link Set Query                               | Liquidity Transfer Order Link Set Query                               | System         | n/a          | Liquidity Transfer Order Link Sets defined on Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)                            |
| Liquidity Transfer Order List Query                                   | Liquidity Transfer Order – List                                       | Object         | Cash Account | Liquidity Transfer Orders on Cash Accounts within own System Entity (for Central Banks) or owned or co-managed by own Party (for Payment Banks/Ancillary Systems) |
| Liquidity Transfer Order of a Liquidity Transfer Order Link Set Query | Liquidity Transfer Order of a Liquidity Transfer Order Link Set Query | System         | n/a          | Liquidity Transfer Order Link Sets defined on Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)                            |
| Liquidity Transfer Group Query  | Liquidity Transfer Group – List                                       | System         | n/a          | Any Liquidity Transfer Group  |
| Liquidity Transfer Group Details Query                                | Liquidity Transfer Group – Details                                    | System         | n/a          | Any Liquidity Transfer Group  |
| Market-specific Restriction List Query                                | Market-specific Restriction List Query                                | System         | n/a          | Restrictions defined by the Operator  |
| Market-specific Restriction Type Rule Detail Query                    | Market-specific Restriction Type Rule – Detail Query                  | System         | n/a          | Restrictions defined by the Operator  |

| PRIVILEGE   | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---|---|----------------|-------------|---|
| Market-specific Restriction Type Rule Parameter Details Query | Market-specific Restriction Type Rule Parameter Details Query | System         | n/a         | Restrictions defined by the Operator  |
| Market-specific Restriction Type Rule Set List Query          | Market-specific Restriction Type Rule Set List Query          | System         | n/a         | Restrictions defined by the Operator  |
| Message Subscription Rule List Query                          | Message Subscription Rule List Query                          | System         | n/a         | Message Subscriptions within own System Entity (for CSDs and Central Banks) or for own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Message Subscription Rule Set Details Query                   | Message Subscription Rule Sets Details Query                  | System         | n/a         | Message Subscriptions within own System Entity (for CSDs and Central Banks) or for own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Message Subscription Rule Set List Query                      | Message Subscription Rule Set List Query                      | System         | n/a         | Message Subscriptions within own System Entity (for CSDs and Central Banks) or for own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Network Service List query                                    | Network Service List Query                                    | System         | n/a         | Any Network Service   |
| Party Audit Trail Query                                       | Party Audit Trail Query                                       | Object         | Party       | Data within own System Entity (for Central Banks/CSDs) or linked to own Party (for Payment Banks/Ancillary Systems/CSD Participant/External CSD)                  |
| Party List Query  | Party List Query  | Object         | Party       | Parties within own System Entity (for Central   |



| PRIVILEGE                          | USER FUNCTION                         | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|------------------------------------|---------------------------------------|----------------|-------------|---|
|                                    |                                       |                |             | Banks/CSDs) or own Party (for Payment Banks/Ancillary Systems/CSD Participants/External CSDs)   |
| Party Reference Data Query         | Party Reference Data Query            | Object         | Party       | Parties within own System Entity (for Central Banks/CSDs) or own Party (for Payment Banks/Ancillary Systems/CSD Participants/External CSDs)                                       |
| Party-Service Link List Query      | Party-Service Link List Query         | System         | n/a         | Links within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)   |
| Party-Service Link Query           | Party-Service Link Query              | System         | n/a         | Links within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)   |
| Privilege Query                    | Privilege – Selection Criteria + List | System         | n/a         | Any Privilege   |
| Queued Data Changes Query          | Queued Data Changes - Select+List     | System         | n/a         | Data within own System Entity (for CSDs and Central Banks) or linked to own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)                            |
| Report Configuration Details Query | Report Configuration Details Query    | System         | n/a         | Report Configurations within own System Entity (for CSds and Central Banks) or for own Party or own or co-managed Cash Account (for CSD Participants/External CSDs/Payment Banks) |
| Report Configuration List Query    | Report Configuration List Query       | System         | n/a         | Report Configurations within own System Entity (for CSDs  |

| PRIVILEGE                              | USER FUNCTION                        | PRIVILEGE TYPE | OBJECT TYPE        | DEFAULT DATA SCOPE   |
|--|--------------------------------------|----------------|--------------------|--|
|  |                                      |                |                    | and Central Banks) or for own Party or own or co-managed Cash Account (for CSD Participants/External CSDs/Payment Banks)   |
| Residual Static Data Audit Trail Query | Static Data Audit Trail Query        | System         | n/a                | Data within own System Entity (for CSDs and Central Banks) or linked to own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)                                   |
| Restricted Party Query                 | Restricted Party Query               | Object         | Party              | Parties within own System Entity (for CSD/Central Bank) or own Party (for CSD Participant/Payment Bank/External CSD/Ancillary System)  |
| Role List Query                        | Role List Query                      | System         | n/a                | Roles created or granted to Parties and Users within own System Entity (for CSDs and Central Banks) or to own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems) |
| Routing List Query                     | Routing List Query                   | System         | n/a                | Routing configurations within own System Entity (for CSDs and Central Banks) or linked to own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)                 |
| Securities Account Audit Trail Query   | Securities Account Audit Trail Query | Object         | Securities Account | Data within own System Entity (for CSD) or linked to own Party (for CSD Participant/External CSD)  |

| PRIVILEGE                                    | USER FUNCTION                            | PRIVILEGE TYPE | OBJECT TYPE        | DEFAULT DATA SCOPE   |
|--|--|----------------|--------------------|--|
| Securities Account List Query                | Securities Account List Query            | Object         | Party              | Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD)          |
| Securities Account Reference Data Query      | Securities Account Reference Data Query  | Object         | Securities Account | Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD)          |
| Securities Audit Trail Query                 | Securities Audit Trail Query             | Object         | Securities         | Data within own System Entity (for CSD)  |
| Securities CSD Link Query                    | Securities CSD Link Query                | System         | n/a                | Security CSD Links within own System Entity (for CSD) or linked to own Party (for External CSD)                              |
| Securities Deviating Nominal Query           | Securities Deviating Nominal Query       | System         | n/a                | All Securities defined in CRDM for T2S.  |
| Securities Reference Data Query              | Securities Reference Data Query          | System         | n/a                | All Securities defined in CRDM for T2S. <sup>9</sup>   |
| Service List Query                           | Service List Query                       | System         | n/a                | Any Service  |
| Settlement Bank Account Group Query          | Settlement Bank Account Group – List     | System         | n/a                | Settlement Bank Account Groups within own System Entity (for Central Banks) or defined for own Party (for Ancillary Systems) |
| Settlement Bank Account Group Details Query  | Settlement Bank Account Group – Details  | System         | n/a                | Settlement Bank Account Groups within own System Entity (for Central Banks) or defined for own Party (for Ancillary Systems) |
| Standing Order for Reservation Details Query | Standing Order for Reservation – Details | System         | n/a                | Standing Orders for Reservation on Cash Accounts within own System Entity (for Central Banks) or                             |

<sup>9</sup> The grantee can query all securities input by all CSDs  
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| PRIVILEGE  | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|--|--|----------------|-------------|---|
|  |  |                |             | owned or co-managed by own Party (for Payment Banks/Ancillary Systems)  |
| Standing Order for Reservation List Query            | Standing Order for Reservation – List                | System         | n/a         | Standing Orders for Reservation on Cash Accounts within own System Entity (for Central Banks) or owned or co-managed by own Party (for Payment Banks/Ancillary Systems) |
| System Entity Query                                  | System Entities – Select + List                      | System         | n/a         | Own System Entity (for Central Banks)   |
| System User Link Query                               | System User Link Query                               | System         | n/a         | Links within own System Entity (for CSDs and Central Banks) or linked to own Users (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)                 |
| Technical Address Network Service Link Details Query | Technical Address Network Service Link Details Query | System         | n/a         | Links within own System Entity (for CSDs and Central Banks) or linked to own Party (for CSD Participants/External CSDs/Payment Banks/Ancillary Systems)                 |
| Service Items List Query                             | Service Items – Select+List                          | System         | n/a         | Any Service Item  |
| Service Items Details Query                          | Service Item – Details                               | System         | n/a         | Any Service Item  |
| Invoice Configuration List Query                     | Invoice Configuration – Select+List                  | System         | n/a         | Invoice Configurations within own System Entity (for Central Banks)   |
| Invoice Configuration Details Query                  | Invoice Configuration – Details                      | System         | n/a         | Invoice Configurations within own System Entity (for Central Banks)   |

| PRIVILEGE      | USER FUNCTION     | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|----------------|-------------------|----------------|-------------|---|
| VAT List Query | VAT – Select+List | System         | n/a         | VAT configurations within own System Entity (for Central Banks) |

**TABLE 15 – TIPS FUNCTIONS**

These privileges are related to user functions within TIPS. As such, they are only used for TIPS-specific business.

| PRIVILEGE                                  | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|--|---|----------------|-------------|--|
| Adjust CMB Limit                           | Adjust CMB Limit  | System         | n/a         | Data within own System Entity (for Central Bank) or linked to own Party (for Payment Bank)   |
| Instruct Instant Payment                   | Initiate Instant Payment<br>Confirm/reject Instant Payment<br>Request Instant Payment recall<br>Confirm Instant Payment recall<br>Reject Instant Payment recall<br>Instant Payment Status Investigation<br>Request Recall Status Update | System         | n/a         | Data related to Accounts within own System Entity (for Central Bank) or for which own Party is set as authorised user (for Payment Bank) |
| Instruct IP using Single Instructing Party | Initiate Instant Payment without reservation of funds   | System         | n/a         | Instruct IP using Single Instructing Party   |
| Instruct Liquidity Transfer                | Initiate Outbound Liquidity Transfer  | System         | n/a         | Accounts within own System Entity (for Central Bank) or owned by own Party (for Payment Bank)  |
| Modify All Blocking Status                 | Block/unblock Participant<br>Block/unblock Account<br>Block/unblock CMB   | System         | n/a         | Data within own System Entity (for Central Bank)   |
| Modify CMB Blocking Status                 | Block/unblock CMB   | System         | n/a         | Data within own System Entity (for Central Bank) or  |

| PRIVILEGE                                | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|--|---|----------------|-------------|--|
|  |   |                |             | linked to own Party (for Payment Bank)   |
| Query All                                | Query Account Balance and Status<br>Query CMB Limit and Status<br>Query Instant Payment Transaction                     | System         | n/a         | Data related to Accounts within own System Entity (for Central Bank) or owned by own Party (for Payment Bank)                            |
| Query as Reachable Party                 | Query CMB Limit and Status<br>Query Instant Payment Transaction   | System         | n/a         | Data related to Accounts within own System Entity (for Central Bank) or for which own Party is set as authorised user (for Payment Bank) |
| MPL Query                                | Personal Data Retrieval Request   | System         | n/a         | Data under responsibility of requestor   |
| MPL Lookup and Reachability Check        | Look-up request<br>Reachability check   | System         | n/a         | All data in MPL  |
| MPL Proxy-IBAN Mapping Table Maintenance | Create Proxy-IBAN Mapping Table entry<br>Delete Proxy-IBAN Mapping Table entry<br>Update Proxy-IBAN Mapping Table entry | System         | n/a         | Data under responsibility of requestor   |

**TABLE 16 – CLM FUNCTIONS**

These privileges are related to user functions within CLM. As such, they are only used for CLM-specific business. These privileges will be defined separately from the RTGS privileges carrying the same name.

| PRIVILEGE                   | USER FUNCTION           | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|-----------------------------|-------------------------|----------------|-------------|--|
| CLM Query Account Balance   | Account Balance Query   | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own or co-managed Party (for Payment Bank); only A2A |
| CLM Query Account Statement | Account Statement Query | System         | n/a         | Reports relevant for requesting party.   |

| PRIVILEGE                           | USER FUNCTION                    | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|-------------------------------------|----------------------------------|----------------|-------------|---|
| CLM Query Copy of General Ledger    | CLM Query Copy of General Ledger | System         | n/a         | Copy of the General Ledger for the relevant system entity (for CB); only A2A.   |
| CLM Current Reservations Query      | Current Reservations Query       | System         | n/a         | Reservations defined on cash accounts within own System Entity (for CB) or owned by own or co-managed Party (for Payment Bank)  |
| CLM Delete Current Reservation      | Delete Current Reservation       | System         | n/a         | Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank); only A2A  |
| CLM Modify Payment Order            | Modify Payment Order             | System         | n/a         | All payment orders on cash accounts within own System Entity (for CB)   |
| CLM Modify Current Reservation      | Modify Current Reservation       | System         | n/a         | Reservations defined on cash accounts within own System Entity (for CB) or owned by own or co-managed Party (for Payment Bank)  |
| CLM Create, Modify Seizure of Funds | Create, Modify Seizure of Funds  | System         | n/a         | Reservations defined on cash accounts within own System Entity (for CB); only U2A   |
| CLM Query Cash Transfer             | Query and List Cash Transfer     | System         | n/a         | All cash transfer orders on cash accounts within own System Entity (for CB) or owned by own or co-managed Party (for CLM account holder or CLM CB account holder); only U2A |
| CLM Query Cash Transfer Details     | Cash Query Transfer Details      | System         | n/a         | All cash transfer orders on cash accounts within own System Entity (for CB) or owned by own or co-managed Party (for CLM  |

| PRIVILEGE                     | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|-------------------------------|--|----------------|-------------|--|
|                               |  |                |             | account holder or CLM CB account holder)   |
| CLM Query Available Liquidity | Query and Display Available Liquidity (Screen Cash Account Liquidity and Dashboard Liquidity Overview) | System         | n/a         | Parties within own System Entity (for CB), own or co-managed Party (for Payment Bank) or Leader of account monitoring group including the relevant account |
| CLM Query File                | Query and List Files, Details of File  | System         | n/a         | All files for own System Entity (for CB) or for owned or co-managed Party (for CLM account holder or CB account holder).                                   |
| CLM Query Message             | CLM Query and List Message   | System         | n/a         | All messages for own System Entity (for CB) or for owned or co-managed Party (for CLM account holder or CB account holder)                                 |
| CLM Query Message Detail      | CLM Query Message Detail   | System         | n/a         | All messages for own System Entity (for CB) or for owned or co-managed Party (for CLM account holder or CB account holder); only U2A                       |
| CLM Query Task queue          | CLM Query and List Task queue  | System         | n/a         | All tasks for own System Entity (for CB) or for owned or co-managed Party (for CLM account holder or CB account holder); only U2A                          |
| CLM Query Task Queue Detail   | Query Task Queue Detail  | System         | n/a         | All tasks for own System Entity (for CB) or for owned or co-managed Party (for CLM account holder or CB account holder); only U2A                          |
| CLM Revoke Payment Order      | CLM Revoke Payment Order   | System         | n/a         | All payments on cash accounts within own System Entity (for CB)  |
| CLM Query Credit Line List    | CLM Query and Display Credit Line List   | System         | n/a         | Cash accounts within own System Entity (for CB); only  |



| PRIVILEGE   | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---|---|----------------|-------------|---|
|   |   |                |             | U2A   |
| CLM Initiate Credit Line update   | CLM Initiate Credit Line update                                       | System         | n/a         | Cash accounts within own System Entity (for CB)   |
| CLM Send Direct Debit (except connected payment)                              | CLM Send Direct Debit (except connected payment)                      | System         | n/a         | Cash accounts within own System Entity (for CB) only A2A  |
| CLM Initiate Financial Institution Credit Transfer (except connected payment) | CLM Initiate Financial Institution Credit Transfer (except connected) | System         | n/a         | Cash accounts within own System Entity (for CB)   |
| CLM Initiate Connected payment  | CLM Initiate Connected payment  | System         | n/a         | Cash accounts within own System Entity (for CB)   |
| CLM Initiate Immediate Liquidity Transfer                                     | CLM Initiate Immediate Liquidity Transfer                             | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own or co-managed Party (for CLM account holder or CB account holder) |
| CLM Initiate Marginal Lending on request                                      | CLM Initiate Marginal Lending on request                              | System         | n/a         | Cash accounts within own System Entity (for CB)   |
| CLM Initiate Overnight Deposit  | CLM Initiate Overnight Deposit  | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own or co-managed Party (for CLM account holder)                      |
| CLM Initiate Overnight Deposit reversal                                       | CLM Initiate Overnight Deposit reversal                               | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own or co-managed Party (for CLM account holder)                      |
| CLM Query System Time   | CLM Query System Time   | System         | n/a         | Current time of the system; only A2A  |
| CLM Agree/Disagree Cash Transfers   | CLM Agree/Disagree earmarked Cash Transfers                           | System         | n/a         | All cash transfers on Cash Accounts within own System Entity (for CB); only U2A   |

| PRIVILEGE                                      | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|--|--|----------------|-------------|--|
| CLM Query Business Case                        | CLM Query Business Case, List of Business Cases                              | System         | n/a         | All cash transfers on Cash Accounts within own System Entity (for CB); only U2A  |
| CLM Query Standing Facilities                  | Query, display Standing facilities   | System         | n/a         | All cash transfers on Cash Accounts within own System Entity (for CB), own Cash Account (Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank) when querying user belongs to the Group leader |
| CLM Query Minimum Reserve                      | CLM Query, display minimum reserve, Running Average, Adjustment Balance etc. | System         | n/a         | Data within own System Entity (for CB) or own MFI (for Payment Bank)   |
| CLM Query and List Minimum Reserve Requirement | CLM Query . Listminimum reserve Requirement                                  | System         | n/a         | Cash Accounts within own System Entity (for CB).   |
| CLM Modify Minimum Reserve Requirement         | CLM Modify minimum reserve Requirement                                       | System         | n/a         | Cash Accounts within own System Entity (for CB).   |
| CLM Query and List Minimum Reserve Fulfilment  | CLM Query and List Minimum Reserve Fulfilment                                | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A  |
| CLM Modify Minimum Reserve Fulfilment          | CLM Modify Minimum Reserve Fulfilment  | System         | n/a         | Cash Accounts within own System Entity (for CB).   |
| CLM Query of Minimum Reserve Infringements     | CLM Query and list minimum reserve infringements                             | System         | n/a         | Cash Accounts within own System Entity (for CB).; only U2A   |
| CLM Administrate Minimum Reserve Penalty       | CLM Administrate Minimum Reserve Penalty                                     | System         | n/a         | Cash Accounts within own System Entity (for CB): only U2A  |

| PRIVILEGE  | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|--|--|----------------|-------------|---|
| CLM Query local party reference data                         | CLM Query, list party reference data   | System         | n/a         | Local Party Reference data within own System Entity (for CB) or belonging to own Cash Accounts, co-managed Cash Accounts or Cash Accounts within own Account Monitoring Group (for Payment Bank); only U2A        |
| CLM Query local party cash account reference data            | CLM Query, list cash account reference data  | System         | n/a         | Local Cash Account Reference data within own System Entity (for CB) or belonging to own Cash Accounts, co-managed Cash Accounts or Cash Accounts within own Account Monitoring Group (for Payment Bank); only U2A |
| CLM Query BIC data   | CLM Query Local BIC data   | System         | n/a         | visible for all parties; only U2A   |
| CLM Query local reference data by MFI                        | CLM Query, list of local reference data by MFI   | System         | n/a         | Reference data within own System Entity (for CB); only U2A  |
| CLM Query broadcast  | CLM Query, list and display details of broadcast   | System         | n/a         | All broadcasts for Parties within own System Entity (for CB) or own Party (for Ancillary System/Payment Bank); only U2A   |
| CLM New broadcast  | CLM Create a new broadcast   | System         | n/a         | Cash Accounts within own System Entity (for CB) and Operator; only U2A  |
| CLM Query Monitoring Screens "Display Liquidity on CB Level" | Query, list and display details of the CB monitoring screens "Display Liquidity on CB Level" | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A   |

| PRIVILEGE   | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---|--|----------------|-------------|---|
| CLM Query Monitoring Screen "List of Sum of Cash Transfers per Account Holder"  | Query, list and display of CB monitoring Screen "Cash Transfer Order Totals by Party/Account Holder"   | System         | n/a         | Cash Accounts within own System Entity (for CB), Operator; only U2A |
| CLM Query Monitoring Screens "Available Liquidity by Party" and "Available Liquidity by Account"  | Query, list and display of CB monitoring Screens "Available Liquidity by Party " and "Available Liquidity by Account"  | System         | n/a         | Cash Accounts within own System Entity (for CB), Operator; only U2A |
| CLM Query Monitoring Screen "Reservations and dedicated Liquidity"  | Query, list and display of CB monitoring Screen "Reservations and Seizure of Funds"  | System         | n/a         | Cash Accounts within own System Entity (for CB), Operator; only U2A |
| CLM Query Monitoring Screens "List of Available Liquidity on Banking Group Level" and "List of Detailed Available Liquidity on Banking Group Level" | Query, list and display of CB monitoring Screens "List of Available Liquidity on Banking Group Level", List of Detailed Available Liquidity on Banking Group Level" and "Query Dashboard Liquidity Overview" | System         | n/a         | Cash Accounts within own System Entity (for CB), Operator; only U2A |
| CLM Query Monitoring Screen "Status Overview for Cash Transfers"  | Query, list and display of CB monitoring Screen "Status Overview on Cash Transfers"  | System         | n/a         | Cash Accounts within own System Entity (for CB), Operator; only U2A |
| CLM Query Monitoring Screen "Warehoused Cash Transfers"   | Query, list and display of CB monitoring Screen "Warehoused Cash Transfers"  | System         | n/a         | Cash Accounts within own System Entity (for CB), Operator; only U2A |
| CLM Query Monitoring Screen "Standing Facilities per Account Holder"  | Query, list and display of CB monitoring Screen "Standing Facilities per Account Holder"   | System         | n/a         | Cash Accounts within own System Entity (for CB), Operator; only U2A |
| CLM Query Monitoring Screen "Minimum Reserve Information per Account Holder"  | Query, list and display of CB monitoring Screen "Minimum Reserve Information per Account Holder"   | System         | n/a         | Cash Accounts within own System Entity (for CB), Operator; only U2A |

| PRIVILEGE   | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---|---|----------------|-------------|--|
| CLM Query Monitoring Screens Crisis Situation                     | Query, list and display details of the CB monitoring screens european wide  | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A                  |
| CLM Upload File U2A in contingency situation                      | CLM Upload File U2A in contingency situation  | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A                  |
| CLM Activate Monitoring Screen for Crisis Situation               | Activation of crisis situation in screens "Display Liquidity on CB Level" or "List of Available Liquidity on Banking group Level" | System         | n/a         | Operator only; only U2A  |
| CLM Display System Parameter                                      | CLM Display System Parameter  | System         | n/a         | All CB user for a specific currency: Operator for all currencies; only U2A |
| CLM Modify System Parameter                                       | CLM Change System Parameter   | System         | n/a         | Operator only; only U2A  |
| CLM Upload General Ledger File from other Services                | Upload General Ledger File from other Services  | System         | n/a         | Operator only; only U2A  |
| CLM Repeat Sending  | Repeat Sending for internal messages to RTGS, T2S and TIPS  | System         | n/a         | TAH user for a specific currency; Operator for all currencies; only U2A;   |
| CLM Simulate Receipt from other Services                          | Simulate Receipt related to business cases from other Services  | System         | n/a         | TAH user for a specific currency; Operator for all currencies; only U2A;   |
| CLM Manual Reversal Booking other Services                        | Manual Reversal Booking related to messages from other Services   | System         | n/a         | TAH user for a specific currency; Operator for all currencies; only U2A;   |
| CLM Initiate Marginal Lending on Request Reversal                 | CLM Initiate Marginal Lending on Request Reversal   | System         | n/a         | Operator only; only U2A  |
| CLM Skip coordinate General Ledger processing with other Services | CLM Skip coordinate General Ledger processing with other Services (for EoD)   | System         | n/a         | Operator only; only U2A  |

| PRIVILEGE   | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---|---|----------------|-------------|--|
| CLM Download Migration Information                  | CLM Download Migration Information  | System         | n/a         | Unmapped TARGET2 accounts within own System Entity (for CB); only relevant for migration; only U2A |
| CLM Skip CRDM Data Loading                          | CLM Skip CRDM Data Loading  | System         | n/a         | Operator only; only U2A  |
| CLM Administrate Migration Information              | CLM Administrate Migration Information (upload of migration data provided by CBs; start the migration of CSLD go-live | System         | n/a         | Operator only; only U2A  |
| CLM Query/List Events                               | CLM Query/List Events   | System         | n/a         | All party user for a specific currency.  |
| CLM Start GL calculation after contingency recovery | Start GL calculation after contingency recovery   | System         | n/a         | Operator only  |

**TABLE 17 – RTGS FUNCTIONS**

These privileges are related to user functions within RTGS. As such, they are only used for RTGS-specific business. These privileges will be defined separately from the CLM privileges carrying the same name.

| PRIVILEGE   | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---|--|----------------|-------------|---|
| RTGS Query Account Balance  | RTGS Query Account Balance in screens "Query/Display RTGS Cash Account Liquidity" and "Display RTGS Sub-Account Liquidity" | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank and Ancillary System)                               |
| RTGS Query Account Statement  | RTGS Account Statement   | System         | n/a         | Reports relevant for requesting party (as set up in CRDM Report configuration).   |
| RTGS Download Statement of Account  | RTGS Download Statement of Account   | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank); only U2A  |
| RTGS Ancillary System Procedure C – Start/End of Cycle (ReturnGeneralBusinessInformation)     | RTGS Ancillary System Procedure C – Start/End of Cycle (ReturnGeneralBusinessInformation)                                  | System         | n/a         | For Ancillary Systems for their own cycles and CBs related to AS within their own community (only relevant for settlement procedure C).     |
| RTGS Ancillary System Procedure C – Start/End of Procedure (ReturnGeneralBusinessInformation) | RTGS AS Procedure C – Start/End of Procedure (ReturnGeneralBusinessInformation)  | System         | n/a         | For Ancillary Systems for their own procedures and CBs related to AS within their own community (only relevant for settlement procedure C). |
| RTGS Query Current Limits   | Query, List Current Limits   | System         | n/a         | Limits defined on RTGS Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)            |
| RTGS Query Current Reservations   | Query and List Current Reservations  | System         | n/a         | Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)                            |

| PRIVILEGE   | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---|---|----------------|-------------|--|
| RTGS Delete Current Limit   | Delete Current Limit  | System         | n/a         | Limits defined on RTGS Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder); only A2A       |
| RTGS Delete Current Reservation                                     | Delete Current Reservation  | System         | n/a         | Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank); only A2A                       |
| RTGS Invoke Guarantee Processing                                    | RTGS Invoke Guarantee Processing                                    | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by Ancillary System or owned by own Party (for RTGS account holder); only A2A           |
| RTGS Liquidity Adjustment (Ancillary System Settlement Procedure D) | RTGS Liquidity Adjustment (Ancillary System Settlement Procedure D) | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by AS Settlement Bank; only A2A   |
| RTGS Modify Cash Transfer Order                                     | RTGS Modify Cash Transfer Order                                     | System         | n/a         | All cash Transfer Orders on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB account holder) |
| RTGS Modify Current Reservation                                     | RTGS Modify Current Reservation                                     | System         | n/a         | Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)                                 |



| PRIVILEGE                       | USER FUNCTION                           | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---------------------------------|---|----------------|-------------|---|
| RTGS Query Cash Transfer        | Query and List RTGS Cash Transfer Order | System         | n/a         | <p>All cash transfers on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS/CB account holder and RTGS account holder)</p> <p>Ancillary System can only query AS Transfer Orders sent by themselves or sent by CB on behalf but Ancillary System (or their CB on behalf) can additionally query AS Transfer Orders from batches when the Ancillary System is connected to the batch as Counterpart-AS in case of Cross-AS-Business.</p>        |
| RTGS Query Cash Transfer Detail | RTGS Query Transfer Detail              | System         | n/a         | <p>All cash transfer orders on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS CB account holder and RTGS account holder);</p> <p>Ancillary System can only query AS Transfer Orders sent by themselves or sent by CB on behalf but Ancillary System (or their CB on behalf) can additionally query AS Transfer Orders from batches when the Ancillary System is connected to the batch as Counterpart-AS in case of Cross-AS-Business;</p> |

| PRIVILEGE                 | USER FUNCTION               | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---------------------------|-----------------------------|----------------|-------------|--|
| RTGS Query File           | Query and List RTGS Files   | System         | n/a         | All files for own System Entity (for CB) or for owned Party (for RTGS account holder or CB account holder or Ancillary System); only U2A   |
| RTGS Query Message        | Query and List RTGS Message | System         | n/a         | All messages for own System Entity (for CB) or for owned Party (for RTGS account holder or CB account holder or Ancillary System); Ancillary System (or their CB on behalf) connected as Counterpart-AS in case of Cross-AS-Business can query pain.998 ASTI sent and pain.998 ASTN received of the Initiating AS party as well; only U2A. |
| RTGS Query Message Detail | RTGS Query Message Detail   | System         | n/a         | All messages for own System Entity (for CB) or for owned Party (for RTGS account holder, CB account holder or Ancillary Systems) ); Ancillary System (or their CB on behalf) connected as Counterpart-AS in case of Cross-AS-Business can query pain.998 ASTI sent and pain.998 ASTN received of the Initiating AS party as well; only U2A |

| PRIVILEGE   | USER FUNCTION                                    | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---|--|----------------|-------------|--|
| RTGS Query Task Queue   | Query and List RTGS task queue                   | System         | n/a         | All tasks for own System Entity (for CB) or for owned Party (for RTGS account holder, CB account holder or Ancillary Systems); only U2A              |
| RTGS Query Task Queue Detail                                  | RTGS Query Task Queue Detail                     | System         | n/a         | All tasks for own System Entity (for CB) or for owned Party (for RTGS account holder, CB account holder or Ancillary Systems); only U2A              |
| RTGS Revoke payment Order                                     | RTGS Revoke payment Order                        | System         | n/a         | All payments on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB account holder); only U2A       |
| RTGS Revoke or Recall Cash Transfer                           | RTGS Revoke cash transfer                        | System         | n/a         | All cash transfers on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB account holder); only A2A |
| RTGS Send Respond Recall Request as Counterparty              | RTGS Send Respond Recall Request as Counterparty | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder); only A2A  |
| RTGS Send Customer credit transfers(except mandated payments) | RTGS Initiate Customer payment (except mandated) | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder). only A2A  |

| PRIVILEGE  | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|--|---|----------------|-------------|---|
| RTGS Send Direct Debit   | RTGS Send Direct Debit payment  | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB account holder); only A2A  |
| RTGS Send Financial Institution Credit Transfer (except mandated payments) | RTGS Send Financial Institution Credit Transfer (except mandated payment) | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB account holder or Ancillary System); only A2A  |
| RTGS Enter Customer Credit Transfer  | RTGS Enter Customer Credit Transfer (except mandated payment)             | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder); only U2A<br><br>This privilege cannot be combined with the privilege "RTGS Enter Exceptional Customer Credit Transfer" |
| RTGS Enter Exceptional Customer Credit Transfer                            | RTGS Enter Exceptional Customer Credit Transfer                           | System         | n/a         | Cash accounts within own System Entity (for CB), own Cash Accounts (for Payment Bank)<br><br>This privilege cannot be combined with the U2A privilege for Enter Customer Credit Transfer, only U2A                      |

| PRIVILEGE   | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---|--|----------------|-------------|--|
| RTGS Enter Financial Institution Credit Transfer (except mandated payments) | RTGS Enter Financial Institution Credit Transfer (except mandated) | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB account holder or Ancillary System); only U2A<br><br>This privilege cannot be combined with the U2A privilege 'RTGS Enter Exceptional Financial Institution Credit Transfer'. |
| RTGS Enter Exceptional Financial Institution Credit Transfer                | RTGS Enter Exceptional Financial Institution Credit Transfer       | System         | n/a         | Cash accounts within own System Entity (for CB), own Cash accounts (for Payment Bank)<br><br>This privilege cannot be combined with the U2A privilege for Enter Financial Institution Credit Transfer; only U2A  |
| RTGS Initiate immediate Liquidity Transfer                                  | RTGS Initiate immediate Liquidity Transfer                         | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB account holder)   |
| RTGS Initiate immediate liquidity transfer to/from sub-account              | RTGS Initiate immediate liquidity transfer to/from sub-account     | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB Account Holder)   |
| RTGS Send Settlement Bank Transfer Initiation                               | RTGS Initiate SBTI   | System         | n/a         | Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder); only A2A  |
| RTGS Send mandated payment  | RTGS Initiate mandated payment                                     | System         | n/a         | Cash accounts within own System Entity (for CB)  |

| PRIVILEGE                            | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|--------------------------------------|---|----------------|-------------|---|
| RTGS Send new AS Transfer Initiation | RTGS Send new AS Transfer Initiation  | System         | n/a         | Ancillary system for their Settlement Bank Account Group or CB (when AS belongs to their community); only A2A   |
| RTGS Initiate Payment Return         | Initiate Payment Return   | System         | n/a         | All payments on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB account holder)  |
| RTGS Query System Time               | RTGS Query System Time  | System         | n/a         | Current time of the system; only A2A  |
| RTGS Modify Current Limit            | RTGS Modify Current Limit   | System         | n/a         | Limits defined on RTGS Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)  |
| RTGS Agree/Disagree Cash Transfers   | RTGS Agree/Disagree AS Batches on Procedure A and B with Group Status "Stopped due to Blocking"<br>RTGS Agree/Disagree earmarked Cash Transfers | System         | n/a         | AS Batches of Procedure A and Procedure B with Group Status "Stopped due to blocking" within own System Entity (for CB); only U2A;<br>All cash transfers on Cash Accounts within own System Entity (for CB); only U2A |
| RTGS Query Business Case             | RTGS Query Business Case, List Business Case,   | System         | n/a         | All cash transfers on Cash Accounts within own System Entity (for CB); only U2A   |

| PRIVILEGE  | USER FUNCTION                                 | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|--|---|----------------|-------------|---|
| RTGS Query AS Batches                            | Query, list and display details of AS batches | System         | n/a         | Ancillary System Parties within own System Entity (for CB) or own Party (for Ancillary System); Ancillary System parties (or their CB on behalf) connected to the batch as Counterpart-AS in case of Cross-AS-Business can query the batch information as well;   |
| RTGS Query AS Batch Processing Log               | Display AS Batch Processing Log               | System         | n/a         | Batch processing information of Ancillary System Parties within own System Entity (for CB); batch processing information of own Party (for Ancillary System); Ancillary system (or their CB on behalf) can query as well the batch processing information of other AS Initiating Party when it is connected to the batch as Counterpart-AS in case of Cross-AS-Business; Batch processing information of Ancillary System Parties when own Party is either debited or credited on own RTGS cash accounts by the batch instructions (for AS Settlement Banks). only U2A. |
| RTGS Modify End of Settlement period of AS Batch | Modify End of Settlement Period of AS batch   | System         | n/a         | Ancillary System Parties and Cash Accounts within own System Entity (for CB) or own Party (for Ancillary System)  |

| PRIVILEGE                              | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|--|---|----------------|-------------|--|
| RTGS Revoke AS Batch                   | Revoke AS Batch   | System         | n/a         | Ancillary System Parties within own System Entity (for CB) or own Party (for Ancillary System); Ancillary System Parties (or their CB on behalf) connected to the batch as Counterpart-AS in case of Cross-AS-Business can query the batch information as well;  |
| RTGS Query of AS procedures and cycles | Query and list of AS Procedure and Cycles   | System         | n/a         | Ancillary System Parties and Cash Accounts within own System Entity (for CB) or own Party (for Ancillary System)   |
| RTGS Query broadcast                   | RTGS Query, list and display details of broadcast                                     | System         | n/a         | All broadcasts for Parties within own System Entity (for CB) or own Party (for Ancillary System/Payment Bank); only U2A  |
| RTGS New broadcast                     | RTGS create a new broadcast   | System         | n/a         | Cash Accounts within own System Entity (for CB) and Operator; only U2A   |
| RTGS Query local reference data        | RTGS Query, list party reference data, cash account reference data and RTGS directory | System         | n/a         | Reference data within own System Entity (for CB) or belonging to own Cash Accounts (payment Bank or Ancillary System) or Cash Accounts within own Account Monitoring Group (for Payment Bank) or Cash Accounts within own Settlement Bank Account Group (for Ancillary System or their CB on behalf); only U2A |



| PRIVILEGE  | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|--|--|----------------|-------------|---|
| RTGS Query Local Party Cash Account Reference Data                 | RTGS Query, List Cash Account Reference Data                       | System         | n/a         | Local Cash Account Reference data within own System Entity (for CB) or belonging to own Cash Accounts (Payment Bank or Ancillary System) or Cash Accounts within own Account Monitoring Group (for Payment Bank) or Cash Accounts within own Settlement Bank Account Group (for Ancillary System or their CB on behalf); only U2A |
| RTGS Query BIC Data  | RTGS Query and List Local Directory Data                           | System         | n/a         | Local Reference Data (Financial Institution Name and BIC from the BIC Data); only U2A   |
| RTGS Query and List allowed and used amount Direct Debit           | Query and List allowed and used amount Direct Debit                | System         | n/a         | Local Cash Account Reference data within own System Entity (for CB) or belonging to own Cash Accounts or Cash Accounts within own Account Monitoring Group (for Payment Bank); only U2A   |
| RTGS Upload Files in U2A   | RTGS Upload Files in U2A   | System         | n/a         | CBs for all A2A messages they are entitled to send; only U2A  |
| RTGS Activate/Deactivate Exceptional Credit Transfer Functionality | RTGS Activate/Deactivate Exceptional Credit Transfer Functionality | System         | n/a         | RTGS Accounts Holder within own System Entity (for CB)  |
| RTGS Activate/Deactivate Value Date Check                          | RTGS Activate/deactivate value date check                          | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A   |

| PRIVILEGE  | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|--|--|----------------|-------------|---|
| RTGS Query Sum of Cash Transfers   | RTGS Query Monitoring Screen "Query/List of Cash Transfer Order Totals by Party" and "List of Cash Transfer Order Totals by Account" | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A |
| RTGS Query Monitoring Screen "Available Liquidity per Account Holder"          | RTGS Query Monitoring Screens "Query/List of RTGS Liquidity by Party", "List of RTGS Liquidity by Account Holder"                    | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A |
| RTGS Query Monitoring Screen "Reservations and Dedicated Liquidity"            | RTGS Query Monitoring Screen "List of Reservations and Dedicated Liquidity"  | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A |
| RTGS Query Monitoring Screen "Status Overview for Cash Transfers"              | RTGS Query Monitoring Screens "List of Cash Transfer Orders by Status" and "List of Cash Transfer Orders Subtotals by Status"        | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A |
| RTGS Query Monitoring Screen "Warehoused Cash Transfers"                       | RTGS Query Monitoring Screen "Ware-housed Cash Transfers"  | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A |
| RTGS Query Monitoring Screen "Pending Payment by Priority"                     | RTGS Query Monitoring Screens "Query/List of Queued Cash Transfer Orders by Priority"  | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A |
| RTGS Query Monitoring Screen "Status Overview for AS Batches"                  | RTGS Query Monitoring Screen "Status Overview for AS Batches"  | System         | n/a         | Cash Accounts within own System Entity (for CB); only U2A |
| RTGS Query/List Screen "Algorithm result" and RTGS Display Algorithm Parameter | RTGS Query Monitoring Screen "Algorithm result" and RTGS Display Algorithm Parameter   | System         | n/a         | Operator only; only U2A                                   |

| PRIVILEGE  | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|--|--|----------------|-------------|--|
| RTGS Query/List System Parameter                                     | RTGS Query/List System Parameter                                     | System         | n/a         | All party users for a specific currency.   |
| RTGS Modify System Parameter   | RTGS Modify System Parameter   | System         | n/a         | Operator only; only U2A  |
| RTGS Simulate Receipt from other services                            | RTGS Simulate Receipt related to business cases from other services  | System         | n/a         | TAH user for a specific currency; Operator for all currencies; only U2A;   |
| RTGS Repeat Sending  | RTGS Repeat Sending for internal messages to CLM, T2S and TIPS       | System         | n/a         | TAH user for a specific currency; Operator for all currencies; only U2A  |
| RTGS Manual Reversal Booking other Services                          | RTGS Manual Reversal Booking related to messages from other Services | System         | n/a         | TAH user for a specific currency; Operator for all currencies; only U2A  |
| RTGS Query/List Events   | RTGS Query/List Events   | System         | n/a         | All party user for a specific currency.  |
| RTGS AS Query "Liquidity of sub-account/guarantee/technical account" | RTGS AS Query "Liquidity of sub-account/guarantee/technical account" | System         | n/a         | Sub-accounts, guarantee account and technical account within Settlement Bank Group of AS and AS within own System Entity (for CB). |

**TABLE 18 – T2S SETTLEMENT INSTRUCTION MANAGEMENT**

| PRIVILEGE   | USER FUNCTION (MESSAGE)                    | PRIVILEGE TYPE | OBJECT TYPE              | DEFAULT DATA SCOPE   |
|---|--|----------------|--------------------------|--|
| Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an external CSD | SecuritiesSettlementTransactionInstruction | Object         | Party Securities Account | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an external CSD | IntraPositionMovementInstruction           | Object         | Securities Account       | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |

| PRIVILEGE   | USER FUNCTION<br>(MESSAGE)                        | PRIVILEGE<br>TYPE | OBJECT<br>TYPE | DEFAULT DATA SCOPE   |
|---|---|-------------------|----------------|--|
| Send new instruction using a specific Instructing Party               | SecuritiesSettlementTransactionInstruction        | Object            | Party          | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Send new instruction using a specific Instructing Party               | IntraPositionMovementInstruction                  | Object            | Party          | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Send new instruction using a specific Instructing Party               | SecuritiesSettlementConditionsModificationRequest | Object            | Party          | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Send new instruction using a specific Instructing Party               | SecuritiesTransactionCancellationRequest          | Object            | Party          | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Send new instruction using a specific Instructing Party               | IntraBalanceMovementInstruction                   | Object            | Party          | All instructions on T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)                         |
| Send new instruction using a specific Instructing Party               | IntraBalanceMovementModificationRequest           | Object            | Party          | All instructions on T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)                         |
| Send new instruction using a specific Instructing Party               | IntraBalanceMovementCancellationRequest           | Object            | Party          | All instructions on T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)                         |
| Unblock CoSD Securities Blocking related to cancelled CoSD Settlement | IntraPositionMovementInstruction                  | Object            | Party          | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or   |

| PRIVILEGE   | USER FUNCTION (MESSAGE)                           | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|---|---|----------------|-------------|--|
| Instructions on Behalf of the relevant CSD in T2S                     |   |                |             | owned by own Party (for CSD Participant and External CSD)                                  |
| Send Settlement Instruction with non-modifiable flag activated        | SecuritiesSettlementTransactionInstruction        | System         | n/a         | All Settlement Instructions sent   |
| Link to an Instruction / Pool Reference belonging to a specific Party | SecuritiesSettlementTransactionInstruction        | Object         | Party       | Parties within own System Entity (for CSD) or own Party (for CSD Participant/External CSD) |
| Link to an Instruction / Pool Reference belonging to a specific Party | IntraPositionMovementInstruction                  | Object         | Party       | Parties within own System Entity (for CSD) or own Party (for CSD Participant/External CSD) |
| Link to an Instruction / Pool Reference belonging to a specific Party | SecuritiesSettlementConditionsModificationRequest | Object         | Party       | Parties within own System Entity (for CSD) or own Party (for CSD Participant/External CSD) |
| Use ISO Transaction Code AUTO (Auto-Collateralisation)                | SecuritiesSettlementTransactionInstruction        | System         | n/a         | All Settlement Instructions sent   |
| Use ISO Transaction Code BYYY (BuyIn)                                 | SecuritiesSettlementTransactionInstruction        | System         | n/a         | All Settlement Instructions sent   |
| Use ISO Transaction Code BSBK (Buy Sell Back)                         | SecuritiesSettlementTransactionInstruction        | System         | n/a         | All Settlement Instructions sent   |
| Use ISO Transaction Code CLAI (Market Claim)                          | SecuritiesSettlementTransactionInstruction        | System         | n/a         | All Settlement Instructions sent   |
| Use ISO Transaction Code CNCB (Central Bank Collateral Operation)     | SecuritiesSettlementTransactionInstruction        | System         | n/a         | All Settlement Instructions sent   |
| Use ISO Transaction Code COLI (Collateral In)                         | SecuritiesSettlementTransactionInstruction        | System         | n/a         | All Settlement Instructions sent   |
| Use ISO Transaction Code COLO (Collateral Out)                        | SecuritiesSettlementTransactionInstruction        | System         | n/a         | All Settlement Instructions sent   |
| Use ISO Transaction Code CONV (Depository Receipt Conversion)         | SecuritiesSettlementTransactionInstruction        | System         | n/a         | All Settlement Instructions sent   |

| PRIVILEGE   | USER FUNCTION<br>(MESSAGE)                 | PRIVILEGE<br>TYPE | OBJECT<br>TYPE | DEFAULT DATA SCOPE               |
|---|--|-------------------|----------------|----------------------------------|
| Use ISO Transaction Code CORP (Corporate Action)          | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code ETFT                             | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code FCTA (Factor Update)             | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code INSP (Move Of Stock)             | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code ISSU (Issuance)                  | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code MKDW (Mark Down)                 | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code MKUP (Mark Up)                   | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code NETT (Netting)                   | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code NSYN (Non Syndicated)            | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code OWNE (External Account Transfer) | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code OWNI (Internal Account Transfer) | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code PAIR (Pair Off)                  | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code PLAC (Placement)                 | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code PORT (Portfolio Move)            | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code REAL (Realignment)               | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |
| Use ISO Transaction Code REBL (Rebalancing)               | SecuritiesSettlementTransactionInstruction | System            | n/a            | All Settlement Instructions sent |

| PRIVILEGE   | USER FUNCTION (MESSAGE)                    | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE               |
|---|--|----------------|-------------|----------------------------------|
| Use ISO Transaction Code REDI (Withdrawal)                              | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code REDM (Redemption)                              | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code RELE (Depository Receipt Release Cancellation) | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code REPU (Repo)                                    | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code RODE (Return Delivery Without Matching)        | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code RVPO (Reverse Repurchase Agreement)            | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code SBBK (Sell Buy Back)                           | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code SBRE (Borrowing Reallocation)                  | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code SECB (Securities Borrowing)                    | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code SECL (Securities Lending)                      | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code SLRE (Lending Reallocation)                    | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code SUBS (Subscription)                            | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code SWIF (Switch From)                             | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |
| Use ISO Transaction Code SWIT (Switch To)                               | SecuritiesSettlementTransactionInstruction | System         | n/a         | All Settlement Instructions sent |

| PRIVILEGE   | USER FUNCTION (MESSAGE)                           | PRIVILEGE TYPE | OBJECT TYPE              | DEFAULT DATA SCOPE   |
|---|---|----------------|--------------------------|--|
| Use ISO Transaction Code SYND (Syndicate Underwriters)  | SecuritiesSettlementTransactionInstruction        | System         | n/a                      | All Settlement Instructions sent   |
| Use ISO Transaction Code TBAC (TBA Closing)   | SecuritiesSettlementTransactionInstruction        | System         | n/a                      | All Settlement Instructions sent   |
| Use ISO Transaction Code TRAD (Trade)   | SecuritiesSettlementTransactionInstruction        | System         | n/a                      | All Settlement Instructions sent   |
| Use ISO Transaction Code TRPO (Triparty Repo)   | SecuritiesSettlementTransactionInstruction        | System         | n/a                      | All Settlement Instructions sent   |
| Use ISO Transaction Code TRVO (Triparty Reverse Repo)   | SecuritiesSettlementTransactionInstruction        | System         | n/a                      | All Settlement Instructions sent   |
| Use ISO Transaction Code TURN (Turnaround)  | SecuritiesSettlementTransactionInstruction        | System         | n/a                      | All Settlement Instructions sent   |
| Party Hold Settlement Instruction on a Securities Account or on Behalf of an external CSD     | SecuritiesSettlementTransactionInstruction        | Object         | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Party Hold Settlement Instruction on a Securities Account or on Behalf of an external CSD     | SecuritiesSettlementConditionsModificationRequest | Object         | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| CSD Hold Settlement Instruction either on a Securities Account or on Behalf of the CSD in T2S | SecuritiesSettlementTransactionInstruction        | Object         | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| CSD Hold Settlement Instruction either on a Securities Account or on Behalf of the CSD in T2S | SecuritiesSettlementConditionsModificationRequest | Object         | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Release Party Hold Settlement Instruction on  | SecuritiesSettlementConditionsModificationRequest | Object         | Securities Account       | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or   |



| PRIVILEGE  | USER FUNCTION<br>(MESSAGE)                        | PRIVILEGE<br>TYPE | OBJECT<br>TYPE           | DEFAULT DATA SCOPE   |
|--|---|-------------------|--------------------------|--|
| a Securities Account or on Behalf of an external CSD   |   |                   | Party                    | owned by own Party (for CSD Participant and External CSD)  |
| Release CSD Hold Settlement Instruction either on a Securities Account or on Behalf of the CSD in T2S  | SecuritiesSettlementConditionsModificationRequest | Object            | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Release CSD Validation Hold Settlement Instruction either on a Securities Account or on Behalf of the CSD in T2S   | SecuritiesSettlementConditionsModificationRequest | Object            | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Release CoSD Hold Settlement Instruction on Behalf of an Administering Party   | SecuritiesSettlementConditionsModificationRequest | Object            | Party                    | Parties within own System Entity (for CSD) or own Party (for CSD Participant/External CSD)   |
| Amend Process Indicator of a Settlement Instruction/ Settlement Restriction on Securities either on a Securities Account or on Behalf of the CSD in T2S or on Behalf of an external CSD              | SecuritiesSettlementConditionsModificationRequest | Object            | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Cancel Settlement Instruction / Settlement Restriction on Securities either on a Securities Account or on Behalf of the CSD in T2S, on Behalf on external CSD or on Behalf of an Administering Party | SecuritiesTransactionCancellationRequest          | Object            | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Amend Process Indicator of a non-modifiable Settlement Instruction on behalf of the Instructing  | SecuritiesSettlementConditionsModificationRequest | Object            | Party                    | Parties within own System Entity (for CSD) or own Party (for CSD Participant/External CSD)   |

| PRIVILEGE   | USER FUNCTION (MESSAGE)                           | PRIVILEGE TYPE | OBJECT TYPE              | DEFAULT DATA SCOPE   |
|---|---|----------------|--------------------------|--|
| Party of the underlying instruction   |   |                |                          |  |
| Hold Non-modifiable Instructions on behalf of the Instructing party of the Underlying Settlement Instruction    | SecuritiesSettlementConditionsModificationRequest | Object         | Party                    | Parties within own System Entity (for CSD) or own Party (for CSD Participant/External CSD)   |
| Release Non-modifiable Instructions on behalf of the Instructing party of the Underlying Settlement Instruction | SecuritiesSettlementConditionsModificationRequest | Object         | Party                    | Parties within own System Entity (for CSD) or own Party (for CSD Participant/External CSD)   |
| Cancel Non-modifiable Instructions on behalf of the Instructing party of the Underlying Settlement Instruction  | SecuritiesTransactionCancellationRequest          | Object         | Party                    | Parties within own System Entity (for CSD) or own Party (for CSD Participant/External CSD)   |
| Release Party Hold Autocollateralisation Instruction on a Securities Account                                    | SecuritiesSettlementConditionsModificationRequest | Object         | Securities Account Party | All Autocollateralisation Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant) |

**TABLE 19 – T2S CASH MANAGEMENT**

| PRIVILEGE   | USER FUNCTION (MESSAGE)                          | PRIVILEGE TYPE | OBJECT TYPE                                  | DEFAULT DATA SCOPE   |
|---|--|----------------|--|--|
| Send New Liquidity Transfer   | Internal / Inbound / Outbound Liquidity Transfer | Object         | Party<br>T2S<br>Dedicated<br>Cash<br>Account | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank) |
| Send New Settlement Restriction on cash on a Dedicated Cash Account | IntraBalanceMovementInstruction                  | Object         | T2S<br>Dedicated<br>Cash<br>Account          | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank) |

| PRIVILEGE   | USER FUNCTION (MESSAGE)                 | PRIVILEGE TYPE | OBJECT TYPE                | DEFAULT DATA SCOPE   |
|---|---|----------------|----------------------------|--|
| Amend Process Indicator Settlement Restriction on Cash on a Dedicated Cash Account                                | IntraBalanceMovementModificationRequest | Object         | T2S Dedicated Cash Account | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank) |
| Cancel Settlement Restriction on Cash on a Dedicated Cash Account   | IntraBalanceMovementCancellationRequest | Object         | T2S Dedicated Cash Account | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank) |
| Unblock CoSD Cash Blocking related to cancelled CoSD Settlement Instructions on Behalf of the relevant CSD in T2S | IntraBalanceMovementInstruction         | Object         | Party                      | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank) |
| Link to an Instruction/Pool Reference belonging to a specific Party   | IntraBalanceMovementInstruction         | Object         | Party                      | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank) |
| Link to an Instruction/Pool Reference belonging to a specific Party   | IntraBalanceMovementModificationRequest | Object         | Party                      | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank) |

**TABLE 20 – T2S DYNAMIC DATA QUERIES**

| PRIVILEGE                                   | USER FUNCTION                               | PRIVILEGE TYPE | OBJECT TYPE              | DEFAULT DATA SCOPE   |
|---|---|----------------|--------------------------|--|
| Settlement Instruction Query                | SettlementInstructionQuery                  | Object         | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Settlement Instruction Current Status Query | Settlement Instruction Current Status Query | Object         | Securities Account Party | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |

| PRIVILEGE                                       | USER FUNCTION                                   | PRIVILEGE TYPE | OBJECT TYPE                | DEFAULT DATA SCOPE   |
|---|---|----------------|----------------------------|--|
| Settlement Instruction Status Audit Trail Query | Settlement Instruction Status Audit Trail Query | Object         | Securities Account Party   | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Settlement Instruction Audit Trail Query        | Settlement Instruction Audit Trail Query        | Object         | Securities Account Party   | All Settlement Instructions on Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Securities Account Position Query               | Securities Account Position Query               | Object         | Securities Account         | Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD)                                |
| T2S Dedicated Cash Account Balance Query        | T2S Dedicated Cash Account Balance Query        | Object         | T2S Dedicated Cash Account | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)   |
| T2S Dedicated Cash Account Posting Query        | T2S Dedicated Cash Account Posting Query        | Object         | T2S Dedicated Cash Account | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)   |
| Immediate Liquidity Transfer Order List Query   | Immediate Liquidity Transfer Order List Query   | Object         | T2S Dedicated Cash Account | Liquidity Transfers on T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)                      |
| Immediate Liquidity Transfer Order Detail Query | Immediate Liquidity Transfer Order Detail Query | Object         | T2S Dedicated Cash Account | Liquidity Transfers on T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)                      |

| PRIVILEGE                                       | USER FUNCTION                                   | PRIVILEGE TYPE | OBJECT TYPE                | DEFAULT DATA SCOPE  |
|---|---|----------------|----------------------------|---|
| Outstanding Auto-Collateralisation Credit Query | Outstanding Auto-Collateralisation Credit Query | System         | n/a                        | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)  |
| T2S Overall Liquidity Query                     | T2S Overall Liquidity Query                     | Object         | Party                      | Parties within own System Entity (for CB) or own Party (for Payment Bank)   |
| Liquidity Information Query                     | Liquidity Information Query                     | Object         | T2S Dedicated Cash Account | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)  |
| Cash Forecast Query                             | Cash Forecast Query                             | Object         | Party                      | Parties within own System Entity (for CB) or own Party (for Payment Bank)   |
| Limit Utilisation Journal Query                 | Limit Utilisation Journal Query                 | System         | n/a                        | Limits on CMB defined on T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank); Limits on CMB linked to one or more CMB Securities Account Links referencing Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant/External CSD) |
| Limit Utilisation Query                         | Limit Utilisation Query                         | System         | n/a                        | Limits on CMB defined on T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank); Limits on CMB linked to one or more CMB Securities Account Links referencing Securities  |

| PRIVILEGE   | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---|---|----------------|-------------|---|
|   |   |                |             | Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant/External CSD)  |
| Total collateral value per T2S Dedicated Cash Account Query | Total collateral value per T2S Dedicated Cash Account Query | System         | n/a         | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank); Collateral Value of securities positions of Securities Accounts within own System Entity (for CSD) or owned by Party (for CSD Participant/External CSD) related to T2S Dedicated Cash Accounts of CMB linked to one or more CMB Securities Account Links referencing the respective Securities Accounts |
| Collateral Value per T2S Dedicated Cash Account Query       | Collateral Value per T2S Dedicated Cash Account Query       | System         | n/a         | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank); Collateral Value of securities positions of Securities Accounts within own System Entity (for CSD) or owned by Party (for CSD Participant/External CSD) related to T2S Dedicated Cash Accounts of CMB linked to one or more CMB Securities Account Links referencing the respective Securities Accounts |
| Collateral Value of a Security Query                        | Collateral Value of a Security Query                        | System         | n/a         | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by   |

| PRIVILEGE  | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE                | DEFAULT DATA SCOPE  |
|--|--|----------------|----------------------------|---|
|  |  |                |                            | own Party (for Payment Bank); Collateral Value of securities positions of Securities Accounts within own System Entity (for CSD) or owned by Party (for CSD Participant/External CSD) related to T2S Dedicated Cash Accounts of CMB linked to one or more CMB Securities Account Links referencing the respective Securities Accounts |
| Cancellation Instructions for Intra-Balance Movements Query                                  | Cancellation Instructions for Intra-Balance Movements Query                              | Object         | T2S Dedicated Cash Account | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)  |
| Cancellation Instructions for Query for Intra-Position Movements and Settlement Instructions | Cancellation Instructions Query for Intra-Position Movements and Settlement Instructions | Object         | Securities Account         | Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD)   |
| Amendment Instruction Query for Intra-Balance Movements                                      | Amendment Instruction Query for Intra-Balance Movements                                  | Object         | T2S Dedicated Cash Account | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)  |

| PRIVILEGE  | USER FUNCTION  | PRIVILEGE TYPE | OBJECT TYPE                | DEFAULT DATA SCOPE  |
|--|--|----------------|----------------------------|---|
| Amendment Instruction Query for Intra-Position Movements and Settlement Instructions | Amendment Instruction Query for Intra-Position Movements and Settlement Instructions | Object         | Securities Account         | Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Intra-Balance Movements Query  | Intra-Balance Movements Query  | Object         | T2S Dedicated Cash Account | T2S Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)              |
| Intra-Position Movements Query   | Intra-Position Movements Query   | Object         | Securities Account         | Securities Accounts within own System Entity (for CSD) or owned by own Party (for CSD Participant and External CSD) |
| Total amount of standing and predefined orders Query                                 | Total amount of standing and predefined orders Query                                 | Object         | Cash Account               | Liquidity Transfers on Cash Accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)     |

**TABLE 21 – BILLING**

| PRIVILEGE                           | USER FUNCTION                       | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|-------------------------------------|-------------------------------------|----------------|-------------|--|
| Invoice Data List Query             | Invoice Data List Query             | System         | n/a         | Billing data for CSD and CB  |
| Invoice Data Details Query          | Invoice Data Details Query          | System         | n/a         | Billing data for CSD and CB  |
| Itemised Invoice Data List Query    | Itemised Invoice Data List Query    | System         | n/a         | Itemised Billing Data under own System Entity  |
| Itemised Invoice Data Details Query | Itemised Invoice Data Details Query | System         | n/a         | Itemised Billing Data under own System Entity  |
| PDF Invoice List Query              | PDF Invoice List Query              | System         | n/a         | Invoices under own System Entity (for Central Banks) or related to own Party (for Payment Banks/Ancillary Systems) |



| PRIVILEGE                       | USER FUNCTION                   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---------------------------------|---------------------------------|----------------|-------------|---|
| Manual Correction List Query    | Manual Correction List Query    | System         | n/a         | Manual corrections for invoices under own System Entity (for Central Banks) |
| Manual Correction Details Query | Manual Correction Details Query | System         | n/a         | Manual corrections for invoices under own System Entity (for Central Banks) |
| Manage Manual Correction        | Manual Correction - New         | System         | n/a         | Manual corrections for invoices under own System Entity (for Central Banks) |
| Manage Manual Correction        | Manual Correction – Delete      | System         | n/a         | Manual corrections for invoices under own System Entity (for Central Banks) |
| BILL Monitor                    | BILL Monitor                    | System         | n/a         | For ECB to act as issuer of System Entity invoices to CSDs and CBs.         |

**TABLE 22 – BILLING CONFIGURATION**

| PRIVILEGE                           | USER FUNCTION                          | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE   |
|-------------------------------------|--|----------------|-------------|--|
| Invoice Configurations List Query   | Invoice Configurations List Query      | System         | n/a         | Invoice Configurations under own System Entity (for Central Banks) |
| Invoice Configuration Details Query | Invoice Configuration Details Query    | System         | n/a         | Invoice Configurations under own System Entity (for Central Banks) |
| Create Invoice Configuration        | Invoice Configuration - New            | System         | n/a         | Invoice Configuration under own System Entity (for Central Banks)  |
| Update Invoice Configuration        | Invoice Configuration - Edit           | System         | n/a         | Invoice Configuration under own System Entity (for Central Banks)  |
| Delete Invoice Configuration        | Invoice Configuration – Delete/Restore | System         | n/a         | Invoice Configuration under own System Entity (for Central Banks)  |
| VAT List Query                      | VAT List Query                         | System         | n/a         | VAT configurations within own System Entity (for Central Banks)    |
| Create VAT                          | VAT - New                              | System         | n/a         | VAT configurations within own System Entity (for Central Banks)    |

| PRIVILEGE  | USER FUNCTION | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|------------|---------------|----------------|-------------|---|
| Update VAT | VAT - Edit    | System         | n/a         | VAT configurations within own System Entity (for Central Banks) |
| Delete VAT | VAT – Delete  | System         | n/a         | VAT configurations within own System Entity (for Central Banks) |

**TABLE 23 – DATA WAREHOUSE FUNCTIONS**

| PRIVILEGE                    | USER FUNCTION                | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|------------------------------|------------------------------|----------------|-------------|---|
| Data Warehouse Normal User   | Data Warehouse Normal User   | System         | n/a         | Execution of predefined reports (for Payment Bank, Ancillary System and Central Bank) |
| Data Warehouse Advanced User | Data Warehouse Advanced User | System         | n/a         | Execution of predefined, adaptable and user-defined reports (for Central Bank)        |
| Data Warehouse Operator User | Data Warehouse Operator User | System         | n/a         | Only applicable for Operator  |

**TABLE 24 – ECONS II FUNCTIONS**

| PRIVILEGE                             | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE |
|---------------------------------------|---|----------------|-------------|--------------------|
| Activation/Deactivation Contingency   | ECONS II Settlement Day management: Open/Close contingency              | System         | n/a         | Operator only.     |
| Change business date in Contingency   | ECONS II Settlement Day management: Change business date in contingency | System         | n/a         | Operator only.     |
| Change Contingency status (start/end) | ECONS II Settlement Day management: Change                              | System         | n/a         | Operator only.     |

| PRIVILEGE                               | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|---|---|----------------|-------------|---|
| Maintenance Window)                     | contingency status (start/end Maintenance Window)                       |                |             |   |
| Open Account                            | Account management - new  | System         | n/a         | Operator only.  |
| Modify Liquidity                        | Transaction/Payment - new   | System         | n/a         | Cash Accounts within own System Entity (for CBs).   |
| Insert Payment                          | Transaction/Payment - new   | System         | n/a         | Cash Accounts within own System Entity (for CBs) or owned by own Party (for Payment Banks).                         |
| Query ECONS II Business Day Information | ECONS II Settlement Day monitoring - search/list                        | System         | n/a         | Data available to all users.  |
| Query Contingency Account and balance   | Contingency Account balance monitoring - search/list                    | System         | n/a         | Cash Accounts within own System Entity (for CBs) or owned by own Party (for Payment Banks).                         |
| Query Task List                         | Task Queue - search/list + details (approve/revoke functionality)       | System         | n/a         | Tasks performed by users within own System Entity (for CBs) or own Party (for Payment Banks and Ancillary Systems). |
| Block/unblock Contingency Account       | Account management - edit   | System         | n/a         | Cash Accounts within own System Entity (for CBs).   |
| Send AS Transfer Initiation             | Send AS Transfer Initiation   | System         | n/a         | Cash Accounts within own System Entity (for CBs).   |
| Agree/Disagree transaction              | Agree/Disagree transaction  | System         | n/a         | Cash Accounts within own System Entity (for CBs).   |
| Query Liquidity Monitoring on CB Level  | Query, list and display details of the Liquidity monitoring on CB Level | System         | n/a         | Cash Accounts within own System Entity (for CBs).   |

**TABLE 25 - BUSINESS DAY MANAGEMENT QUERIES**

| PRIVILEGE                            | USER FUNCTION                        | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE           |
|--------------------------------------|--------------------------------------|----------------|-------------|------------------------------|
| Calendar Query                       | Calendar Query                       | System         | n/a         | All elements <sup>10</sup>   |
| Diary Query                          | Diary Query                          | System         | n/a         | All elements <sup>11</sup>   |
| Current Status of the settlement day | Current Status of the settlement day | System         | n/a         | Current status <sup>12</sup> |

**TABLE 26 - REPORT QUERIES**

| PRIVILEGE            | USER FUNCTION        | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE                     |
|----------------------|----------------------|----------------|-------------|--|
| Report Details Query | Report Details Query | System         | n/a         | Reports relevant for requesting party. |

**TABLE 27 - MESSAGE MANAGEMENT**

| PRIVILEGE                         | USER FUNCTION                  | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE  |
|-----------------------------------|--------------------------------|----------------|-------------|---|
| Resend Communication              | ResendCommunication            | Object         | Party       | n/a   |
| RTGS answer                       | RTGS answer                    | System         | n/a         | T2S Dedicated Cash Accounts within own System Entity (for CB) |
| Third party receipt <sup>13</sup> | All messages subject to copies | Object         | Party       | n/a   |

**TABLE 28 – OTHER**

| PRIVILEGE                  | USER FUNCTION             | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE |
|----------------------------|---------------------------|----------------|-------------|--------------------|
| Data Migration Tool Access | Allows access to the DMT. | System         | n/a         | n/a                |
| CRDM Access                | Allows access to CRDM.    | System         | n/a         | n/a                |
| TIPS Access                | Allows access to TIPS.    | System         | n/a         | n/a                |

<sup>10</sup> The grantee can query all the entries of the calendar.

<sup>11</sup> The grantee can query all the events of the current settlement day.

<sup>12</sup> The grantee can query the current status of the settlement day.

<sup>13</sup> See section [Message subscription](#).

| PRIVILEGE          | USER FUNCTION   | PRIVILEGE TYPE | OBJECT TYPE | DEFAULT DATA SCOPE |
|--------------------|---|----------------|-------------|--------------------|
| CLM Access         | Allows access to CLM.                                   | System         | n/a         | n/a                |
| RTGS Access        | Allows access to RTGS.                                  | System         | n/a         | n/a                |
| ECMS Access        | Allows access to ECMS.                                  | System         | n/a         | n/a                |
| Contingency Access | Allows access to ECONS2.                                | System         | n/a         | n/a                |
| DWH Access         | Allows access to Data Warehouse                         | System         | n/a         | n/a                |
| BILL Access        | Allows access to Billing component                      | System         | n/a         | n/a                |
| BDM Access         | Allows access to Business Day Management Component      | System         | n/a         | n/a                |
| EIDB Access        | Allows access to the TIPS Enhanced Information Database | System         | n/a         | n/a                |

See section 1.2.2.2.2 [Configuration of privileges](#) for information on the configuration of privileges.

#### 1.2.2.1.3 Secured object

A secured object is a reference data object on which a grantee was granted an object privilege. This is the exhaustive list of the possible types of secured objects:

- | Party;
- | Security;
- | Securities account;
- | Cash account.

#### 1.2.2.1.4 Secured group

A secured group is a homogeneous group of secured objects, i.e. a group of secured objects of the same type (e.g. a group of securities accounts, a group of parties). See section 1.2.2.3 Configuration of secured objects and secured groups for information on the configuration of secured groups.

#### 1.2.2.1.5 Role

A role is a set of privileges. See section 1.2.2.2.3 [Configuration of roles](#) for information on the configuration of roles.

#### 1.2.2.1.6 User

A user is an individual or application that interacts with CRDM triggering the available CRDM user functions. See section 1.2.2.2.1 [Configuration of users](#) for information on the configuration of users.

### 1.2.2.1.7 Certificate

A digital certificate is an electronic document binding an identity to a pair of electronic keys, a private key (used to sign digital information to be sent to a counterpart or to decrypt digital information received from a counterpart) and a public key (used to encrypt digital information to be sent to a counterpart or to perform the authentication and to ensure the integrity of digital information received from a counterpart).

CRDM Actors assign certificates to their individuals (interacting with CRDM and other Services/components in U2A mode) and applications (interacting with CRDM and other Services/components in A2A mode). If a CRDM Actor uses multiple connectivity providers to connect, then it has to assign one certificate to each of its individuals and applications for each of these connectivity providers.

### 1.2.2.1.8 Associations between users and certificates

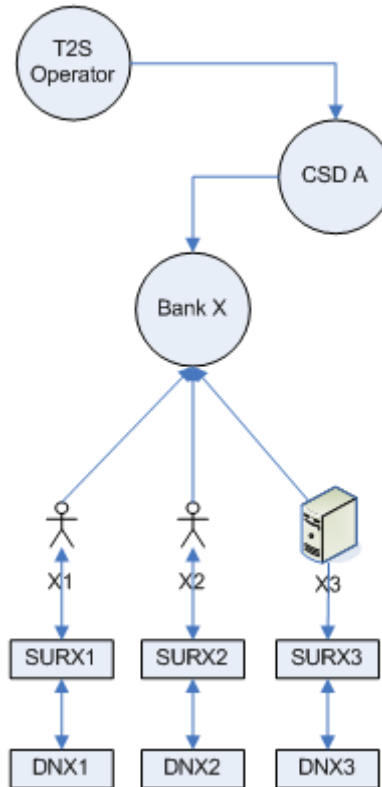
Depending on the provisions of the specific Service or component, CRDM actors may play different roles within them and, as a consequence, they may be defined as multiple parties in CRDM (e.g. a bank being a participant of multiple CSDs, or a Central Bank being defined as a CB and also as a participant of its local CSD). This can result in different types of associations between the system user references (and consequently the users) and the certificate DNs (and consequently the certificates) of a given CRDM Actor.

In a basic scenario where a given CRDM Actor is defined as one party in CRDM, the association between certificate DNs and system user references is one-to-one. Each individual and each application of the CRDM Actor is defined as a user belonging to the party defined in CRDM for this Actor and the certificate DN of each individual and each application is linked to the system user reference of the corresponding user defined in CRDM.

#### **EXAMPLE 4 - BASIC SCENARIO WITH ONE CRDM ACTOR DEFINED AS ONE PARTY**

Bank X participates in T2S as a participant of CSD A only, with two individuals and one application. Bank X creates one user for each of them and it links their certificate DNs to the system user references of the created users according to a one-to-one association.

**DIAGRAM 4 - BASIC SCENARIO WITH ONE CRDM ACTOR DEFINED AS ONE PARTY**



The following table shows the one-to-one association between the distinguished names of the given individuals and applications and the system user references of the corresponding users defined in CRDM.

**TABLE 29 - BASIC SCENARIO WITH ONE CRDM ACTOR DEFINED AS ONE PARTY**

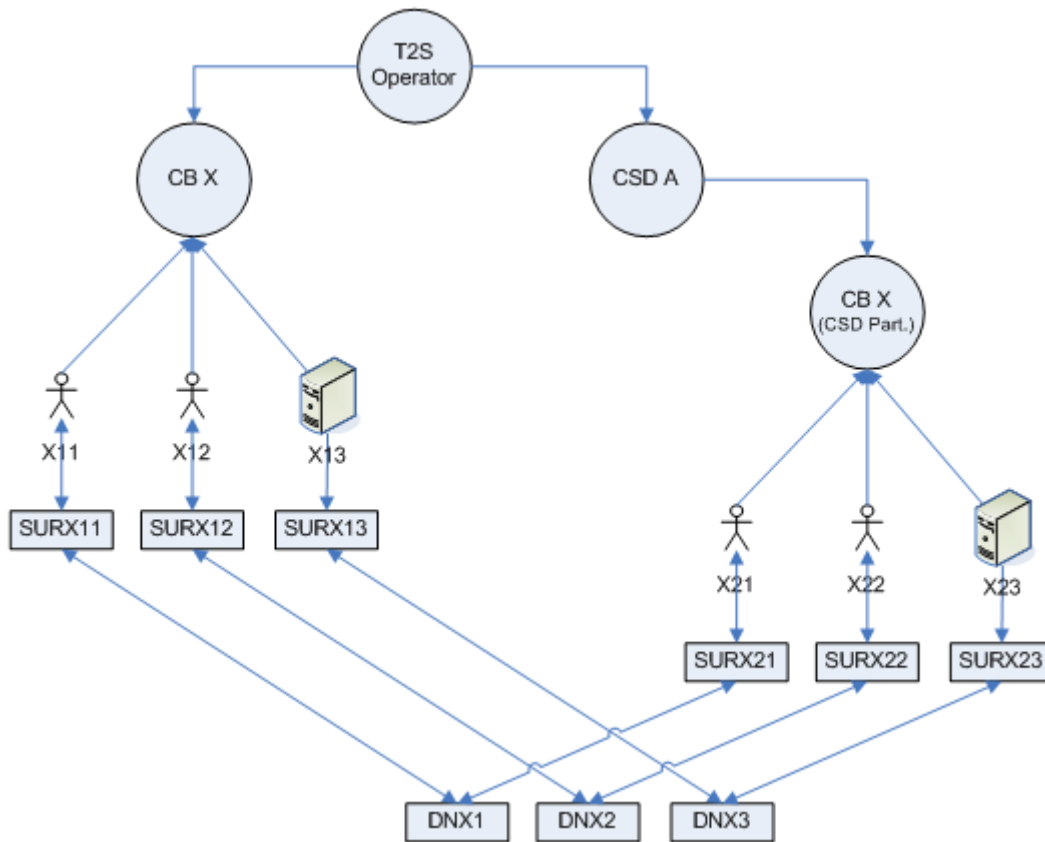
| DISTINGUISHED NAME | SYSTEM USER REFERENCE |
|--------------------|-----------------------|
| DNX1               | SURX1                 |
| DNX2               | SURX2                 |
| DNX3               | SURX3                 |

In a more complex scenario, where a single CRDM Actor is defined as multiple parties in CRDM, the association between certificate DNs and system user references can be one-to-many. In fact, in this scenario each individual and each application of the CRDM Actor may be defined as a user for each of the parties defined for the given CRDM Actor in CRDM. In this case, CRDM allows linking each of the users corresponding to a given individual or to a given application to the same certificate DN, i.e. the distinguished name of the certificate of the same individual or application.

**EXAMPLE 5 - COMPLEX SCENARIO WITH ONE CRDM ACTOR DEFINED AS MULTIPLE PARTIES (A)**

The central bank X participates in T2S as a Central Bank and also as a participant of CSD A, with two individuals (X1 and X2) and one application (X3). Central bank X creates one user for each of them for both parties and it links their certificate DNs to the system user references of the created users according to a one-to-many association.

**DIAGRAM 5 - COMPLEX SCENARIO WITH ONE CRDM ACTOR DEFINED AS MULTIPLE PARTIES (A)**



The following table shows the one-to-many association between the distinguished names of the given individuals and applications and the system user references of the corresponding users defined in T2S.

**TABLE 30 - COMPLEX SCENARIO WITH ONE CRDM ACTOR DEFINED AS MULTIPLE PARTIES (A)**

| DISTINGUISHED NAME | SYSTEM USER REFERENCE |
|--------------------|-----------------------|
| DNX1               | SURX11                |
| DNX1               | SURX21                |
| DNX2               | SURX12                |
| DNX2               | SURX22                |
| DNX3               | SURX13                |
| DNX3               | SURX23                |

This configuration allows each individual and application of central bank X to connect as two different users (e.g. individual X1 can connect either as user X11 or user X21) and operate either for party CB X or for party CB X (CSD Part.).

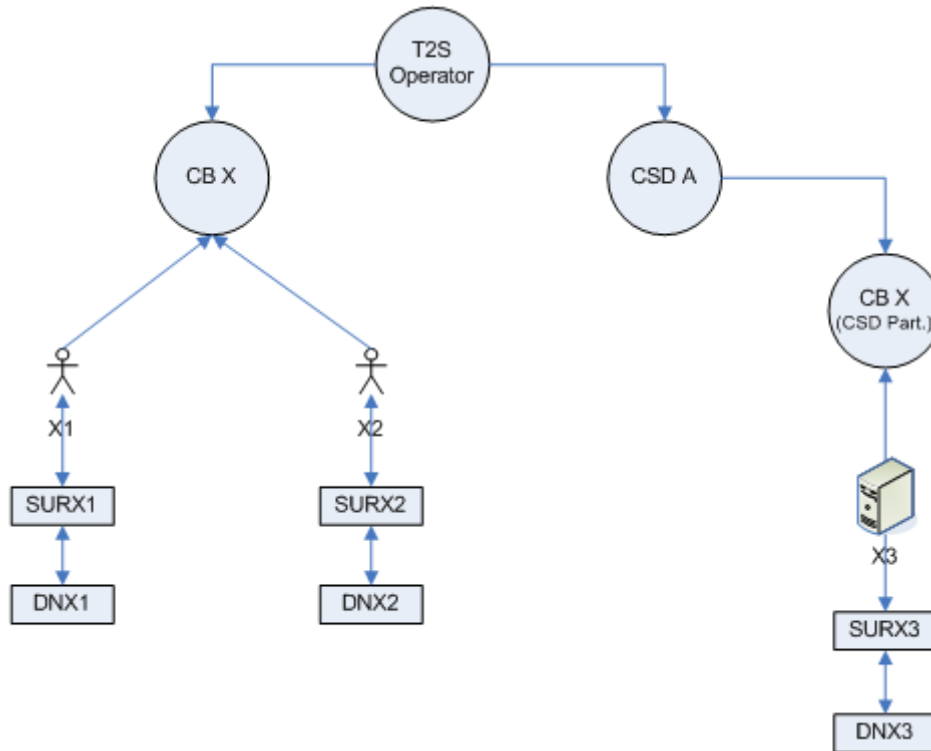
It is worth mentioning that the one-to-many association between certificate DNs and system user references just illustrated is not a mandatory option for the CRDM Actor in a complex scenario. In fact, the CRDM Actor may also opt for defining only one user belonging to one of its parties for each of its individuals and applications. This would result in a partitioning of its individuals and applications among its parties.



**EXAMPLE 6 - COMPLEX SCENARIO WITH ONE CRDM ACTOR DEFINED AS MULTIPLE PARTIES (B)**

The central bank X participates in T2S as a Central Bank and also as a participant of CSD A, with two individuals (X1 and X2) and one application (X3). Central bank X creates one user for each of the two individuals assigning them to the Central Bank and then it creates one user for the application assigning it to the CSD participant. Finally, it links their certificate DNs to the system user references of the created users according to a one-to-one association.

**DIAGRAM 6 - COMPLEX SCENARIO WITH ONE CRDM ACTOR DEFINED AS MULTIPLE PARTIES (B)**



The following table shows the one-to-one association between the distinguished names of the given individuals and applications and the system user references of the corresponding users defined in CRDM.

**TABLE 31 - COMPLEX SCENARIO WITH ONE CRDM ACTOR DEFINED AS MULTIPLE PARTIES (B)**

| DISTINGUISHED NAME | SYSTEM USER REFERENCE |
|--------------------|-----------------------|
| DNX1               | SURX1                 |
| DNX2               | SURX2                 |
| DNX3               | SURX3                 |

This configuration allows each individual operating only for party CB X, whereas it allows the application operating only for party CB X (CSD Part.).

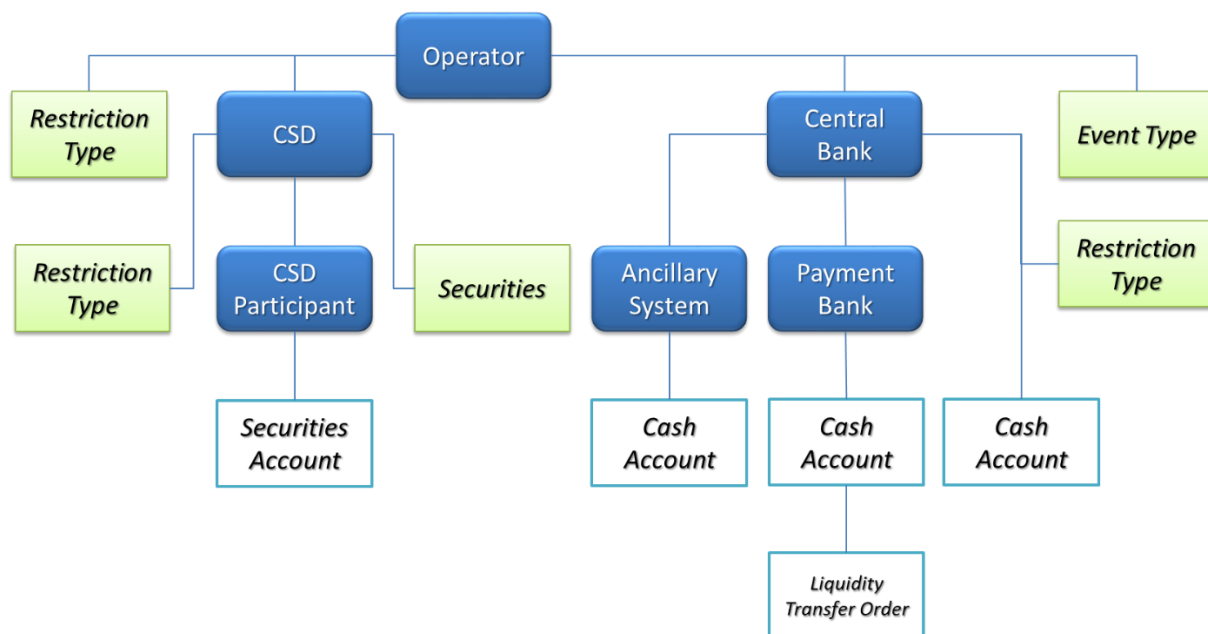
1.2.2.1.9 Common reference data objects and the hierarchical party model

All parties in the CRDM are linked to each other according to a hierarchical model. As shown in the following diagram and on the basis of this hierarchical party model, the Operator is the only party at level 1, all the

CSDs and Central Banks are level 2 parties, all CSD participants, external CSDs, payment banks and ancillary systems are level 3 parties<sup>14</sup>. All the other reference data objects are linked to a party. For example:

- | a cash account is linked to its Central Bank, ancillary system or payment bank;
- | a securities account is linked to its CSD or CSD participant;
- | a standing or pre-defined liquidity transfer order is linked, via the relevant debited cash account, to the payment bank holding the same cash account;
- | a restriction type is linked to the Operator or to the CSD or to the CB that defined this restriction type;
- | a security is linked to the CSD responsible for its maintenance;
- | all event types are linked to the Operator.

**DIAGRAM 7 – COMMON REFERENCE DATA OBJECTS AND THE HIERARCHICAL PARTY MODEL**



### 1.2.2.1.10 Data scope

For each privilege, the hierarchical party model determines the data scope of the grantee, i.e. the set of reference data objects on which the grantee can trigger the relevant user function. More precisely:

- | users of the Operator have visibility on all reference data objects, and can act on objects belonging to participants only in exceptional circumstances, following a specific agreement;
- | users of the CSDs and of the Central Banks have visibility on all reference data objects belonging to the same system entity;<sup>15</sup>
- | users of the CSD participants, external CSDs, payment banks and ancillary systems have visibility on reference data objects that are (directly or indirectly) linked to the same party.

<sup>14</sup> Participation types may be further detailed with information specific to each individual Service, if the Service foresees this possibility; for more information see section 1.3.2.

<sup>15</sup> A system entity in the CRDM corresponds to a partition of data equating to the scope of a Central Bank or of the Operator. For example, the system entity of a Central Bank includes all the data related to its payment banks.

The default data scope of each user can be extended or reduced on the basis of the actual business needs, by means of object privileges. Granting a user a given privilege on a secured object (or on a secured group) results in extending the data scope of the user by adding the secured object (or the secured group) to the data scope of the user. Vice versa, denying a user a given privilege on a secured object (or on a secured group) results in reducing the data scope of the user by removing the secured object (or the secured group) from the data scope of the user.

The default data scope of privileges can also be extended or reduced at party level. Granting a party a given object privilege on a secured object (or on a secured group) as listed in tables

- | Settlement Instruction Management
- | Cash Management
- | Securities Data Management
- | Securities Account Data Management
- | Cash Account Data Management
- | Dynamic Data Queries
- | Reference Data Queries
- | Business Day Management Queries
- | Report Queries
- | Billing Queries

results in extending the data scope of the party by adding the secured object (or the secured group). This allows the party administrator of the grantee party to extend the data scope of the users and roles of the party by granting them with the given object privilege on the same object (or secured group). On the other hand, denying a party a given object privilege on a secured object (or on a secured group)<sup>16</sup> as listed in tables

- | Settlement Instruction Management
- | Cash Management
- | Securities Data Management
- | Securities Account Data Management
- | Cash Account Data Management

results in reducing the data scope of the party by removing the secured object (or the secured group) from the default data scope of the party. This automatically results in reducing in the same way the data scope of all the users and roles of the party.<sup>17</sup>

Extending the default data scope of a user can be meaningful in several circumstances. For example:

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16 The reduction of a participant's data scope at party level is only meaningful when the related secured object is a Party, Security, Securities Account, Cash Account or a Secured Group. It cannot be used to deny participant access to its own Party and all of its Accounts, nor to the participant's own System Entity.

17 The data scope reduction for the users is made effective on a deferred basis for performance reasons. The related process runs daily on a scheduled basis and corresponds to the business day event "Update Environment Table". If necessary, users can contact the Operator to request an ad hoc run of the event in order to make the changes immediately effective.

- I A CSD Participant X may grant another CSD Participant Y with the power of attorney to send Settlement Instructions referencing one or many securities accounts of X. This can be obtained by extending the default data scope of a user belonging to Y in order to include the relevant securities account of X.
- I A CSD X may grant a CB Y with the privilege to query the Settlement Instructions and the securities positions related to one or many securities accounts of the CSD X. Also in this case, the needed configuration can be set up by extending the default data scope of a user belonging to the CB Y. A similar approach can also be adopted in order to allow a CB X granting a CSD Y with the privilege to query the cash balances related to one or many cash accounts of the CB X.
- I Reducing the default data scope of a user can also be meaningful. For example, a CSD Participant may decide, for specific business or organisational reasons, to grant some or all of its users with a selective access to a given sub-set of its securities accounts. This configuration can be obtained by reducing the default data scope of the relevant users, i.e. by denying them the privilege to access this sub-set of securities accounts, which would normally belong to the default data scope of these users.
- I A CSD may decide, for some special purpose securities accounts of one of its CSD Participants (e.g. pledge accounts, accounts used to keep collateral received as collateral taker, or accounts to segregate instructed positions in case of voluntary corporate actions), to prevent the CSD Participant instructing on these securities accounts, which normally belong to the default data scope of this CSD Participant. The CSD can setup this configuration by reducing the default data scope of the CSD Participant at party level, i.e. by denying to the party the privileges to instruct on these securities accounts.

The rest of this section presents some examples describing the concept of default, extended and reduced data scope.<sup>18</sup>

**EXAMPLE 7 – DEFAULT DATA SCOPE**

Three users, X, Y and Z, belonging to a Payment Bank, to a Central Bank and to the Operator respectively, are granted with the same privilege to query cash accounts:

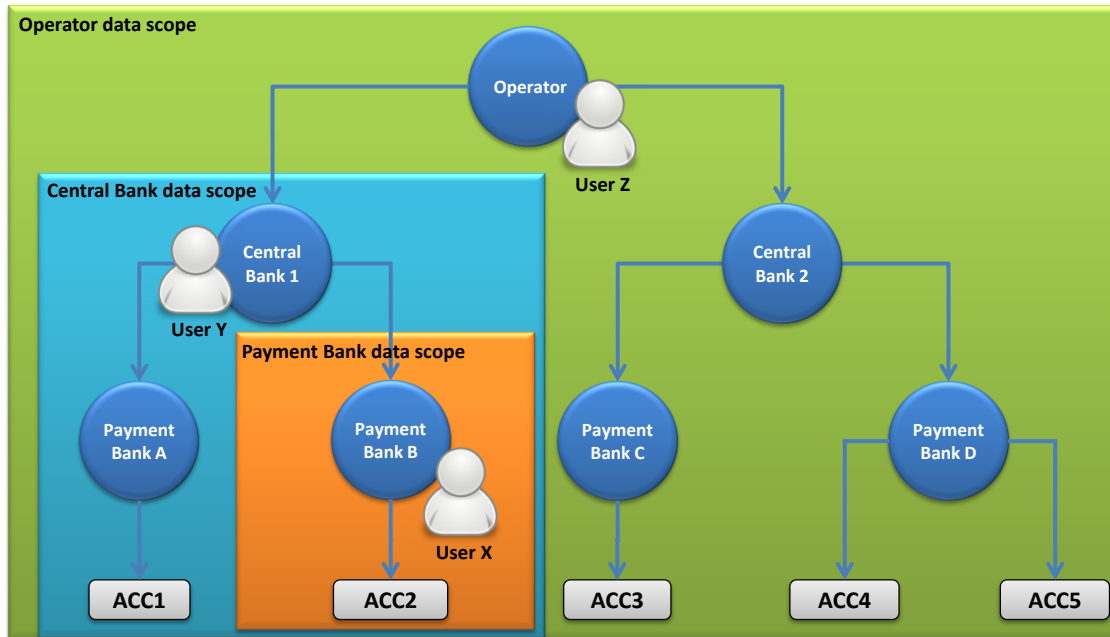
**TABLE 32 - USER PRIVILEGES (DATA SCOPE)**

| USER | PRIVILEGE                         |
|------|-----------------------------------|
| X    | Cash Account Reference Data Query |
| Y    | Cash Account Reference Data Query |
| Z    | Cash Account Reference Data Query |

The following diagram shows the default data scopes stemming from this access rights configuration for the three users.

<sup>18</sup> Each of the following examples presents only the configuration data that are relevant for the example. All the possible configuration options are defined in the following sections.

**DIAGRAM 8 - DATA SCOPES**



The diagram shows that users X, Y and Z are given different default data scopes, owing to the fact that they belong to different parties located at different levels of the hierarchical party model. More precisely:

- | User X of Payment Bank B gets a default data scope including the cash account ACC2 only, as ACC2 is the only account of Payment Bank B. User X cannot query any other cash account in CRDM;
- | User Y of Central Bank 1 gets a default data scope including cash accounts ACC1 and ACC2, as these accounts belong to Payment Banks of Central Bank 1. User Y cannot query any other cash account in CRDM, i.e. any cash account falling under the data scope of any other Central Bank;
- | User Z of the Operator gets a default data scope including all cash accounts in CRDM, as the Operator is at the top level of the hierarchical party model.

**EXAMPLE 8 - EXTENDED DATA SCOPE AT OBJECT LEVEL**

The user X, belonging to CSD Part.B, is granted the privilege to send new Settlement Instructions:

**TABLE 33 - USER PRIVILEGES (EXTENDED DATA SCOPE AT OBJECT LEVEL)**

| USER | PRIVILEGE   |
|------|---|
| X    | Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD |

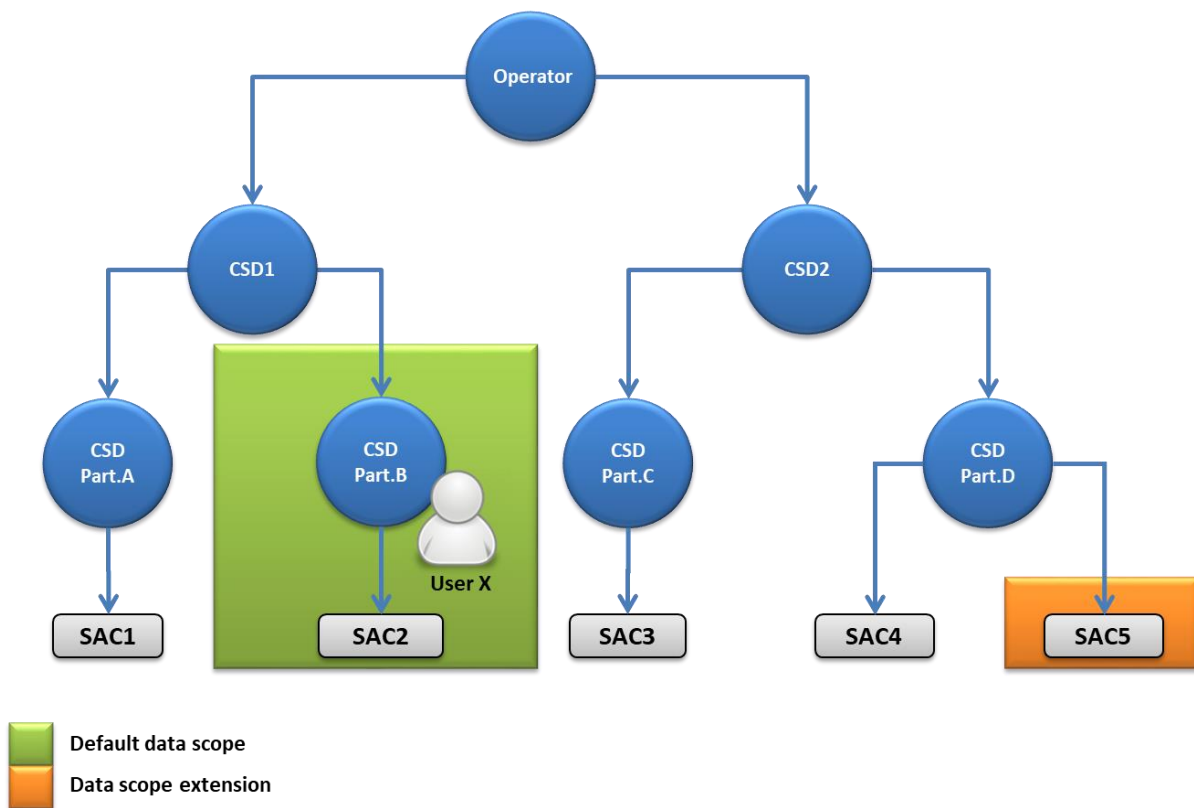
and the same privilege with specific reference to securities account SAC5 as a secured object:

**TABLE 34 - USER OBJECT PRIVILEGES (EXTENDED DATA SCOPE AT OBJECT LEVEL)**

| USER | PRIVILEGE   | OBJECT | OBJECT TYPE        |
|------|---|--------|--------------------|
| X    | Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | SAC5   | Securities Account |

The following diagram shows that user X gets a default data scope including all the securities accounts of CSD Part.B (SAC2 only, in this example), plus a data scope extension which includes the securities account SAC5. The resulting extended data scope of user X includes SAC2 and SAC5.

**DIAGRAM 9 - EXTENDED DATA SCOPE AT OBJECT LEVEL**



**EXAMPLE 9 - EXTENDED DATA SCOPE AT PARTY LEVEL**

The user X, belonging to CSD Part.B, is granted the privilege to send new Settlement Instructions:

**TABLE 35 - USER PRIVILEGES (EXTENDED DATA SCOPE AT PARTY LEVEL)**

| USER | PRIVILEGE   |
|------|---|
| X    | Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD |

and the same privilege with specific reference to party CSD Part.D as a secured object <sup>19</sup>:

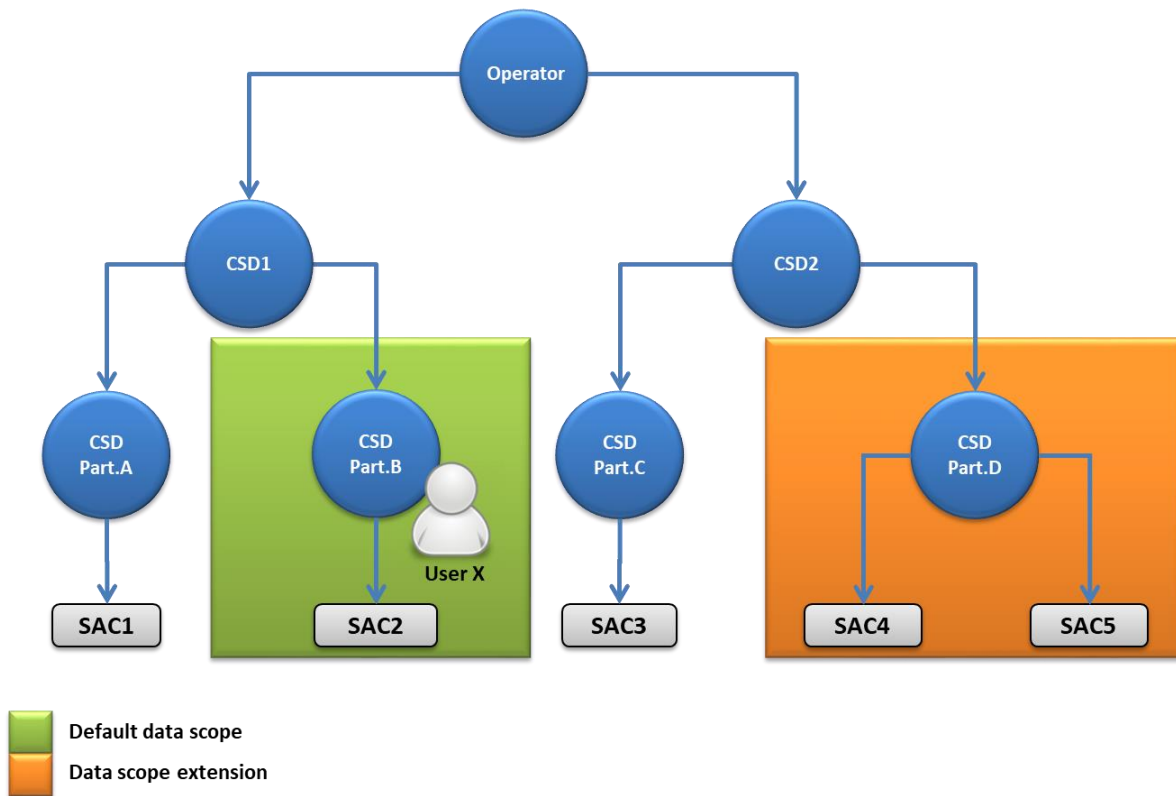
<sup>19</sup> For details on the various types of assignments for an object privilege, see section [Configuration of privileges](#).  
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**TABLE 36 - USER OBJECT PRIVILEGES (EXTENDED DATA SCOPE AT PARTY LEVEL)**

| USER | PRIVILEGE   | OBJECT     | OBJECT TYPE |
|------|---|------------|-------------|
| X    | Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | CSD Part.D | Party       |

The following diagram shows the resulting extend data scope for user X.

**DIAGRAM 10 - EXTENDED DATA SCOPE AT PARTY LEVEL**



The diagram shows that user X gets a default data scope including all the securities accounts of CSD Part.B (SAC2 only, in this example), plus a data scope extension which includes all securities accounts of CSD Part.D (SAC4 and SAC5). The resulting extended data scope of user X includes SAC2, SAC4 and SAC5.

**EXAMPLE 10 - REDUCED DATA SCOPE**

The user X, belonging to CSD Part.D, is granted the privilege to send new Settlement Instructions:

**TABLE 37 - USER PRIVILEGES (REDUCED DATA SCOPE)**

| USER | PRIVILEGE   | DENY <sup>20</sup> |
|------|---|--------------------|
| X    | Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | False              |

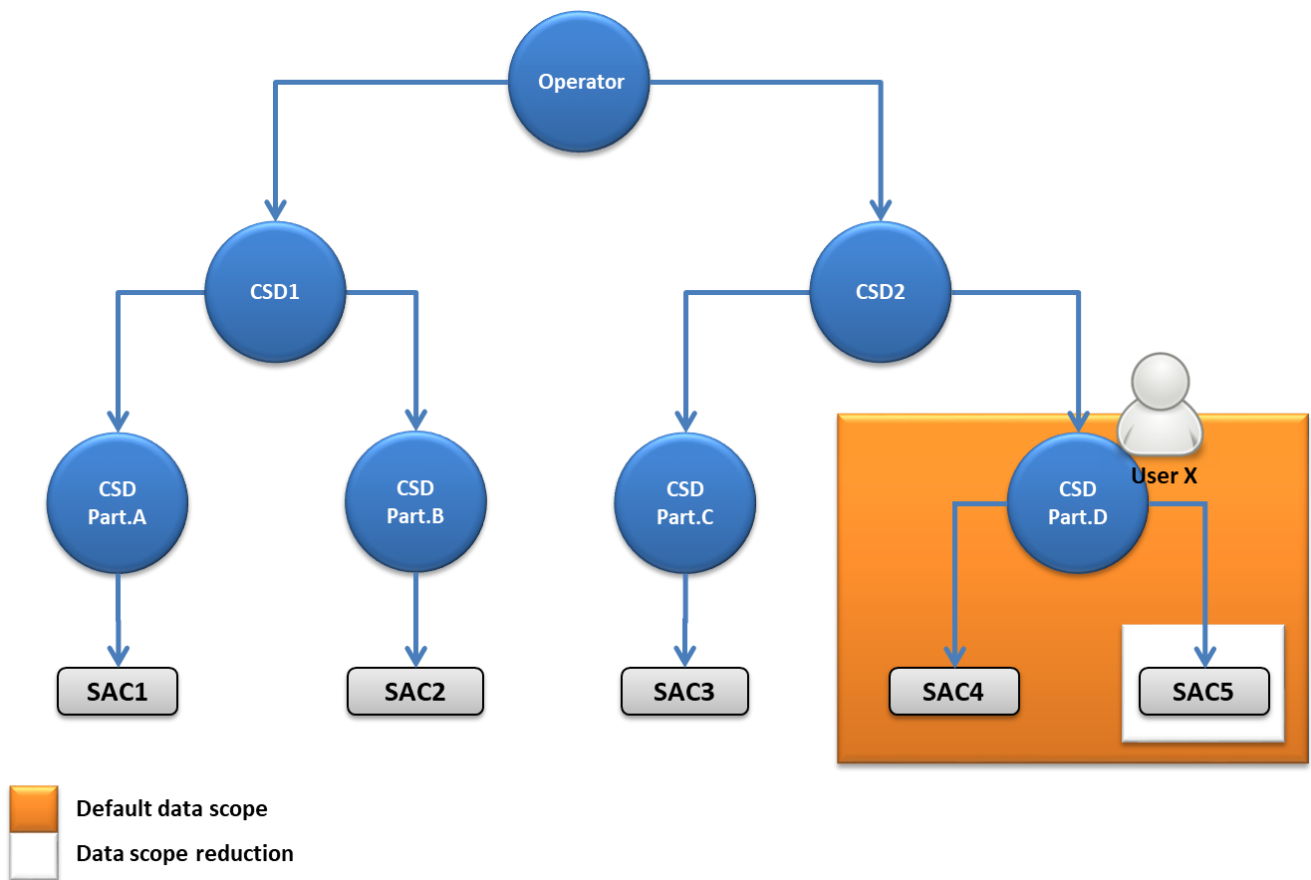
<sup>20</sup> See section Configuration of Privileges for a definition of the Deny option.  
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This user is then denied the same privilege with specific reference to securities account SAC5 as a secured object:

**TABLE 38 - USER OBJECT PRIVILEGES (REDUCED DATA SCOPE)**

| USER | PRIVILEGE   | OBJECT | OBJECT TYPE        | DENY |
|------|---|--------|--------------------|------|
| X    | Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | SAC5   | Securities Account | True |

**DIAGRAM 11 - REDUCED DATA SCOPE**



The diagram shows that user X gets a default data scope including all the securities accounts of CSD Part.D (SAC4 and SAC5), minus the data scope reduction which includes SAC5. The resulting reduced data scope of user X includes SAC4 only.

### 1.2.2.2 Access rights configuration

This section presents how roles and privileges can be configured in the CRDM in order to grant each user with the appropriate set of access rights.

#### 1.2.2.2.1 Configuration of users

##### Links between users and parties



Each new user is linked to the same party which the creator user belongs to. An exception takes place when creating the first user of a party, i.e.

- I when a CRDM Operator party administrator creates a new party administrator for a CSD or for a Central Bank;
- I When a CSD party administrator creates a new party administrator for one of its CSD participants or external CSDs;
- I when a Central Bank party administrator creates a new party administrator for one of its payment banks or ancillary systems.

In all these cases the created user is linked to the party this user is going to administer.

Through the link with the relevant party, each user inherits a data scope (see section 1.2.2.1.10 [Data scope](#)). The link between a user and a party cannot be changed, i.e. a user is always linked to the same party.

#### Party administrators

Each party must have at least one party administrator, i.e. a user being granted specific system privileges that allow its grantee to grant any roles and privileges previously granted to the grantee's party.

#### 1.2.2.2.2 Configuration of privileges

##### Availability of privileges

Each privilege, just after its creation, is available to the party administrator(s) of the CRDM Operator only. This means that party administrators of all the other parties cannot grant this privilege to their users.

A privilege becomes available to a party administrator of a party different from the CRDM Operator only after this privilege has been granted to this party. From this moment on, the party administrator can grant this privilege, according to the rules defined in the following sections.

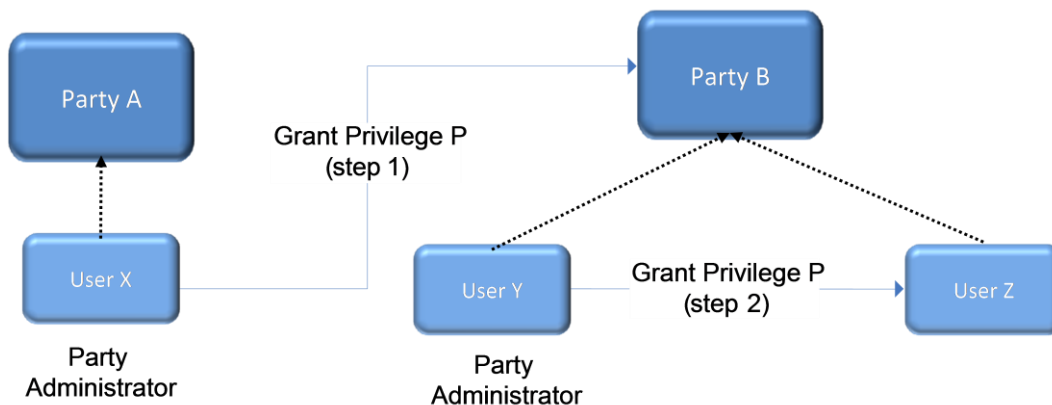
This implies that a two-step process is required in order to grant a specific privilege to a user belonging to a party different from the CRDM Operator. In the first step, the privilege is granted to the relevant party (so that it becomes available to the party administrator(s) of this party). With the second step, one of the party administrators grants the privilege to the relevant user.

The following diagram illustrates the access rights configuration steps needed to grant a user Z of a Party B a given privilege P that is already available to the party administrator X of another party A.<sup>21</sup>

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<sup>21</sup> Party A may be the Operator or any other party which was previously granted privilege P.  
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**DIAGRAM 12 - ACCESS RIGHTS CONFIGURATION STEPS**



The two configuration steps are as follows:

- I User X, as a party administrator of party A, grants privilege P to party B. From this moment on, privilege P becomes available to the party administrator Y of party B.
- I User Y, as a party administrator of party B, grants privilege P to user Z. From this moment on, user Z can trigger the user functions linked to privilege P.

At Party level, Access rights are propagated following the hierarchical Party model, i.e. the Operator propagates access rights to Central Banks and CSDs which in turn propagate them to their Payment Banks, Ancillary Systems, CSD Participants and External CSDs. If necessary, the Operator can act on behalf of a Central Bank or CSDs following a specific request to propagate access rights directly to its Payment Banks, Ancillary Systems, CSD Participants or External CSDs.

While the features described above apply to all privileges related to CRDM functions, it should be noted that privileges related to TIPS, CLM and RTGS functions cannot be granted directly to Parties or Users, but can only be granted to Roles, which can in turn be granted to Parties and Users. This implies that the above described configuration steps remain valid for TIPS, CLM and RTGS as well, but in this case Privileges have to be granted to Roles in the first place and then Roles can be granted to Parties and Users. For details on the configuration of Roles see section 1.2.2.2.3 [Configuration of roles](#).

#### Granting system privileges

Most system privileges can be granted to roles, users and parties, whereas CLM, RTGS and TIPS privileges can be granted to roles only. When granting a privilege, the grantor specifies appropriate values for the three following assignment options: Deny option, Administration option and Four-Eyes option.

**TABLE 39 - PRIVILEGE ASSIGNMENT OPTIONS**

| OPTION         | DESCRIPTION  |
|----------------|--|
| Deny           | This option specifies whether the associated user function is allowed (Deny is False) or explicitly denied (Deny is True).   |
| Administration | <p>If the grantee of the privilege is a user or a role, this option specifies whether the grantee is allowed to grant the same privilege to another user or role of the same party (Administrator is True) or not (Administrator is False).</p> <p>If the grantee of the privilege is a party, this option specifies whether the party administrators of the grantee party is allowed to grant the same privilege only to users and roles of the same party (Administrator is False) or also to other parties (Administrator is True).</p> |
| Four-Eyes      | <p>This option specifies whether the grantee of the privilege is allowed to use the function associated to the privilege according to the Two-Eyes (Four-Eyes is False) or Four-Eyes (Four-Eyes is True) principles.</p> <p>This option is relevant only when the Deny option is set to False and it is always not relevant for privileges related to queries.</p>   |

Object privileges can also be granted as system privileges. In this case, the object privilege is granted without specifying any secured object or secured group. This action results in granting the given privilege on all the objects belonging to the relevant default data scope. For example, granting a user of a CSD with the object privilege Update Securities Account without specifying a given securities account or a given group of securities account, results in granting the user with the privilege to update all the securities accounts of the CSD.

**EXAMPLE 11 - ASSIGNMENT OF PRIVILEGES TO ROLES**

The following table shows some examples of assignment of privileges to roles:

**TABLE 40 - ASSIGNMENT OF PRIVILEGES TO ROLES**

| ROW | ROLE                        | PRIVILEGE                         | DENY  | ADMIN | FOUR-EYES    |
|-----|-----------------------------|-----------------------------------|-------|-------|--------------|
| 1   | Cash Account Management     | Cash Account Reference Data Query | False | False | not relevant |
| 2   | Cash Account Administration | Cash Account Reference Data Query | True  | True  | not relevant |
| 3   | Party Management            | Create Party                      | False | False | True         |
| 4   | Party Management            | Update Party                      | False | False | True         |
| 5   | Party Management            | Delete Party                      | False | False | True         |
| 6   | Party Management            | Party Reference Data Query        | False | True  | not relevant |

For each assignment of a privilege to a role, three additional attributes define the features of such assignment. For example, according to row 1, the privilege to query Cash Account data is assigned to the Cash Account Management role:

- | without Deny, i.e. users linked to the Cash Account Management role can query cash account data <sup>22</sup>;
- | without Admin, i.e. users linked to the Cash Account Management role cannot grant the privilege to query cash account data to other roles and users.

According to row 2, the privilege to query Cash Account data is assigned to the Cash Account Administration role:

- | with Deny, i.e. users linked to the Cash Account Administration role cannot query cash account data;
- | with Admin, i.e. users linked to the Cash Account Administration role can grant the privilege to query cash account data to other roles and users of the same party.

As a whole, rows 1 and 2 result in a segregation of duties between business users and access rights administrators. In fact, users linked to the Cash Account Management role can query accounts, but they cannot configure the same access rights for any other user. On the contrary, users linked to the Cash Account Administration role cannot query accounts, but they can configure these access rights for other users.

According to row 3, the privilege to create parties is assigned to the Party Management role:

- | without Deny and with 4-Eyes set to True, i.e. users linked to the Party Management role can create parties according to the Four-Eyes principle only;
- | without Admin, i.e. users linked to the Party Management role cannot grant the privilege to create parties to other roles and users.

As per rows 4 and 5, the privileges to maintain and delete parties are assigned to the Party Management role with the same assignment options.

Finally, according to row 6, the privilege to query parties is assigned to the Party Management role:

- | without Deny, i.e. users linked to the Party Management role can query parties;
- | with Admin, i.e. users linked to the Party Management role can grant the privilege to query parties to other roles and users of the same party.

As a whole, rows from 3 to 6 only result in a partial segregation of duties between business users and access rights administrators. In fact:

- | business users linked to the Party Management role can create, maintain, delete and query parties, they can only configure the same access rights for any other user limited to the query privilege;
- | on the contrary, access rights administrators linked to the Party Management role, and whose Party is also linked to the same role, can create, maintain, delete and query parties and they can also grant the same privilege to other users of the same party; in addition, they can also grant the query privilege to other parties.

#### EXAMPLE 12 - ASSIGNMENT OF PRIVILEGES TO USERS

The following table shows two examples of assignment of privileges to users:

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<sup>22</sup> In this case the setting for the Four Eyes assignment option is not applicable, as the privilege refers to a query.  
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**TABLE 41 - ASSIGNMENT OF PRIVILEGES TO USERS**

| ROW | PRIVILEGE           | USER           | DENY  | ADMIN | FOUR-EYES |
|-----|---------------------|----------------|-------|-------|-----------|
| 1   | Create Cash Account | U <sub>x</sub> | False | False | False     |
| 2   | Create Cash Account | U <sub>y</sub> | True  | True  | False     |

For each assignment of a privilege to a user, three additional attributes define the features of such assignment. According to row 1, the privilege to create cash accounts is assigned to user U<sub>x</sub>:

- without Deny, i.e. user U<sub>x</sub> can create cash accounts according to the Two-Eyes principle (as the privilege is assigned without Four-Eyes);
- without Admin, i.e. user U<sub>x</sub> cannot grant the privilege to create cash accounts to other roles and users.

Similarly, row 2 stipulates that the privilege to create cash accounts is assigned to user U<sub>y</sub>:

- with Deny, i.e. user U<sub>y</sub> cannot create cash accounts;
- with Admin, i.e. user U<sub>y</sub> can grant the privilege to create cash accounts to other roles and users of the same party, according to the Two-Eyes principle or to the Four-Eyes principle (as the privilege is assigned without Four-Eyes).

As a whole, this configuration results in a full segregation of duties between business users and access rights administrators. In fact, user U<sub>x</sub> can create cash accounts, but without having the possibility to grant the same privilege to any other user. Vice versa, user U<sub>y</sub> can configure this privilege for other users, but without having the possibility to use it.

**EXAMPLE 13 - ASSIGNMENT OF PRIVILEGES TO PARTIES**

The following table shows one example of assignment of a privilege to a party:

**TABLE 42 - ASSIGNMENT OF PRIVILEGES TO PARTIES**

| PRIVILEGE                         | PARTY          | DENY  | ADMIN | FOUR-EYES |
|-----------------------------------|----------------|-------|-------|-----------|
| Cash Account Reference Data Query | Payment Bank A | False | True  | False     |

For each assignment of a privilege to a party, three additional attributes define the features of such assignment. In this example, the privilege to query cash accounts is assigned to the payment bank A:

- without Deny, i.e. party administrators of the payment bank A can grant the privilege to query cash accounts to other roles and users of the same party;
- with Admin, i.e. party administrators of the payment bank A can grant the privilege to query cash accounts to other parties.

The Four-Eyes attribute is set to false but it is not relevant for this example, as the privilege refers to a Query.

Granting object privileges

Like system privileges, object privileges as well can be granted to roles, users and parties. However, in this case it is also necessary to specify the secured object(s) on which the privilege is going to be granted. In this respect, three different options are possible:

- I To grant the privilege on a secured object. As a result, the grantee is assigned the relevant privilege with specific reference to the given secured object. For example, this option makes it possible to grant a user with the privilege to initiate immediate liquidity transfer orders debiting a specific cash account;
- I To grant the privilege on a secured group. As a result, the grantee is assigned the relevant privilege with specific reference to all the secured objects included in the given secured group (See section 1.2.2.3 Configuration of secured objects and secured groups). For example, this option makes it possible to grant a user with the privilege to display reference data of all the securities accounts included in a previously defined secured group of securities accounts;
- I To grant the privilege on a party. As a result, the grantee is assigned the relevant privilege with specific reference to all the secured objects belonging to the given party. For example, this option makes it possible to grant a user with the privilege to send Settlement Instructions against all the securities accounts of a party. <sup>23</sup>

Also when granting object privileges, CRDM requires the specification of appropriate values for the Deny option, the Administration option and the Four-Eyes option.

**EXAMPLE 14 - ASSIGNMENT OF OBJECT PRIVILEGES TO ROLES**

Object privileges can be assigned to roles, users and parties. The following table shows three examples of assignment of object privileges to roles:

**TABLE 43 - ASSIGNMENT OF OBJECT PRIVILEGES TO ROLES**

| ROW | ROLE | PRIVILEGE   | OBJECT | OBJECT TYPE        | DENY  | ADMIN | FOUR-EYES |
|-----|------|---|--------|--------------------|-------|-------|-----------|
| 1   | R01  | Securities Account Position Query   | SAC1   | Securities Account | False | False | False     |
| 2   | R02  | Securities Account Position Query   | SAC2   | Securities Account | False | True  | False     |
| 3   | R01  | Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | SAC1   | Securities Account | False | False | True      |

For each assignment of an object privilege to a role, three additional attributes define the features of such assignment.

For example, according to row 1, the privilege to query the securities account SAC1 is assigned to the role R01:

- I Without Deny, i.e. users linked to the role R01 can query the securities account SAC1;

<sup>23</sup> If the party is a CSD participant, then the grantee can instruct all the securities accounts of this CSD participant. If the party is a CSD, then the grantee can instruct all the securities accounts of all the CSD participants of this CSD.

- | Without Admin, i.e. users linked to the role R01 cannot grant the privilege to query the securities account SAC1 to other roles and users of the same party.

Row 2 stipulates that the privilege to query the securities account SAC2 is assigned to the role R01:

- | Without Deny, i.e. users linked to the role R01 can query the securities account SAC2;
- | With Admin, i.e. users linked to the role R01 can grant the privilege to query the securities account SAC2 to other roles and users of the same party.

Finally, according to row 3, the privilege to send new Settlement Instructions referencing the securities account SAC1 is assigned to the role R01:

- | Without Deny, i.e. users linked to the role R01 can send new Settlement Instructions referencing the securities account SAC1 according to the Four-Eyes principle only (as the privilege is assigned with Four-Eyes);
- | Without Admin, i.e. users linked to the role R01 cannot grant the privilege to send new Settlement Instructions referencing the securities account SAC1 to other roles and users of the same party.

**EXAMPLE 15 - ASSIGNMENT OF OBJECT PRIVILEGES TO USERS**

The following table shows one example of assignment of an object privilege to a user:

**TABLE 44 - ASSIGNMENT OF OBJECT PRIVILEGES TO USERS (A)**

| PRIVILEGE   | OBJECT | OBJECT TYPE        | USER           | DENY  | ADMIN | FOUR-EYES |
|---|--------|--------------------|----------------|-------|-------|-----------|
| Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | SAC1   | Securities Account | U <sub>x</sub> | False | False | True      |

For each assignment of an object privilege to a user, three additional attributes define the features of such assignment. In this example, the privilege to send new Settlement Instructions referencing the securities account SAC1 is assigned to user U<sub>x</sub>:

- | Without Deny, i.e. user U<sub>x</sub> can send new Settlement Instructions referencing the securities account SAC1 according to the Four- Eyes principle (as the privilege is assigned with Four-Eyes);
- | Without Admin, i.e. user U<sub>x</sub> cannot grant the privilege to send new Settlement Instructions referencing the securities account SAC1 to other roles and users of the same party.

**EXAMPLE 16 - ASSIGNMENT OF OBJECT PRIVILEGES TO PARTIES**

The following table shows two examples of assignment of object privileges to parties:

**TABLE 45 - ASSIGNMENT OF OBJECT PRIVILEGES TO PARTIES (A)**

| PRIVILEGE                         | OBJECT | OBJECT TYPE        | PARTY          | DENY  | ADMIN | FOUR-EYES |
|-----------------------------------|--------|--------------------|----------------|-------|-------|-----------|
| Securities Account Position Query | SAC1   | Securities Account | CB A           | False | True  | False     |
| Securities Account Position Query | SAC1   | Securities Account | Payment Bank B | False | False | False     |

For each assignment of an object privilege to a party, three additional attributes define the features of such assignment. In this example, the privilege to query the securities account SAC1 is assigned to the central bank A:

- | Without Deny, i.e. parties administrators of the central bank A can grant the privilege to query the securities account SAC1 to other roles and users of the same party;
- | With Admin, i.e. parties administrators of the central bank A can grant the privilege to query the securities account SAC1 to other parties.

Similarly, the privilege to query the securities account SAC1 is assigned to the payment bank B:

- | Without Deny, i.e. parties administrators of the payment bank B can grant the privilege to query the securities account SAC1 to other roles and users of the same party;
- | Without Admin, i.e. parties administrators of the payment bank B cannot grant the privilege to query the securities account SAC1 to other parties.

Contradicting privileges

Each system privilege and each object privilege can be granted to a role, a user or a party only once; however if a user or party has already been granted a system or object privilege via role it is still possible to assign the same privilege directly. In this case the directly granted privilege has priority over the one granted via role. This is in order to prevent the possibility to grant contradicting privileges to the same role, user or party, e.g.:

- | The same user being allowed (grant with deny option set to false) and not allowed (grant with deny option set to true) to send new Settlement Instructions;
- | The same role being assigned the privilege to input an immediate liquidity transfer order both according to the Two-Eyes principle and to the Four-Eyes principle.

For this reason, when granting a system privilege or an object privilege to a role, a user or a party, CRDM applies the following rules:

- | a system privilege can be granted to a role, a user or a party if and only if the role, the user or the party is not yet linked directly to the same system privilege;
- | an object privilege on a given object or group of objects can be granted to a role, a user or a party if and only if the role, the user or the party is not yet linked directly to the same object privilege on the same object or group of object;
- | a role can be granted to a user or a party if and only if the user or the party is not yet linked, directly or indirectly, to one or more system privileges contained in the role;



- These rules imply that one privilege can always be granted both as a system privilege and as an object privilege to the same role, user or party without resulting in a contradicting configuration. This also applies when granting the same object privilege on two different objects or group of objects to the same role, user or party.

The following tables show some examples on the assignment of contradicting and non-contradicting privileges.

**TABLE 46 - ASSIGNMENT OF CONTRADICTING PRIVILEGES (A)**

| ROW | PRIVILEGE       | PRIVILEGE TYPE | OBJECT    | GRANTEE | DENY  | ADMIN | FOUR-EYES |
|-----|-----------------|----------------|-----------|---------|-------|-------|-----------|
| 1   | Update Security | System         | ISIN00001 | User A  | False | False | False     |
| 2   | Update Security | System         | ISIN00001 | User A  | True  | False | False     |

The above configuration is rejected; it is not possible to assign the same system privilege to the same user regardless of the value of the Deny flag. If Row 1 is created first, it will not be possible to create Row 2. This prevents the assignment of privileges representing a contradicting grant (in this example, the two privileges respectively allow and forbid the Update of Securities ISIN00001).

**TABLE 47 - ASSIGNMENT OF CONTRADICTING PRIVILEGES (B)**

| ROW | PRIVILEGE       | PRIVILEGE TYPE | OBJECT    | GRANTEE | DENY  | ADMIN | FOUR-EYES |
|-----|-----------------|----------------|-----------|---------|-------|-------|-----------|
| 1   | Update Security | System         | n/a       | User A  | False | False | False     |
| 2   | Update Security | Object         | ISIN00001 | User A  | True  | False | False     |
| 3   | Update Security | Object         | ISIN29021 | User A  | False | False | False     |

The above configuration is allowed. It is possible to assign the same Privilege both at System and Object level. Row 1 grants generic access to the Update Securities function on the default data scope of User A. Row 2 blocks Update access to ISIN00001; for example, if ISIN00001 is within the default data scope of User A, the creation of Rows 1 and 2 corresponds to allowing User A to update all the Securities in its own default data scope with the exception of ISIN00001.

Additionally, Row 3 grants the same Update rights on ISIN29021. This is not in contradiction with the other privilege assignments, but is meaningful only if ISIN29021 is outside of User A's default data scope. Otherwise, it is redundant with row 1.

**TABLE 48 - ASSIGNMENT OF CONTRADICTING PRIVILEGES (C)**

| ROW | PRIVILEGE       | PRIVILEGE TYPE | OBJECT    | GRANTEE | DENY  | ADMIN | FOUR-EYES |
|-----|-----------------|----------------|-----------|---------|-------|-------|-----------|
| 1   | Update Security | Object         | ISIN00001 | User A  | False | False | False     |
| 2   | Update Security | Object         | ISIN00001 | User A  | False | False | True      |

Similarly to the first example, this configuration is rejected. It is not possible to assign the same privilege with different values for the Four-Eyes flag.

**TABLE 49 - ASSIGNMENT OF CONTRADICTING PRIVILEGES (D)**

| ROW | PRIVILEGE       | PRIVILEGE TYPE | OBJECT    | GRANTEE | DENY  | ADMIN | FOUR-EYES |
|-----|-----------------|----------------|-----------|---------|-------|-------|-----------|
| 1   | Update Security | Object         | ISIN00001 | Role X  | True  | False | False     |
| 2   | Update Security | Object         | ISIN00001 | User A  | False | False | False     |

The above configuration is allowed, but the system blocks any attempt to grant Role X to User A. Doing so would result in a contradicting configuration similar to assigning the same privilege twice directly to User A.

**TABLE 50 - ASSIGNMENT OF CONTRADICTING PRIVILEGES (E)**

| ROW | PRIVILEGE       | PRIVILEGE TYPE | OBJECT | GRANTEE                 | DENY  | ADMIN | FOUR-EYES |
|-----|-----------------|----------------|--------|-------------------------|-------|-------|-----------|
| 1   | Update Security | System         | n/a    | Role A                  | False | False | False     |
| 2   | Update Security | System         | n/a    | USER A (through Role A) | False | False | False     |
| 3   | Update Security | System         | n/a    | USER A directly         | False | False | True      |

The above configuration is allowed. It is possible to assign the same Privilege firstly via Role and then directly to a party or a user. As a result the user A can update securities only in four-eyes mode.

Revoking privileges

Privileges can be revoked from roles, users and parties.

When revoking a system privilege or an object privilege from the user, this just results in the removal of the privilege from the list of privileges linked to the user.

When revoking a system privilege or an object privilege from a role, this results in the removal of the privilege from the list of privileges linked to the role. Consequently, all the users and parties linked to the role are not linked anymore to the privilege, with immediate effect in CRDM.

When revoking a privilege from a party, CRDM applies a cascade effect. This results in the removal of the privilege:

- | from the list of privileges linked to the party and
- | from the list of privileges linked to all the roles and users of the party.

The following table shows all the possible scenarios for revoking privileges that are allowed in CRDM, their link with the cascade process and how party administrators of CSDs and Central Banks can ensure that all the privileges revoked from one of their parties are revoked also from all the users of the same party:

**TABLE 51 – CASCADE PROCESS WHEN REVOKING PRIVILEGES**

| FUNCTION         | FROM  | CASCADE | PROPAGATION TO USERS   |
|------------------|-------|---------|--|
| Revoke Privilege | User  | n/a     | As the grantee is already a user, there is no need to trigger any cascade process.   |
| Revoke Privilege | Role  | n/a     | <p>If the party administrator of the CSD Participant/External CSD/Payment Bank/Ancillary System granted a privilege included in the role directly to other users of the CSD Participant/External CSD/Payment Bank/Ancillary System, then the removal of this privilege from the role would not revoke the same privilege from these users.</p> <p>In fact, when revoking a privilege from a role, CRDM does not trigger the cascade process as this may result in unintended removal of privileges from the users of the CSD Participant/External CSD/Payment Bank/Ancillary System. For example, even a simple movement of a privilege between two roles assigned to the same CSD Participant/External CSD/Payment Bank/Ancillary System (i.e. revoking the privilege from the first role and granting it to the latter) would imply the removal of the same privilege from all the users of this CSD Participant/External CSD/Payment Bank/Ancillary System and this would oblige the party administrator of the CSD Participant/External CSD/Payment Bank/Ancillary System to grant again this privileges to all the impacted users.</p> <p>In order to ensure that the relevant privilege is revoked also from the users of the CSD Participant/External CSD/Payment Bank/Ancillary System (if this is the intended goal), the party administrator of the Central Bank should grant directly this privilege to the CSD Participant/External CSD/Payment Bank/Ancillary System and then revoke it, as this will trigger the cascade process related to the Revoke Privilege function from Party (see next row of this table).</p> |
| Revoke Privilege | Party | Yes     | CRDM triggers automatically the cascade process, which ensures that privileges revoked from a party are also revoked from all the users and roles of the same party.   |

The cascade process is automatically triggered in a deferred mode one time per business day. However, in case the party administrator needs the cascade process to take place immediately, this can be achieved by contacting the CRDM Operator, as the CRDM Operator can trigger this process on demand also intraday.

**EXAMPLE 17 – REVOKE PRIVILEGE CASCADE EFFECT**

The following table shows one example of assignment of the same privilege to a party and its users:

**TABLE 52 - ASSIGNMENT OF PRIVILEGE TO PARTY AND USERS**

| PRIVILEGE                         | GRANTEE        | DENY  | ADMIN | FOUR-EYES |
|-----------------------------------|----------------|-------|-------|-----------|
| Cash Account Reference Data Query | Payment Bank A | False | True  | False     |
| Cash Account Reference Data Query | User A1        | False | True  | False     |

| PRIVILEGE                         | GRANTEE | DENY  | ADMIN | FOUR-EYES |
|-----------------------------------|---------|-------|-------|-----------|
| Cash Account Reference Data Query | User A2 | False | False | False     |

Users A1 and A2 belongs to Payment Bank A. If Payment Bank A’s Central Bank wants to revoke the privilege “Cash Account Reference Data Query” from all Users of Payment Bank A, it just needs to revoke it from Payment Bank A at Party level. The cascade process will then automatically revoke it from Users A1 and A2.

### 1.2.2.2.3 Configuration of roles

#### Links between roles

CRDM supports a role-based access control (RBAC) model. This results in the possibility to inherit privileges from one or more roles.

#### Granting roles

Roles can be granted to users and parties.

When granting a role to a user, the grantee user immediately inherits all the privileges of the granted role, i.e. all the privileges linked to the granted role.

When granting a role to a party, the grantee party immediately inherits all the privileges of the granted role, i.e. all the privileges linked to the granted role.

#### Revoking roles

Roles can be revoked from users and parties.

When revoking a role from a user, this user immediately loses all the privileges of the revoked role, i.e. all the privileges linked to the revoked role.

When revoking a role from a party, this party immediately loses all the privileges of the revoked role, i.e. all the privileges linked to the revoked role.

Both when revoking roles from users and from parties, CRDM does not apply a cascade effect.

The following table shows all the possible scenarios for revoking roles that are allowed in CRDM, their link with the cascade process and how party administrators of Central Banks can ensure that all the roles revoked from one of their parties (and all the privileges included in these roles) are revoked also from all the users of the same party:

**TABLE 53 – CASCADE PROCESS WHEN REVOKING ROLES**

| FUNCTION    | FROM  | CASCADE | PROPAGATION TO USERS   |
|-------------|-------|---------|--|
| Revoke Role | User  | n/a     | As the grantee is already a user, there is no need to trigger any cascade process.   |
| Revoke Role | Party | n/a     | If the party administrator of the CSD Participant/External CSD/Payment Bank/Ancillary System granted the role (or a privilege included in the role) directly to other users of the CSD Participant/External CSD/Payment Bank/Ancillary System, |

| FUNCTION | FROM | CASCADE | PROPAGATION TO USERS  |
|----------|------|---------|---|
|          |      |         | <p>then the removal of this role from the party would not revoke the same role (or the privilege included in the role) from these users.</p> <p>In fact, when revoking a role from a party, CRDM does not trigger the cascade process as this may result in unintended removal of roles (or privileges) from the users of the CSD Participant/External CSD/Payment Bank/Ancillary System.</p> <p>In order to ensure that the relevant role is revoked also from the users of the CSD Participant/External CSD/Payment Bank/Ancillary System, the party administrator of the Central Bank or CSD should revoke all the privileges included in the role from the role itself and then delete the role. It should be noted that this approach can be applied without unintended side effects on other CSD Participant/External CSD/Payment Banks/Ancillary System only if the role was specifically created for (and assigned to) the relevant CSD Participant/External CSD/Payment Bank/Ancillary System only, otherwise the procedure just described would also have an effect on all CSD Participant/External CSD/Payment Banks/Ancillary System (and on all their users) being granted with the same role.</p> <p>Furthermore, in order to ensure that any privilege belonging to the role and that was granted directly to users of the CSD Participant/External CSD/Payment Bank/Ancillary System is also revoked from these users, the party administrator of the Central Bank or CSD should grant directly this privilege to the CSD Participant/External CSD/Payment Bank and then revoke it, as this will trigger the cascade process related to the Revoke Privilege function from Party (see Table 11 – Cascade Process when Revoking Privileges).</p> |

**EXAMPLE 18 – PROCEDURE TO REVOKE ROLE FROM ALL USERS OF A PARTY**

The following table shows one example of assignment of the privileges to a Role, of the Role to a User and of one of the Privileges it contains directly to another User:

**TABLE 54 - ASSIGNMENT OF PRIVILEGES TO ROLES**

| ROW | ROLE             | PRIVILEGE                  | DENY  | ADMIN | FOUR-EYES    |
|-----|------------------|----------------------------|-------|-------|--------------|
| 1   | Party Management | Create Party               | False | True  | True         |
| 2   | Party Management | Update Party               | False | True  | True         |
| 3   | Party Management | Delete Party               | False | True  | True         |
| 4   | Party Management | Party Reference Data Query | False | True  | not relevant |

**TABLE 55 - ASSIGNMENT OF ROLES TO USERS**

| ROW | ROLE             | USER    | DENY  | ADMIN | FOUR-EYES |
|-----|------------------|---------|-------|-------|-----------|
| 1   | Party Management | User A1 | False | True  | True      |

**TABLE 56 - ASSIGNMENT OF PRIVILEGES TO USERS**

| ROW | PRIVILEGE    | USER    | DENY  | ADMIN | FOUR-EYES |
|-----|--------------|---------|-------|-------|-----------|
| 1   | Update Party | User A2 | False | True  | True      |

Assuming Users A1 and A2 belong to the same Payment Bank Party, and the responsible Central Bank wants to make sure they both do not use any of the Privileges included in Role Party Management, the Central Bank administrator should:

- | Revoke all Privileges from the Role, then delete the Role: this renders the Role useless and prevents other Party Administrators from granting privileges to it again for any reason. As a consequence, User A1 can no longer use the privileges contained in the Role;
- | Grant the "Update Party" Privilege to the Payment Bank to which Users A1 and A2 belong, then revoke it. This triggers the cascade process for revoking Privileges, which results in Privilege "Update Party" being revoked automatically from User A2, who had it granted directly.

### 1.2.2.3 Configuration of secured objects and secured groups

CRDM provides the possibility to create and maintain secured groups, i.e. sets of secured objects of the same type (See section 1.2.2.1.4 Secured group). Each secured group is defined by the following elements:

- | The identifier of the secured group;
- | The type of the secured group, i.e. the type of the secured objects that can be assigned to the secured group.

#### EXAMPLE 19 - CREATION OF A NEW SECURED GROUP

The following table shows the definition of a secured group of securities accounts.

**TABLE 57 - CREATION OF A NEW SECURED GROUP**

| SECURED GROUP ID | SECURED GROUP TYPE |
|------------------|--------------------|
| SGX              | Securities Account |

Each newly created secured group must also already include references to one or more secured objects. After its creation, the secured group can be assigned additional secured objects, provided that they are the same type as the secured group. Secured objects previously assigned to a secured group can also be removed from the same secured group.

#### EXAMPLE 20 - ASSIGNMENT OF SECURED OBJECTS TO A SECURED GROUP

The following table shows the assignment of three secured objects, namely three securities accounts, to one secured group.

**TABLE 58 - ASSIGNMENT OF SECURED OBJECTS TO A SECURED GROUP**

| SECURED GROUP ID | SECURED OBJECT ID |
|------------------|-------------------|
| SGX              | ABC               |
| SGX              | XYZ               |
| SGX              | MNO               |

Object privileges can be granted on secured groups to roles, users and parties.

**EXAMPLE 21 - ASSIGNMENT OF OBJECT PRIVILEGES ON SECURED GROUPS**

The following tables show several examples of assignment of object privileges on a secured group SGX of securities accounts to roles, users and parties:

**TABLE 59 - ASSIGNMENT OF OBJECT PRIVILEGES ON SECURED GROUPS TO ROLES**

| ROLE | PRIVILEGE   | OBJECT | OBJECT TYPE   | DENY  | ADMIN | FOUR-EYES |
|------|---|--------|---------------|-------|-------|-----------|
| R01  | Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | SGX    | Secured Group | False | False | True      |
| R01  | Securities Account Position Query   | SGX    | Secured Group | False | False | False     |

**TABLE 60 - ASSIGNMENT OF OBJECT PRIVILEGES ON SECURED GROUPS TO USERS**

| PRIVILEGE                 | OBJECT | OBJECT TYPE   | USER | DENY  | ADMIN | FOUR-EYES |
|---------------------------|--------|---------------|------|-------|-------|-----------|
| Update Securities Account | SGX    | Secured Group | Uy   | False | False | True      |

**TABLE 61 - ASSIGNMENT OF OBJECT PRIVILEGES ON SECURED GROUPS TO PARTIES**

| PRIVILEGE                         | OBJECT | OBJECT TYPE   | PARTY       | DENY  | ADMIN | FOUR-EYES |
|-----------------------------------|--------|---------------|-------------|-------|-------|-----------|
| Securities Account Position Query | SGX    | Secured Group | CSD Part. A | False | True  | False     |
| Update Securities Account         | SGX    | Secured Group | CSD Part. A | False | False | False     |
| Delete Securities Account         | SGX    | Secured Group | CSD Part. A | False | False | True      |

For each assignment of an object privilege to a role, three additional attributes define the features of such assignment.

In this example:

- According to Table 65 - [Assignment of Object Privileges on Secured Groups to Roles](#), users granted with role R01 are authorised to query and to send new Settlement Instructions according to the Four-Eyes principle referencing all securities accounts included in the secured group SGX. Users granted with role

R01, however, cannot grant the same privileges to other roles and users (as the administration option is set to false);

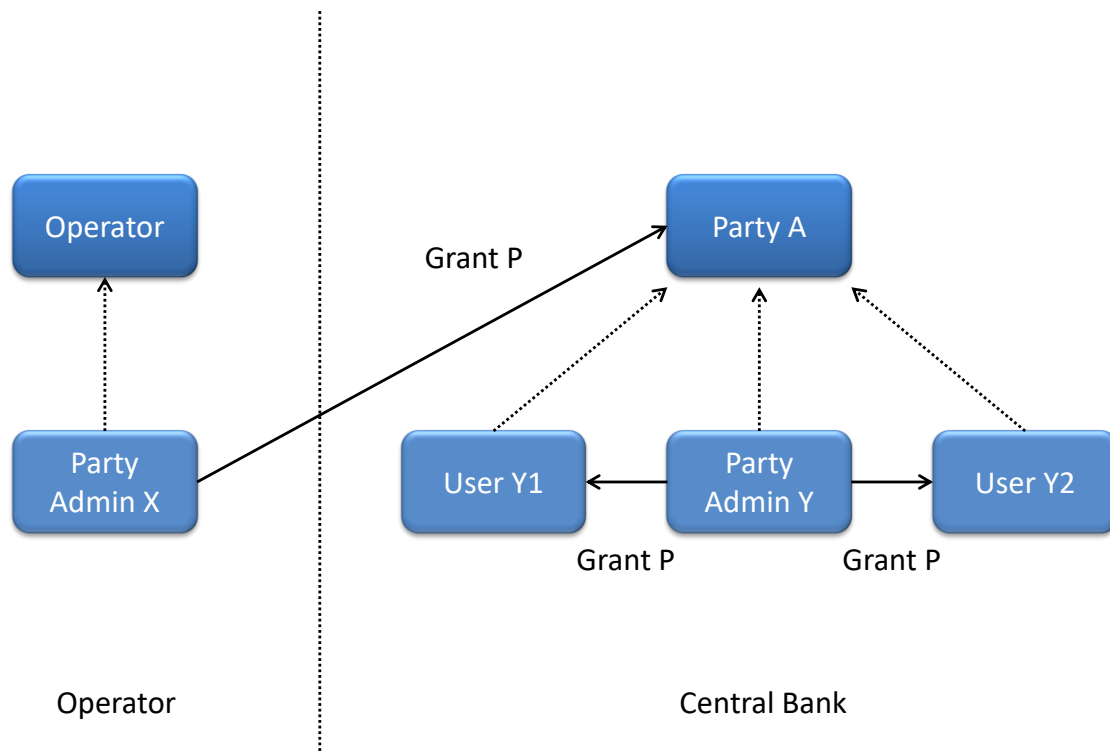
- I Table 66 - [Assignment of Object Privileges on Secured Groups to Users](#) stipulates that user  $U_y$  can update according to the Four-Eyes principle all securities accounts included in the secured group SGX. User  $U_y$ , however, cannot grant the same privilege to other roles and users (as the administration option is set to false);
- I Finally, as per Table 67 - [Assignment of Object Privileges on Secured Groups to Parties](#), the CSD participant A is granted with the privileges to query, update (according to the Two-Eyes principle) and delete (according to the Four-Eyes principle) all securities accounts included in the secured group SGX. This implies that a party administrator of the CSD participant A can grant the same privileges to other users and roles of the same party. Furthermore, owing to the specific configuration of the administration option for the three privileges, a party administrator of the CSD participant A can only grant the privilege to query all securities accounts of the secured group SGX to other parties (as the administration option is set to true for this privilege only).

#### 1.2.2.4 Access rights configuration process

As described in section 1.2.2.2.2 [Configuration of privileges](#), before the party administrator of a given party can grant a privilege to a user of the same party, the same privilege has to be granted to the same party, so that it becomes available to the party administrator(s) of the party.

On this basis, the following diagram illustrates the steps needed for granting a given privilege P to the users of a Central Bank (identified as Party A in the diagram).

**DIAGRAM 13 - ACCESS RIGHTS CONFIGURATION PROCESS (A)**



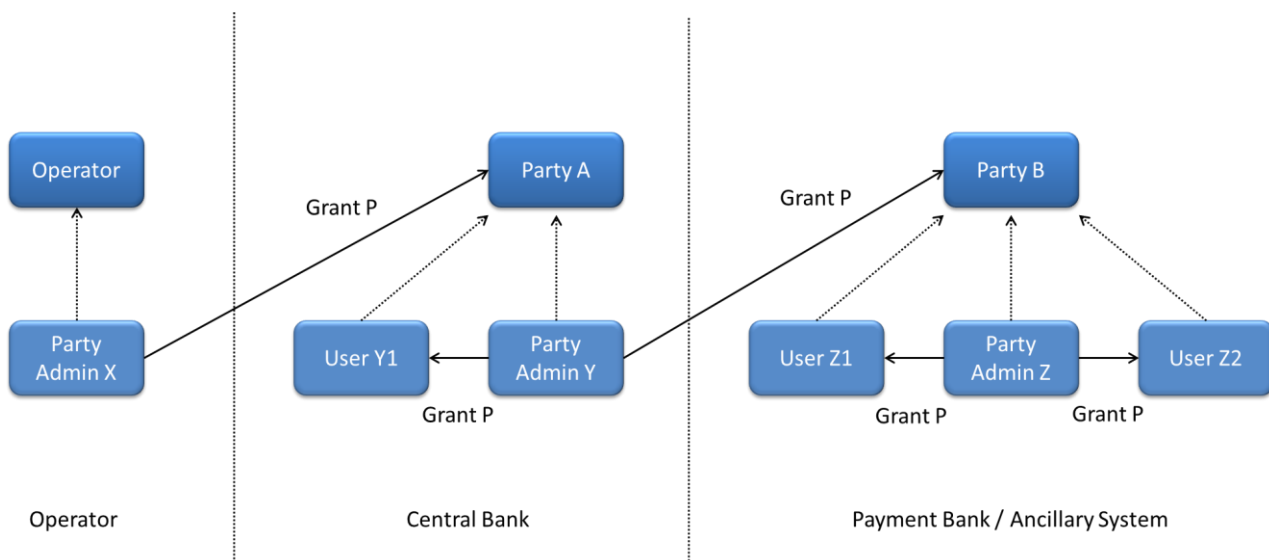
The diagram shows that the two required steps are as follows:



- | User X, as a party administrator of the Operator, grants the privilege P to the party A;
- | User Y, as a party administrator of the party A, grants the privilege P to all the relevant users (in this case, users Y1 and Y2).

The same process applies when a Central Bank needs to configure access rights for their payment banks and ancillary systems. The following diagram illustrates all the steps needed for granting a given privilege P to the users of a payment bank/ancillary system (party B in the diagram), via the relevant Central Bank (party A in the diagram).

**DIAGRAM 14 - ACCESS RIGHTS CONFIGURATION PROCESS (B)**



The diagram shows that the three required steps are as follows:

- | User X, as a party administrator of the Operator, grants the privilege P to the party A (i.e. to a Central Bank or a CSD);
- | User Y, as a party administrator of the party A, grants the privilege P to the party B (i.e. to a CSD participant, external CSD, payment bank or ancillary system);
- | User Z, as a party administrator of the party B, grants the privilege P to the relevant users (in this case users Z<sub>1</sub> and Z<sub>2</sub>).

In addition, the diagram shows that user Y, as a party administrator of the party A, can also grant the privilege P to the user Y<sub>1</sub>, as this user belongs to the same party.

These two examples illustrates that the access rights configuration process in the CRDM consists in two main tasks:

- | configuration of access rights at party level;
- | configuration of access rights at user level.

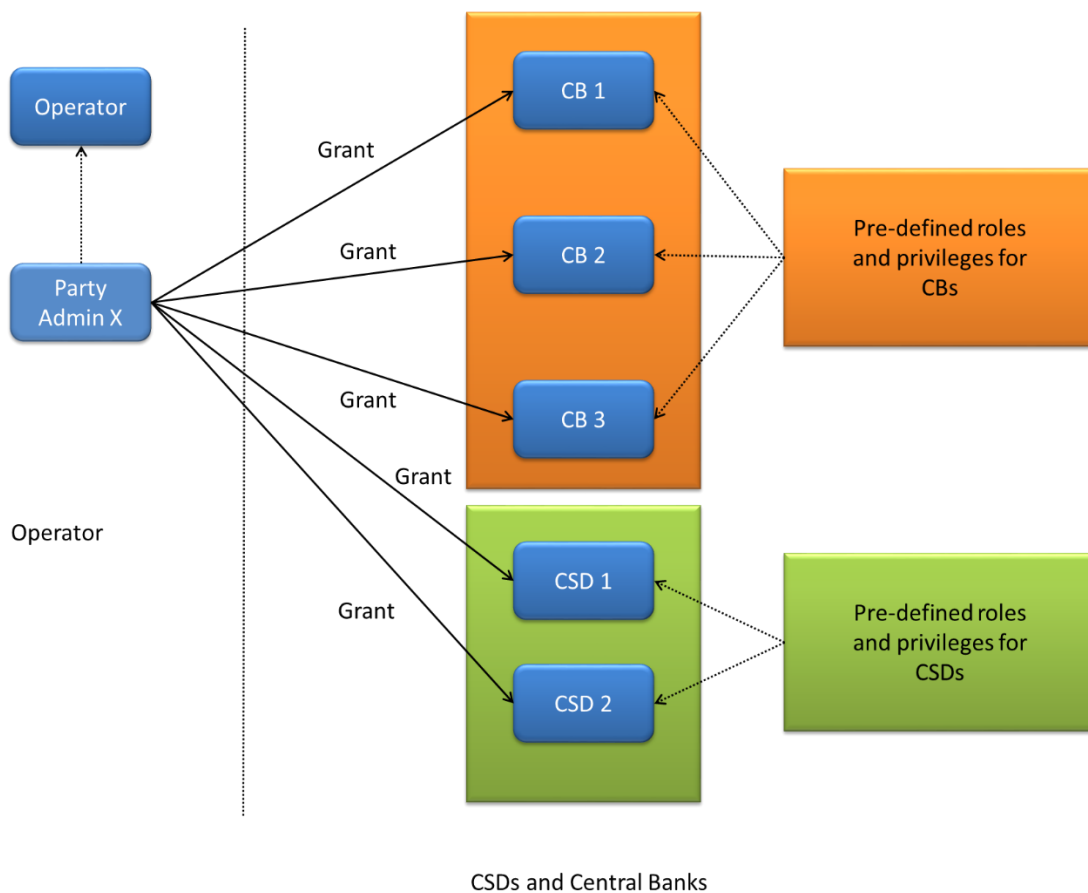
As stated in section 1.2.2.2.2 [Configuration of privileges](#), the above process is not directly applicable for TIPS Privileges; in this case Privileges have to be granted to Roles in the first place and then Roles can be granted to Parties and Users. For details on the configuration of Roles see section 1.2.2.2.3 [Configuration of roles](#).

#### 1.2.2.4.1 Configuration of access rights at party level

This task consists in the assignment of the relevant set of roles and privileges to a given party in the CRDM. A party administrator of the Operator performs this task for the configuration of access rights of CSDs and Central Banks.

The following diagram shows an example in which the party administrator of the Operator grants to all the CSDs the same set of roles and privileges. This set includes all the privileges needed by the CSDs and all the privileges needed by the CSD participants. Similarly, the Operator grants to all the Central Banks the same set of roles and privileges, including also all the privileges needed by the Payment Banks and Ancillary Systems.

**EXAMPLE 22 - CONFIGURATION OF ACCESS RIGHTS AT PARTY LEVEL BY THE OPERATOR**



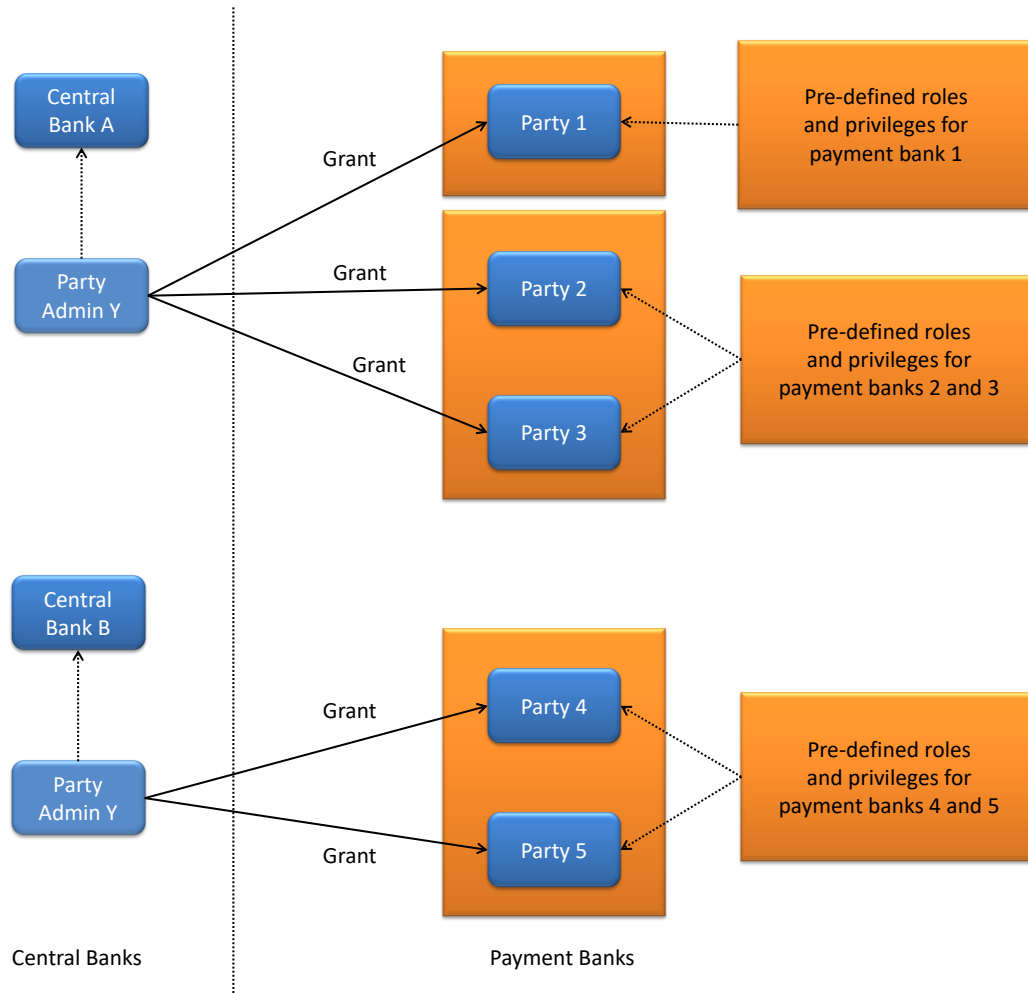
A party administrator of each CSD assigns the relevant set of roles and privileges to all its CSD participants, whereas a party administrator of each Central Bank assigns the relevant set of roles<sup>24</sup> and privileges to all its payment banks.

In this example the party administrator of a Central Bank A configures the relevant access rights for three payment banks Party 1, Party 2 and Party 3. This results in two different set of roles and privileges, the first one being granted to the payment bank Party 1 only, the latter being assigned to both payment banks Party

<sup>24</sup> For T2 and TIPS privileges, new Roles can only be created and maintained by the CRDM Operator and Central Bank parties. Payment Banks and Ancillary Systems can only grant/revoke Roles that have previously been granted to them by their Central Banks. For other types of privileges, CBs and CSDs can create their own Roles.

2 and Party 3. Similarly, the party administrator of a Central Bank B assigns the relevant access rights to two payment banks Party 4 and Party 5, this task resulting in the configuration of the same set of access rights for both payment banks Party 4 and Party 5.

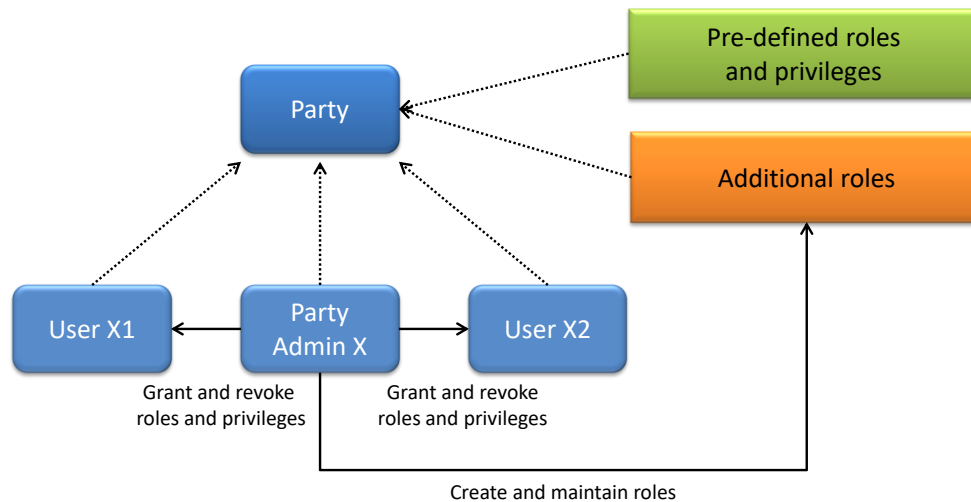
**EXAMPLE 23 - CONFIGURATION OF ACCESS RIGHTS AT PARTY LEVEL BY PARTY ADMINISTRATOR OF A CB**



1.2.2.4.2 Configuration of access rights at user level

After the configuration of access rights at party level has been set up for a given party, its party administrator(s) can perform the configuration of access rights at user level, in order to assign the appropriate roles and privileges to all the users of the given party.

**DIAGRAM 15 - CONFIGURATION OF ACCESS RIGHTS AT USER LEVEL**



The above diagram shows that the party administrator(s) can set up the appropriate access rights configuration for the users of the same party:

- | by possibly creating and maintaining<sup>25</sup> additional roles, besides the ones previously granted at party level<sup>26</sup>
- | by granting (and revoking) the (default and additional) roles and the (default) privileges to the users of the same party.

**EXAMPLE 24 - POWER OF ATTORNEY AT SECURITIES ACCOUNT LEVEL**

The CSD participant PTY\_X holding the securities account SAC\_X wants to give another party, identified by PTY\_Y, the power of attorney to instruct a given securities account SAC\_X.

This scenario can be modelled as follows:

**TABLE 62 - ASSIGNMENT OF OBJECT PRIVILEGES TO PARTIES (B)**

| PRIVILEGE   | OBJECT | OBJECT TYPE        | PARTY | DENY  | ADMIN | FOUR-EYES |
|---|--------|--------------------|-------|-------|-------|-----------|
| Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | SAC_X  | Securities Account | PTY_Y | False | False | False     |

The object privilege to send new Settlement Instructions referencing the securities account SAC\_X is assigned:

- | Without Deny, i.e. party administrators of PTY\_Y can grant this privilege to other roles and users of the same party;
- | Without Admin, i.e. party administrators of PTY\_Y cannot give other parties the power of attorney to send new Settlement Instructions referencing this securities account;

25 For T2 and TIPS privileges, new Roles can only be created and maintained by the CRDM Operator and Central Bank parties. Payment Banks and Ancillary Systems can only grant/revoke Roles that have previously been granted to them by their Central Banks. For other types of privileges, CBs and CSDs can create their own Roles.

26 These additional roles can only be granted with available privileges, i.e. privileges previously granted at party level.

- I Without Four-Eyes, i.e. party administrators of PTY\_Y can grant other roles and users of the same party with the privilege to send new Settlement Instructions referencing the securities account SAC\_X, according to the Two-Eyes principle or to the Four-Eyes principle.

From now on, party PTY\_Y has the power of attorney to send new Settlement Instructions referencing the securities account SAC\_X of party PTY\_X.

It is up to party administrators of PTY\_Y to specify the actual roles and users of the same party that are granted the privilege to send new Settlement Instructions referencing the securities account SAC\_X.

**EXAMPLE 25 - POWER OF ATTORNEY AT PARTY LEVEL**

The CSD participant PTY\_X holding multiple securities accounts in T2S wants to give another party, identified by PTY\_Y, the power of attorney to send new Settlement Instructions referencing all its securities accounts.

This scenario can be modelled as follows:

**TABLE 63 - ASSIGNMENT OF OBJECT PRIVILEGES TO PARTIES (C)**

| PRIVILEGE   | OBJECT | OBJECT TYPE | PARTY | DENY  | ADMIN | FOUR-EYES |
|---|--------|-------------|-------|-------|-------|-----------|
| Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | PTY_X  | Party       | PTY_Y | False | False | True      |

The object privilege to send new Settlement Instructions referencing securities accounts of party PTY\_X is assigned:

- I Without Deny, i.e. party administrators of PTY\_Y can grant this privilege to other roles and users of the same party;
- I Without Admin, i.e. party administrators of PTY\_Y cannot give other parties the power of attorney to send new Settlement Instructions referencing the securities accounts of PTY\_X;
- I With Four-Eyes, i.e. party administrators of PTY\_Y can grant other roles and users of the same party with the privilege to send new Settlement Instructions referencing any securities account of PTY\_X, according to the Four- Eyes principle only.

From now on, party PTY\_Y has power of attorney to send new Settlement Instructions referencing all securities accounts of party PTY\_X.

It is up to party administrators of PTY\_Y to specify the actual roles and users of the same party that are granted the privilege to send new Settlement Instructions referencing these securities accounts.

**EXAMPLE 26 - SELECTIVE ACCESS AT SECURITIES ACCOUNT LEVEL**

A party administrator of the CSD participant holding the securities account SAC\_X wants to grant:

- I User USR\_Y the privilege to query this securities account;
- I User USR\_Z the privilege of querying and send new Settlement Instructions referencing this securities account.

This scenario can be modelled as follows:

**TABLE 64 - ASSIGNMENT OF OBJECT PRIVILEGES TO USERS (B)**

| PRIVILEGE   | OBJECT | OBJECT TYPE        | USER  | DENY  | ADMIN | FOUR-EYES |
|---|--------|--------------------|-------|-------|-------|-----------|
| Securities Account Position Query   | SAC_X  | Securities Account | USR_Y | False | False | False     |
| Securities Account Position Query   | SAC_X  | Securities Account | USR_Z | False | False | False     |
| Send New Settlement Instruction/Settlement Restriction on Securities either on a Securities Account or on Behalf of an External CSD | SAC_X  | Securities Account | USR_Z | False | False | True      |

The privilege to query the securities account SAC\_X is assigned:

- | Without Deny, i.e. users USR\_Y and USR\_Z can query the securities account SAC\_X;
- | Without Admin, i.e. users USR\_Y and USR\_Z cannot grant the privilege to query the securities account SAC\_X to any other roles and users of the same party;
- | Without Four-Eyes, which is not relevant for a privilege related to a read-only function.

The privilege to send new Settlement Instructions referencing the securities account SAC\_X is assigned:

- | Without Deny, i.e. user USR\_Z can send new Settlement Instructions referencing the securities account SAC\_X;
- | Without Admin, i.e. user USR\_Z cannot grant the same privilege to other roles and users of the same party;
- | With Four-Eyes, i.e. user USR\_Z can send new Settlement Instructions referencing the securities account SAC\_X according to the Four-Eyes principle only.

**EXAMPLE 27 - SELECTIVE ACCESS AT GROUP OF SECURITIES ACCOUNTS LEVEL**

A party administrator of the CSD participant holding securities accounts SAC\_1, SAC\_2 and SAC\_3 wants to grant user USR\_X the privilege to query these securities accounts.

This scenario can be modelled as follows:

**TABLE 65 - ASSIGNMENT OF OBJECT PRIVILEGES TO USERS (C)**

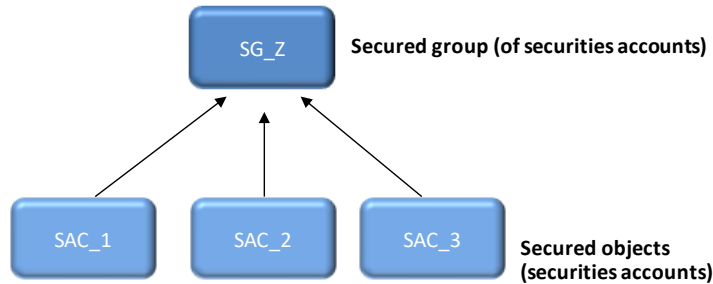
| PRIVILEGE                         | OBJECT | OBJECT TYPE        | USER  | DENY  | ADMIN | FOUR-EYES |
|-----------------------------------|--------|--------------------|-------|-------|-------|-----------|
| Securities Account Position Query | SAC_1  | Securities Account | USR_X | False | False | False     |
| Securities Account Position Query | SAC_2  | Securities Account | USR_X | False | False | False     |
| Securities Account Position Query | SAC_3  | Securities Account | USR_X | False | False | False     |

Alternatively, the same scenario can also be modelled as follows:

**TABLE 66 - ASSIGNMENT OF OBJECT PRIVILEGES TO USERS (D)**

| PRIVILEGE                         | OBJECT | OBJECT TYPE   | USER  | DENY  | ADMIN | FOUR-EYES |
|-----------------------------------|--------|---------------|-------|-------|-------|-----------|
| Securities Account Position Query | SG_Z   | Secured Group | USR_X | False | False | False     |

where SG\_Z is the group of secured objects defined as in the following diagram:



**EXAMPLE 28 - CB ACCESS TO SECURITIES ACCOUNTS**

A party administrator of the CSD Y holding the securities account SAC\_A wants to grant its own CSD Participant PTY\_X as well as CB PTY\_Z with the privilege to query the securities account SAC\_A.

This scenario can be modelled as follows:

**TABLE 67 - ASSIGNMENT OF OBJECT PRIVILEGES TO PARTIES (D)**

| PRIVILEGE                         | OBJECT | OBJECT TYPE        | PARTY | DENY  | ADMIN | FOUR-EYES |
|-----------------------------------|--------|--------------------|-------|-------|-------|-----------|
| Securities Account Position Query | SAC_A  | Securities Account | PTY_X | False | True  | False     |
| Securities Account Position Query | SAC_A  | Securities Account | PTY_Z | False | False | False     |

The privilege to query the securities account SAC\_A is assigned by a party administrator of CSD PTY\_Y to the CSD participant PTY\_X

- | Without Deny, i.e. party administrators of PTY\_X can grant the privilege to query the securities account SAC\_A to other roles and users of the same party;
- | With Admin, i.e. party administrators of PTY\_X can grant the privilege to query the securities account SAC\_A to other parties;
- | Without Four-Eyes, which is not relevant for a privilege related to a read-only function.

Moreover, the privilege to query the securities account SAC\_A is assigned by a party administrator of the Y to the central bank PTY\_Z

- | Without Deny, i.e. party administrators of PTY\_Z can grant the privilege to query the securities account SAC\_A to other roles and users of the same party;
- | Without Admin, i.e. party administrators of PTY\_Z cannot grant the privilege to query the securities account SAC\_A to other parties;
- | Without Four-Eyes, which is not relevant for a privilege related to a read-only function.

From now on, the central bank PTY\_Z can query the securities account SAC\_A of the CSD Y.

It is up to party administrators of the central bank PTY\_Z to specify the actual roles and users of the same party that are granted the privilege to query the securities account SAC\_A.

### 1.2.3 Message subscription

#### 1.2.3.1 Message subscription configuration

CSDs and Central Banks can configure, for themselves and for CSD participants, external CSDs, payment banks and ancillary systems they are responsible for, the specific set of messages (or copies of messages) they want to receive from individual services and components.

Each message subscription rule set is defined by the following elements:

- | the name and the description of the message subscription rule set;
- | a validity period, specified by a mandatory initial date of validity and an optional final date of validity;
- | a set of subscribing interested parties to which the relevant service or component sends all the messages matching the rule set;
- | a set of rules defining the criteria according to which the relevant service checks whether a message has to be sent or not. These criteria are expressed on the basis of a pre-defined set of parameter types. Each rule is assigned a validity period, specified by a mandatory initial date of validity and an optional final date of validity. The validity period of a rule cannot exceed the validity period of the message subscription rule set it belongs to, i.e. the validity period of a rule cannot start before or end after the validity period of the relevant message subscription rule set.
- | if applicable for the relevant Service/component, a positive/negative parameter according to which the Service/component should send/should not send a given message (if "positive", the rule set matches if one of its rules is satisfied);

The positive/negative parameter allows subscribing Parties to explicitly refuse to receive messages that match certain criteria. If set to negative it means that the Party/ies does not receive messages which match the rule set. <sup>27</sup> Setting it to positive means that the Party/ies receive messages matching the rule set (i.e., the normal subscription behaviour). In the event of an overlap, "negative" rule sets have priority over "positive" rule sets.

If deemed necessary, Central Banks can decide to hand over the control to their Payment Banks and/or Ancillary Systems by granting them the privilege for message subscription configuration (for more information on privilege granting see section 1.2.2 [Access rights](#)).

#### 1.2.3.2 Message subscription parameter types

The table below describes the exhaustive list of parameter types that CSDs and Central Banks can use for configuring their message subscription rule sets.

**Table 68 - Message subscription Parameter Types**

<sup>27</sup> Exception exists for parameter "Instruction Status Reason Code". For this parameter, also the paths of Message status, Instruction status and all Instruction Status Reason Codes reported in the respective message are relevant. As long as one or more statuses or codes are provided in the respective message that do not match the one set up in the negative message subscription rule, the negative rule is not applied and the messages are sent provided a corresponding positive subscription rule exists.



| PARAMETER TYPE | APPLICABLE SERVICE/COMPONENT <sup>28</sup> | DESCRIPTION  |
|----------------|--|--|
| Message Type   | TIPS, T2S, T2 (CLM/RTGS), CRDM             | <p>It specifies the type of message, depending on the service. Possible values depend on the specific service for which messages are being subscribed and are listed below.</p> <p>For TIPS:</p> <ul style="list-style-type: none"> <li>  BankToCustomerDebitCreditNotification (camt.054)</li> <li>  BillingReport (camt.077)</li> </ul> <p>For CLM:</p> <ul style="list-style-type: none"> <li>  SystemEventNotification (admi.004)</li> <li>  ReturnBusinessDayInformation (camt.019)</li> <li>  BankToCustomerDebitCreditNotification (camt.054)</li> <li>  PaymentStatusReport (pacs.002)</li> </ul> <p>For RTGS:</p> <ul style="list-style-type: none"> <li>  SystemEventNotification (admi.004)</li> <li>  ReturnBusinessDayInformation (camt.019)</li> <li>  ResolutionOfInvestigation (camt.029)</li> <li>  BankToCustomerDebitCreditNotification (camt.054)</li> <li>  PaymentStatusReport (pacs.002)</li> <li>  BillingReport (camt.077)</li> </ul> |

<sup>28</sup> This column defines the applicable Service or Component to be selected to subscribe to each specific message in the context of that Service/Component. **{T2 CR0136}**

| PARAMETER<br>TYPE | APPLICABLE<br>SERVICE/COMPONENT <sup>28</sup> | DESCRIPTION  |
|-------------------|---|--|
|                   |   | <p>For T2S:</p> <ul style="list-style-type: none"> <li>  SettlementInstruction/SecuritiesSettlementTransaction (sese.023)</li> <li>  SettlementRestriction on securities/IntraPositionMovement (semt.013)</li> <li>  SettlementRestriction on cash/IntraBalanceMovement (camt.066)</li> <li>  SystemEventNotification (admi.004)</li> <li>  ReturnBusinessDayInformation (camt.019)</li> <li>  ResolutionOfInvestigation (camt.029)</li> <li>  BankToCustomerDebitCreditNotification (camt.054)</li> <li>  PaymentStatusReport (pacs.002)</li> <li>  BillingReport (camt.077)</li> <li>  IntraPositionMovementStatusAdvice (semt.014)</li> <li>  IntraPositionMovementConfirmation (semt.015)</li> <li>  SecuritiesSettlementTransactionStatusAdvice (sese.024)</li> <li>  SecuritiesSettlementTransactionConfirmation (sese.025)</li> <li>  SecuritiesTransactionCancellationRequestStatusAdvice (sese.027)</li> <li>  SecuritiesSettlementTransactionAllegementNotification (sese.028)</li> <li>  SecuritiesMessageCancellationAdvice (semt.020)</li> <li>  SecuritiesSettlementAllegementRemovalAdvice (sese.029)</li> <li>  SecuritiesSettlementConditionsModificationStatusAdvice (sese.031)</li> <li>  IntraBalanceMovementStatusAdvice (camt.067)</li> <li>  IntraBalanceMovementConfirmation (camt.068)</li> <li>  SecuritiesSettlementTransactionGenerationNotification (sese.023)</li> <li>  IntraBalanceMovementModificationRequestStatusAdvice (camt.073)</li> <li>  IntraBalanceMovementCancellationRequestStatusAdvice (camt.075)</li> </ul> |

| PARAMETER TYPE         | APPLICABLE SERVICE/COMPONENT <sup>28</sup> | DESCRIPTION   |
|------------------------|--|---|
|                        |  | For CRDM <sup>29</sup> : <ul style="list-style-type: none"> <li>  AccountRequestAcknowledgement (acmt.010)</li> <li>  PartyStatusAdvice (reda.016)</li> <li>  Receipt (camt.025)</li> <li>  SecurityCreationStatusAdvice (reda.008)</li> <li>  SecurityMaintenanceStatusAdvice (reda.029)</li> <li>  SecurityDeletionStatusAdvice (reda.030)</li> <li>  SecuritiesAccountStatusAdvice (reda.020)</li> <li>  CollateralDataStatusAdvice (reda.028)</li> <li>  EligibleCounterpartCSDStatusAdvice (reda.044)</li> <li>  SecurityCSDLinkStatusAdvice (reda.047)</li> <li>  AccountLinkStatusAdvice (reda.051)</li> </ul> |
| Instruction Type       | T2S  | It specifies the type of instruction included in the message. Refer to section "Instruction Types" in the T2S UDFS for the exhaustive list of instruction types.  |
| Message Status         | T2S, CRDM                                  | It specifies the status of the message, i.e. the status of the request included in the message. <sup>30</sup>   |
| Party                  | T2S, CRDM                                  | It specifies the party referenced in the message.   |
| Securities Account     | T2S, CRDM                                  | It specifies the securities account referenced in the message.  |
| ISIN                   | T2S, CRDM                                  | It specifies the financial instrument referenced in the message.  |
| Cash Account           | TIPS, T2S, T2 (CLM/RTGS), CRDM             | It specifies the Cash Account for which relevant messages shall be sent.  |
| Debit/Credit indicator | TIPS                                       | It specifies whether the notification should be sent for Liquidity Transfers which debit or credit the TIPS Account.  |
| Multi-addressee BIC    | T2 (RTGS)                                  | It specifies the BIC11 of the Multi-addressee that sent the related instruction/cancellation.   |
| Business case          | T2 (CLM/RTGS)                              | It specifies the business case for which the message is subscribed.   |
| Priority               | T2 (RTGS)                                  | It specifies the priority of the original payment instruction.  |

<sup>29</sup> A subset of messages is generated and sent by CRDM, for which the subscription is not related to specific Services (i.e. all instances of the selected messages, regardless of which Service the underlying data refers to, will be sent if subscribed). This requires to define a Rule Set using the value "T2S/CRDM" as Service. **{T2 CR0136}**

<sup>30</sup> Consequently, the meaning of this status depends on the given message type, e.g. it is a settlement status for a message conveying the response related to an immediate liquidity transfer, whereas it is a processing status for a message conveying the response related to a static data maintenance request. The exhaustive list of possible values depends on the specific status and it is provided in the specification of the relevant message type.

| PARAMETER TYPE          | APPLICABLE SERVICE/COMPONENT <sup>28</sup> | DESCRIPTION   |
|-------------------------|--|---|
| Underlying message type | T2 (CLM/RTGS)                              | It specifies the message type of the original message sent to the service.  |
| Instruction Status      | T2S, CRDM                                  | <p>It specifies the status of the instruction. The exhaustive list of possible status values of instructions is as follows, depending on the message type:</p> <p>For camt.025:</p> <ul style="list-style-type: none"> <li>  LIMC (Reference data Limit maintenance "Completed" code)</li> <li>  LIMQ (Reference data Limit maintenance "Queued" code)</li> <li>  LIMR (Reference data Limit maintenance "Rejected" code)</li> <li>  LTOC (Reference data Liquidity Transfer Order maintenance "Completed" code)</li> <li>  LTOQ (Reference data Liquidity Transfer Order maintenance "Queued" code)</li> <li>  LTOR (Reference data Liquidity Transfer Order maintenance "Rejected" code)</li> <li>  APPR (Liquidity Transfer "Approved" code)</li> <li>  SPAS (Liquidity Transfer "Partially Settled" code)</li> <li>  SSET (Liquidity Transfer "Settled" code)</li> <li>  SUNS (Liquidity Transfer "Unsettled" code)</li> <li>  RREJ (RTGS "Rejected" code)</li> </ul> <p>For semt.014, sese.024, sese.027, sese.031, sese.032, camt.067, camt.073 and camt.075:</p> <ul style="list-style-type: none"> <li>  AckdAcptd (Accepted)</li> </ul> <p>For semt.014, sese.024, sese.027, camt.067 and camt.075:</p> <ul style="list-style-type: none"> <li>  Canc (Cancelled)</li> </ul> <p>For semt.014, sese.024, sese.032 and camt.067:</p> <ul style="list-style-type: none"> <li>  Pdg (Pending) <sup>31</sup></li> </ul> <p>For sese.027, sese.031, camt.073 and camt.075:</p> <ul style="list-style-type: none"> <li>  Dnd (Denied)</li> </ul> <p>For sese.031 and camt.073:</p> <ul style="list-style-type: none"> <li>  Cmpltd (Completed)</li> </ul> |

<sup>31</sup> If the customer wants to receive only messages for failing, he has to set up a negative message subscription for Instruction Status "Pending".

| PARAMETER TYPE                        | APPLICABLE SERVICE / COMPONENT <sup>28</sup> | DESCRIPTION   |
|---------------------------------------|--|---|
|                                       |  | <p>For sese.024:</p> <ul style="list-style-type: none"> <li>  Mtchd (Matched) <sup>32</sup></li> <li>  CxlReqd (Cancellation Requested)</li> </ul> <p>For sese.027:</p> <p>PdgCxl (Pending Cancellation)</p>  |
| Instruction Status Reason Code        | T2S  | <p>It specifies the reason codes of "pending" and "failing" settlement status messages. The exhaustive list of possible status reason codes is as follows, depending on the message type. Please refer to the Index of Status Values and Codes in the T2S UDFS for the detailed lists:</p> <p>For semt.014</p> <ul style="list-style-type: none"> <li>  PendingReason10Code</li> <li>  FailingReason3Code</li> </ul> <p>For sese.024</p> <ul style="list-style-type: none"> <li>  PendingReason2Code</li> <li>  FailingReason2Code</li> </ul> <p>For camt.067</p> <ul style="list-style-type: none"> <li>  PendingReason10Code</li> <li>  FailingReason3Code</li> </ul> |
| Transaction Code                      | T2S  | It specifies the ISO transaction code referenced in the message.  |
| Currency                              | T2S  | It specifies the currency code referenced in the message.   |
| Already Matched Flag                  | T2S  | It specifies whether to select only one side of the reporting when a settlement instruction is sent as "already matched" in T2S.  |
| Settlement Transaction Condition Code | T2S  | It specifies the settlement transaction condition code referenced in the message.   |
| Business Sending Party                | T2S  | It specifies the Business Sending Party of the message. For outgoing messages, it refers to the Business Sending Party of the related incoming message.   |
| System User Reference                 | T2S  | It specifies the System User Reference of the Business Sending User of the message.   |

<sup>32</sup> If the customer wants to receive only messages with unmatched status, he has to set up a negative message subscription for Instruction Status "Matched".

| PARAMETER TYPE    | APPLICABLE SERVICE/COMPONENT <sup>28</sup> | DESCRIPTION   |
|-------------------|--|---|
| Instructing Party | T2S  | It specifies the Instructing Party of the message. For outgoing messages, it refers to the Instructing Party of the related incoming message. |

Not all the parameter types listed in the previous table are applicable for each message. The following table provides the mapping between the incoming message types subject to subscription and the applicable parameter types<sup>33</sup>.

**TABLE 69 - APPLICABLE MESSAGE SUBSCRIPTION PARAMETER TYPES FOR INCOMING MESSAGES (FOR COPIES)**

| MESSAGE TYPE  | INSTRUCTING PARTY | SYSTEM USER REFERENCE | BUSINESS SENDING PARTY | SETTLEMENT TRANSACTION CONDITION CODE | ALREADY MATCHED FLAG | CURRENCY | TRANSACTION CODE | INSTRUCTION STATUS | T2S DEDICATED CASH ACCOUNT | ISIN | SECURITIES ACCOUNT | PARTY | MESSAGE STATUS | INSTRUCTION TYPE |
|---|-------------------|-----------------------|------------------------|---------------------------------------|----------------------|----------|------------------|--------------------|----------------------------|------|--------------------|-------|----------------|------------------|
| SettlementInstruction   | Yes               | Yes                   | Yes                    | Yes                                   | Yes                  | Yes      | Yes              | No                 | Yes                        | Yes  | Yes                | Yes   | No             | Yes              |
| SecuritiesSettlementTransaction (sese.023)                              |                   |                       |                        |                                       |                      |          |                  |                    |                            |      |                    |       |                |                  |
| SettlementRestriction on securities<br>IntraPositionMovement (semt.013) | No                | No                    | Yes                    | Yes                                   | No                   | No       | No               | No                 | No                         | Yes  | Yes                | Yes   | No             | No               |
| SettlementRestriction on cash<br>IntraBalanceMovement (camt.066)        | No                | No                    | Yes                    | No                                    | No                   | Yes      | No               | No                 | Yes                        | No   | No                 | Yes   | No             | No               |

The following table provides the mapping between the outgoing message types subject to subscription and the applicable parameter types<sup>34</sup>.

**Table 70 – Applicable Message subscription Parameter Types for Outgoing Messages**

<sup>33</sup> The Message parameter type is not shown in the following table as it applicable by definition to all messages.

<sup>34</sup> The Message parameter type is not shown in the following table as it applicable by definition to all messages.

| MESSAGE TYPE                                     | INSTRUCTION TYPE | MESSAGE STATUS | PARTY | SECURITIES ACCOUNT | ISIN | CASH ACCOUNT | MULTI-ADDRESSEE BIC | BUSINESS CASE | PRIORITY | UNDERLYING MESSAGE TYPE | INSTRUCTION STATUS | INSTRUCTION STATUS REASON CODE | TRANSACTION CODE | CURRENCY | ALREADY MATCHED FLAG | SETTLEMENT TRANSACTION CONDITION CODE | BUSINESS SENDING PARTY <sup>35</sup> | SYSTEM USER REFERENCE | INSTRUCTING PARTY |
|--|------------------|----------------|-------|--------------------|------|--------------|---------------------|---------------|----------|-------------------------|--------------------|--------------------------------|------------------|----------|----------------------|---------------------------------------|--------------------------------------|-----------------------|-------------------|
| SystemEventNotification (admi.004)               | No               | No             | No    | No                 | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| ReturnBusinessDayInformation (camt.019)          | No               | No             | No    | No                 | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| ResolutionOfInvestigation (camt.029)             | No               | No             | No    | No                 | No   | Yes          | Yes                 | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| BankToCustomerDebitCreditNotification (camt.054) | No               | No             | No    | No                 | No   | Yes          | No                  | Yes           | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| PaymentStatusReport (pacs.002)                   | No               | No             | No    | No                 | No   | Yes          | Yes                 | No            | Yes      | Yes                     | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| AccountRequestAcknowledgement (acmt.010)         | No               | Yes            | Yes   | No                 | No   | Yes          | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| PartyStatusAdvice (reda.016)                     | No               | Yes            | Yes   | No                 | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| SecurityCreationStatusAdvice (reda.008)          | No               | Yes            | No    | No                 | Yes  | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| SecurityMaintenanceStatusAdvice (reda.029)       | No               | Yes            | No    | No                 | Yes  | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| SecurityDeletionStatusAdvice (reda.030)          | No               | Yes            | No    | No                 | Yes  | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| SecuritiesAccountStatusAdvice (reda.020)         | No               | Yes            | No    | Yes                | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| CollateralDataStatusAdvice (reda.028)            | No               | Yes            | No    | No                 | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |

| MESSAGE TYPE  | INSTRUCTION TYPE | MESSAGE STATUS | PARTY | SECURITIES ACCOUNT | ISIN | CASH ACCOUNT | MULTI-ADDRESSEE BIC | BUSINESS CASE | PRIORITY | UNDERLYING MESSAGE TYPE | INSTRUCTION STATUS | INSTRUCTION STATUS REASON CODE | TRANSACTION CODE | CURRENCY | ALREADY MATCHED FLAG | SETTLEMENT TRANSACTION CONDITION CODE | BUSINESS SENDING PARTY <sup>35</sup> | SYSTEM USER REFERENCE | INSTRUCTING PARTY |
|---|------------------|----------------|-------|--------------------|------|--------------|---------------------|---------------|----------|-------------------------|--------------------|--------------------------------|------------------|----------|----------------------|---------------------------------------|--------------------------------------|-----------------------|-------------------|
| EligibleCounterpartCSDStatusAdvice (reda.044)                   | No               | Yes            | No    | No                 | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| SecurityCSDLinkStatusAdvice (reda.047)                          | No               | Yes            | Yes   | No                 | Yes  | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| AccountLinkStatusAdvice (reda.051)                              | No               | Yes            | No    | Yes                | No   | Yes          | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| ReturnBusinessDayInformation (camt.019)                         | No               | No             | No    | No                 | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| Receipt (camt.025)  | No               | No             | No    | No                 | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| BillingReport (camt.077)  | No               | No             | No    | No                 | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| BankToCustomerDebitCreditNotification (camt.054)                | Yes              | No             | No    | No                 | No   | Yes          | No                  | No            | No       | No                      | No                 | No                             | No               | Yes      | No                   | No                                    | No                                   | No                    | No                |
| IntraPositionMovementStatusAdvice (semt.014)                    | No               | Yes            | Yes   | Yes                | Yes  | No           | No                  | No            | No       | No                      | Yes                | Yes                            | No               | No       | No                   | No                                    | Yes                                  | No                    | Yes               |
| IntraPositionMovementConfirmation (semt.015)                    | No               | No             | Yes   | Yes                | Yes  | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | Yes                                  | No                    | Yes               |
| SecuritiesSettlementTransactionStatusAdvice (sese.024)          | Yes              | Yes            | Yes   | Yes                | Yes  | No           | No                  | No            | No       | No                      | Yes                | Yes                            | Yes              | Yes      | Yes                  | Yes                                   | Yes                                  | No                    | Yes               |
| SecuritiesSettlementTransactionConfirmation (sese.025)          | Yes              | No             | Yes   | Yes                | Yes  | Yes          | No                  | No            | No       | No                      | No                 | No                             | Yes              | Yes      | Yes                  | Yes                                   | Yes                                  | No                    | Yes               |
| SecuritiesTransactionCancellationRequestStatusAdvice (sese.027) | No               | Yes            | Yes   | Yes                | Yes  | No           | No                  | No            | No       | No                      | Yes                | No                             | No               | Yes      | Yes                  | No                                    | Yes                                  | No                    | Yes               |



| MESSAGE TYPE  | INSTRUCTION TYPE | MESSAGE STATUS | PARTY | SECURITIES ACCOUNT | ISIN | CASH ACCOUNT | MULTI-ADDRESSEE BIC | BUSINESS CASE | PRIORITY | UNDERLYING MESSAGE TYPE | INSTRUCTION STATUS | INSTRUCTION STATUS REASON CODE | TRANSACTION CODE | CURRENCY | ALREADY MATCHED FLAG | SETTLEMENT TRANSACTION CONDITION CODE | BUSINESS SENDING PARTY <sup>35</sup> | SYSTEM USER REFERENCE | INSTRUCTING PARTY |
|---|------------------|----------------|-------|--------------------|------|--------------|---------------------|---------------|----------|-------------------------|--------------------|--------------------------------|------------------|----------|----------------------|---------------------------------------|--------------------------------------|-----------------------|-------------------|
| SecuritiesSettlementTransactionAllegementNotification (sese.028)  | No               | No             | Yes   | Yes                | Yes  | No           | No                  | No            | No       | No                      | No                 | No                             | Yes              | Yes      | No                   | No                                    | No                                   | No                    | No                |
| SecuritiesMessageCancellationAdvice (semt.020)                    | No               | No             | Yes   | Yes                | No   | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| SecuritiesSettlementAllegementRemovalAdvice (sese.029)            | No               | No             | Yes   | Yes                | Yes  | No           | No                  | No            | No       | No                      | No                 | No                             | No               | No       | No                   | No                                    | No                                   | No                    | No                |
| SecuritiesSettlementConditionsModificationStatusAdvice (sese.031) | No               | Yes            | Yes   | Yes                | No   | No           | No                  | No            | No       | No                      | Yes                | No                             | No               | No       | Yes                  | No                                    | Yes                                  | No                    | Yes               |
| IntraBalanceMovementStatusAdvice (camt.067)                       | No               | Yes            | Yes   | No                 | No   | Yes          | No                  | No            | No       | No                      | Yes                | Yes                            | No               | Yes      | No                   | No                                    | Yes                                  | No                    | Yes               |
| IntraBalanceMovementConfirmation (camt.068)                       | No               | No             | Yes   | No                 | No   | Yes          | No                  | No            | No       | No                      | No                 | No                             | No               | Yes      | No                   | No                                    | Yes                                  | No                    | Yes               |
| SecuritiesSettlementTransactionGenerationNotification (sese.023)  | Yes              | Yes            | Yes   | Yes                | Yes  | Yes          | No                  | No            | No       | No                      | Yes                | No                             | Yes              | Yes      | No                   | No                                    | Yes                                  | No                    | Yes               |
| IntraBalanceMovementModificationRequestStatusAdvice (camt.073)    | No               | Yes            | Yes   | No                 | No   | Yes          | No                  | No            | No       | No                      | Yes                | No                             | No               | Yes      | No                   | No                                    | Yes                                  | No                    | Yes               |
| IntraBalanceMovementCancellationRequestStatusAdvice (camt.075)    | No               | Yes            | Yes   | No                 | No   | Yes          | No                  | No            | No       | No                      | Yes                | No                             | No               | Yes      | No                   | No                                    | Yes                                  | No                    | Yes               |

### 1.2.3.3 Message subscription examples

The above described message subscription configuration is illustrated below.

**EXAMPLE 29 - SUBSCRIBING FOR LIQUIDITY TRANSFER CREDIT NOTIFICATION**

This example is about a message subscription configuration which allows a payment bank A to receive credit notifications related to settlement of liquidity transfers.

This message subscription configuration must be valid as of 1<sup>st</sup> of July 2019. The general features of the new message subscription rule set for the payment bank A, i.e. the rule set name, the starting validity date and the relevant interested party can be specified as follows:

**TABLE 71 - DEFINITION OF A NEW MESSAGE SUBSCRIPTION RULE SET**

| MESSAGE SUBSCRIPTION RULE SET |  |
|-------------------------------|--|
| Name                          | CREDIT_NOTIFY_ACCOUNT_A                    |
| Description                   | Receive credit notifications for account A |
| Interested Party              | Payment Bank A                             |
| Valid From                    | 1-July-2019                                |
| Valid To                      | -  |

The rule that the payment bank A needs to specify for itself in order to fulfil the requirements described before is as follows:

**TABLE 72 - DEFINITION OF THE RULES FOR A NEW MESSAGE SUBSCRIPTION RULE SET**

| RULE SET | VALID FROM | VALID TO | MESSAGE TYPE                              | CASH ACCOUNT | DEBIT/CREDIT INDICATOR |
|----------|------------|----------|---|--------------|------------------------|
| Rule 1   | 2019-07-01 | -        | BankToCustomerDebitCreditNotificatio<br>n | ACCOUNT A    | CRDT                   |

**EXAMPLE 30 - SUBSCRIBING FOR MATCHING AND SETTLEMENT CONFIRMATION MESSAGES**

This example is about two message subscription configurations which allow:

- I A CSD A to receive from T2S status advices related to matching and partial settlement, plus settlement confirmations for the Settlement Instructions of all its participants.
- I A directly connected participant DCP B to receive settlement confirmations for all its Settlement Instructions.

These message subscription configurations must be valid as of 1st of July 2015. The general features of the new message subscription rule set for the CSD A, i.e. the rule set name, the starting validity date and the relevant interested party can be specified as follows:

**TABLE 73 - DEFINITION OF A NEW MESSAGE SUBSCRIPTION RULE SET**

| MESSAGE SUBSCRIPTION RULE SET |  |
|-------------------------------|--|
| Name                          | REC_STAT_ADV_AND_CONF                  |
| Description                   | Receive Status Advice and Confirmation |

| MESSAGE SUBSCRIPTION RULE SET |             |
|-------------------------------|-------------|
| Interested Party              | CSD A       |
| Valid From                    | 1-July-2015 |
| Valid To                      | -           |
| Positive/Negative             | positive    |

The rule set that the CSD A needs to specify for itself in order to fulfil the requirements described before is as follows:

**TABLE 74 - DEFINITION OF THE RULES FOR A NEW MESSAGE SUBSCRIPTION RULE SET**

| RULE SET | VALID FROM | VALID TO | MESSAGE TYPE                                      | INSTRUCTION TYPE | MESSAGE STATUS | PARTY | SECURITIES ACCOUNT | ISIN | T2S DEDICATED CASH ACCOUNT | INSTRUCTION STATUS |
|----------|------------|----------|---|------------------|----------------|-------|--------------------|------|----------------------------|--------------------|
| Rule 1   | 2015-07-01 | -        | SecuritiesSettlementTransactionStatusAdvice       |                  |                |       |                    |      |                            | Pending            |
|          |            |          | SecuritiesSettlementTransactionStatusAdvice       |                  |                |       |                    |      |                            | Matched            |
| Rule 2   | 2015-07-01 | -        | SecuritiesSettlementTransactionStatusConfirmation |                  |                |       |                    |      |                            |                    |

Similarly, the CSD A has to configure for the directly connected participant DCP B the following general features:

**TABLE 75 - DEFINITION OF A NEW MESSAGE SUBSCRIPTION RULE SET**

| MESSAGE SUBSCRIPTION RULE SET |                                 |
|-------------------------------|---------------------------------|
| Name                          | REC_SETT_CONF                   |
| Description                   | Receive Settlement Confirmation |
| Interested Party              | DCP B                           |
| Valid From                    | 1-July-2015                     |
| Valid To                      | -                               |
| Positive/Negative             | positive                        |

Finally, the following matrix shows the rule set the CSD A must specify for DCP B:

**TABLE 76 - DEFINITION OF THE RULES FOR A NEW MESSAGES SUBSCRIPTION RULE SET**

| RULE SET | VALID FROM | VALID TO | MESSAGE TYPE                                | INSTRUCTION TYPE | MESSAGE STATUS | PARTY | SECURITIES ACCOUNT | ISIN | T2S DEDICATED CASH ACCOUNT | INSTRUCTION STATUS |
|----------|------------|----------|---|------------------|----------------|-------|--------------------|------|----------------------------|--------------------|
| Rule 1   | 2015-07-01 | -        | SecuritiesSettlementTransactionConfirmation |                  |                |       |                    |      |                            |                    |

On the basis of the two rule sets described above, as of 1st of July 2015:

- I The CSD A starts receiving status advices for matched and pending instructions (rule 1 of Table 80) and settlement confirmations (rule 2 of Table 80) for the Settlement Instructions of all its participants.
- I The directly connected participant DCP B starts receiving settlement confirmations (rule 1 of Table 82) for all its Settlement Instructions.

The following diagram shows the message flows exchanged between the two involved T2S Actors (CSD A and DCP B) and T2S when the CSD A sends a Settlement Instruction to T2S and this instruction is fully settled.

**DIAGRAM 16 - MESSAGE FLOWS EXCHANGED BETWEEN THE T2S ACTORS AND T2S (A)**



After the CSD A has sent a Settlement Instruction to T2S (step 1 in the diagram) and this Settlement Instructions is matched, T2S sends a status advice to CSD A to notify the matching status (step 2). Finally, when the given Settlement Instruction is settled, T2S sends the related settlement confirmation both to the sender party, CSD A, and to the directly connected participant DCP B (step 3).

**EXAMPLE 31 - SUBSCRIBING FOR COPIES OF INCOMING SETTLEMENT INSTRUCTIONS**

This example is about a message subscription configuration which allows a CSD A to receive from T2S copies of incoming Settlement Instructions submitted by two directly connected participants of the same CSD.

This message subscription configuration must be valid as of 1st of July 2015. The general features of the new message subscription rule set for the CSD A, i.e. the rule set name, the starting validity date and the relevant subscribing party can be specified as follows:

**TABLE 77 - DEFINITION OF A NEW MESSAGE SUBSCRIPTION RULE SET**

| MESSAGE SUBSCRIPTION RULE SET |  |
|-------------------------------|--|
| Name                          | REC_COPY_SETT_INST                     |
| Description                   | Receive Copy of Settlement Instruction |
| Interested Party              | CSD A                                  |
| Valid From                    | 1-July-2015                            |
| Valid To                      | -                                      |
| Positive/Negative             | Positive                               |

The rule set that the CSD A needs to specify for itself in order to fulfil the requirements described before is as follows:

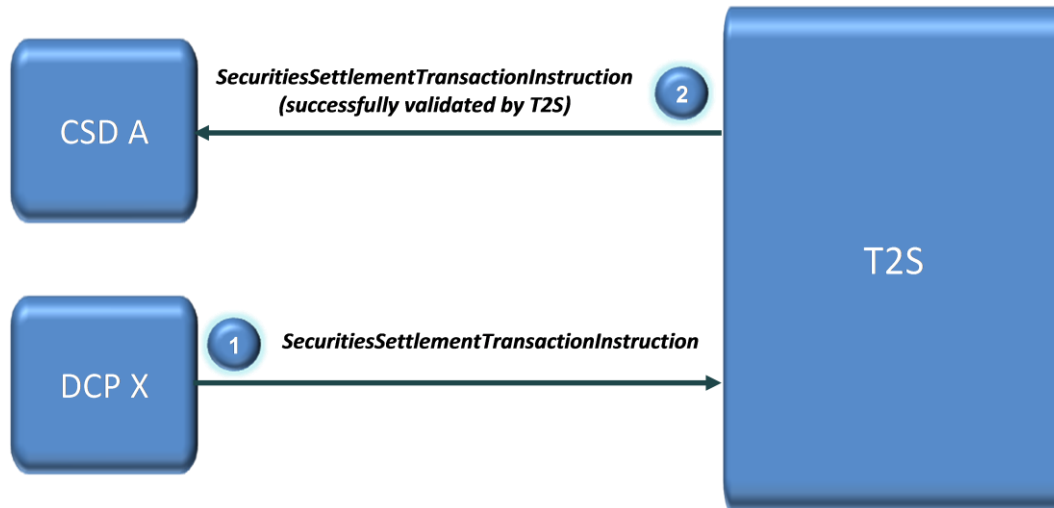
**TABLE 78 - DEFINITION OF THE RULES FOR A NEW MESSAGE SUBSCRIPTION RULE SET**

| RULE SET | VALID FROM | VALID TO | MESSAGE TYPE                                   | INSTRUCTION TYPE | MESSAGE STATUS | PARTY | SECURITIES ACCOUNT | ISIN | T2S DEDICATED CASH ACCOUNT | INSTRUCTION STATUS |
|----------|------------|----------|--|------------------|----------------|-------|--------------------|------|----------------------------|--------------------|
| Rule 1   | 2015-07-01 | -        | SecuritiesSettlementTransactionInstr<br>uction |                  |                | DCP X |                    |      |                            |                    |
|          |            |          | SecuritiesSettlementTransactionInstr<br>uction |                  |                | DCP Y |                    |      |                            |                    |

On the basis of the message subscription configuration just described, as of 1st of July 2015 the CSD A starts receiving copies of all Settlement Instructions submitted either by DCP X or by DCP Y, after T2S has successfully performed the business validation for these incoming Settlement Instructions.

The following diagram shows the message flows exchanged between the involved T2S Actors and T2S when one of the directly connected participants (DCP X) sends a Settlement Instruction to T2S and this instruction is successfully validated.

**DIAGRAM 17 - MESSAGE FLOWS EXCHANGED BETWEEN THE T2S ACTORS AND T2S (B)**



After the DCP X sends a Settlement Instruction to T2S (step 1 in the diagram) and this Settlement Instructions undergoes successfully the business validation process, T2S sends a copy of the incoming Settlement Instruction to CSD A (step 2).

**EXAMPLE 32 - SUBSCRIBING FOR A SUB-SET OF REFERENCE DATA STATUS ADVICES**

This example describes how a T2S Actor, in this case a central bank CB A, can set up a message subscription rule set to receive reference data status advice messages only if the relevant status value is final, i.e. if status = "Rejected" or status = "Completed". This allows the T2S Actor avoiding the transmission of all reference data status advice messages with a provisional status, i.e. with status = "Queued" as they are in any case followed by another message after T2S completes the processing of the relevant reference data maintenance instruction.

If the message subscription rule set must be valid from the 15th of May 2015 (included), this new configuration can be specified as follows.

**TABLE 79 - DEFINITION OF A NEW MESSAGE SUBSCRIPTION RULE SET**

| MESSAGE SUBSCRIPTION RULE SET |                                      |
|-------------------------------|--------------------------------------|
| Name                          | REC_ADV_REJ_COMP                     |
| Description                   | Receive Advice Rejected or Completed |
| Interested Party              | NCB A                                |
| Valid From                    | 15-May                               |
| Valid To                      | -                                    |
| Positive/Negative             | positive                             |

Once defined the general features of this new message subscription rule set, the CB A must specify the following rule set, implementing the requirements described before:

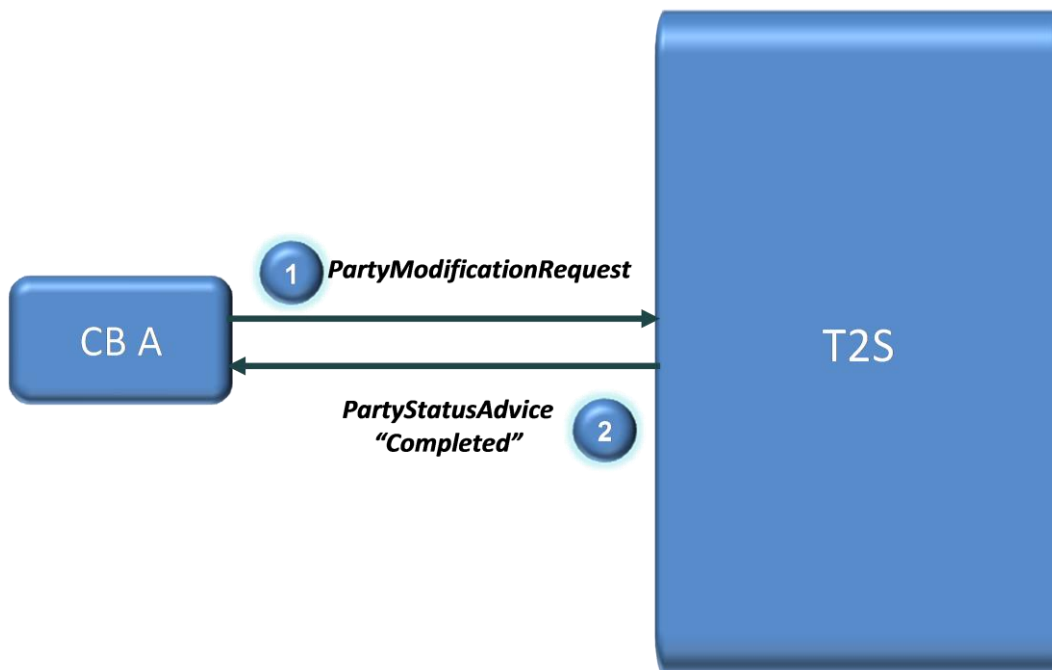
**TABLE 80 - DEFINITION OF THE RULES FOR A NEW MESSAGE SUBSCRIPTION RULE SET**

| RULE SET | VALID FROM | VALID TO | MESSAGE TYPE      | INSTRUCTION TYPE | MESSAGE STATUS | PARTY | SECURITIES ACCOUNT | ISIN | T2S DEDICATED CASH ACCOUNT | INSTRUCTION TYPE |
|----------|------------|----------|-------------------|------------------|----------------|-------|--------------------|------|----------------------------|------------------|
| Rule 1   | 2015-07-01 | -        | PartyStatusAdvice |                  | Rejected       |       |                    |      |                            |                  |
|          |            |          | PartyStatusAdvice |                  | Completed      |       |                    |      |                            |                  |

On the basis of the rule defined above, as of 15th of May 2015, all the party status advice messages for reference data maintenance instructions related to parties of the CB A are sent to the CB A only if their status is final, i.e. "Completed" or "Rejected".

The following diagram shows the message flows exchanged between the CB A and T2S when the CB A sends a party creation request to T2S.

**DIAGRAM 18 - MESSAGE FLOWS EXCHANGED BETWEEN THE T2S ACTORS AND T2S (E)**



These flows are the same regardless of the phase of the settlement day in which the CB A sends the given party modification request. In fact, even if the CB A sends this request while a night-time settlement sequence is running, T2S does not send to the CB A the provisional party status advice (with status = "Queued"), just All rights reserved.

after having suspended the processing of the given request until the end of the current night-time settlement sequence.

### 1.2.4 Graphical user interface

Users of CRDM Actors granted with the appropriate privileges can communicate with the CRDM in U2A mode via a web-based graphical user interface (GUI).

The following CRDM functionalities are available in U2A mode:

**TABLE 81 – CRDM U2A FUNCTIONS**

| Function                                | Actor <sup>36</sup>  |
|---|--|
| Create Party                            | Operator, CSD, Central Bank  |
| Update Party                            | Operator, CSD, Central Bank  |
| Delete/Restore Party                    | Operator, CSD, Central Bank  |
| Query Party List                        | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query Party Details                     | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Create Party Service Link               | Operator, Central Bank   |
| Update Party Service Link               | Operator, Central Bank   |
| Delete/Restore Party Service Link       | Operator, Central Bank   |
| Query Party Service Link List           | Operator, Central Bank, Payment Bank, Ancillary System                                     |
| Create Eligible Counterpart CSD         | CSD  |
| Update Eligible Counterpart CSD         | CSD  |
| Delete/Restore Eligible Counterpart CSD | CSD  |
| Eligible Counterpart CSD List Query     | CSD  |
| Eligible Counterpart CSD Details Query  | CSD  |
| Create Banking Group                    | Central Bank   |
| Update Banking Group                    | Central Bank   |
| Delete/Restore Banking Group            | Central Bank   |
| Query Banking Group List                | Central Bank, Payment Bank   |

<sup>36</sup> The Actor types listed for each function refer to the default responsible Actor in normal operating conditions. However it is possible for the CRDM Operator to act on behalf of Central Banks (and of Payment Banks, upon request of the relevant Central Bank) and for the Central Banks to act on-behalf of their Payment Banks, under well-defined contingency scenarios.



| Function                               | Actor <sup>36</sup>  |
|--|--|
| Query Banking Group Details            | Central Bank, Payment Bank   |
| Create Billing Group                   | Central Bank   |
| Update Billing Group                   | Central Bank   |
| Delete/Restore Billing Group           | Central Bank   |
| Query Billing Group List               | Central Bank, Payment Bank   |
| Query Billing Group Details            | Central Bank, Payment Bank   |
| Create Cash Account                    | Operator, Central Bank, Payment Bank, Ancillary System <sup>37</sup> |
| Update Cash Account                    | Operator, Central Bank, Payment Bank, Ancillary System <sup>37</sup> |
| Delete/Restore Cash Account            | Operator, Central Bank, Payment Bank, Ancillary System <sup>37</sup> |
| Query Cash Account List                | Operator, Central Bank, Payment Bank, Ancillary System               |
| Query Cash Account Details             | Operator, Central Bank, Payment Bank, Ancillary System               |
| Create External RTGS Account           | Central Bank   |
| Update External RTGS Account           | Central Bank   |
| Delete/Restore External RTGS Account   | Central Bank   |
| External RTGS Account List Query       | Central Bank   |
| External RTGS Account Details Query    | Central Bank   |
| Create Limit                           | Payment Bank, Ancillary System                                       |
| Update Limit                           | Payment Bank, Ancillary System                                       |
| Delete/Restore Limit                   | Payment Bank, Ancillary System                                       |
| Query Limit List                       | Payment Bank, Ancillary System                                       |
| Query Limit Details                    | Payment Bank, Ancillary System                                       |
| Create Authorized Account User         | Payment Bank, Ancillary System                                       |
| Update Authorized Account User         | Payment Bank, Ancillary System                                       |
| Delete/Restore Authorized Account User | Payment Bank, Ancillary System                                       |

<sup>37</sup> Payment Banks and Ancillary Systems are only allowed to Update floor/ceiling data (threshold amounts, target amounts and notification flags) for Cash Accounts under their responsibility as well as to Create/Update/Delete/Restore Cash Accounts of type "TIPS Credit Memorandum Balance".

| Function  | Actor <sup>36</sup>                          |
|---|--|
| Query Authorized Account User List                  | Payment Bank, Ancillary System               |
| Create Ancillary System Bilateral Agreement         | Central Bank                                 |
| Delete/Restore Ancillary System Bilateral Agreement | Central Bank                                 |
| Update Ancillary System Bilateral Agreement         | Central Bank                                 |
| Query Ancillary System Bilateral Agreement List     | Central Bank, Payment Bank, Ancillary System |
| Create Ancillary System Procedure                   | Central Bank                                 |
| Delete/Restore Ancillary System Procedure           | Central Bank                                 |
| Update Ancillary System Procedure                   | Central Bank                                 |
| Query Ancillary System Procedure List               | Central Bank, Payment Bank, Ancillary System |
| Create Account Monitoring Group                     | Payment Bank                                 |
| Update Account Monitoring Group                     | Payment Bank                                 |
| Delete/Restore Account Monitoring Group             | Payment Bank                                 |
| Query Account Monitoring Group List                 | Payment Bank                                 |
| Query Account Monitoring Group Details              | Payment Bank                                 |
| Create Liquidity Transfer Order                     | Central Bank, Payment Bank, Ancillary System |
| Update Liquidity Transfer Order                     | Central Bank, Payment Bank, Ancillary System |
| Delete/Restore Liquidity Transfer Order             | Central Bank, Payment Bank, Ancillary System |
| Query Liquidity Transfer Order List                 | Central Bank, Payment Bank, Ancillary System |
| Query Liquidity Transfer Order Details              | Central Bank, Payment Bank, Ancillary System |
| Create Liquidity Transfer Order Link Set            | Central Bank, Payment Bank                   |
| Update Liquidity Transfer Order Link Set            | Central Bank, Payment Bank                   |
| Delete/Restore Liquidity Transfer Order Link Set    | Central Bank, Payment Bank                   |
| Liquidity Transfer Order Link Set List Query        | Central Bank, Payment Bank                   |
| Liquidity Transfer Order Link Set Details Query     | Central Bank, Payment Bank                   |
| Create Liquidity Transfer Group                     | Central Bank                                 |
| Update Liquidity Transfer Group                     | Central Bank                                 |
| Delete/Restore Liquidity Transfer Group             | Central Bank                                 |
| Query Liquidity Transfer Group List                 | Central Bank, Payment Bank                   |
| Query Account Monitoring Group Details              | Central Bank, Payment Bank                   |

| Function   | Actor <sup>36</sup>  |
|--|--|
| Create Settlement Bank Accounts Group                  | Central Bank   |
| Delete/Restore Settlement Bank Accounts Group          | Central Bank   |
| Update Settlement Bank Accounts Group                  | Central Bank   |
| Query Settlement Bank Accounts Group                   | Central Bank, Payment Bank, Ancillary System                   |
| Query Settlement Bank Accounts Group Details           | Central Bank, Payment Bank, Ancillary System                   |
| Create Direct Debit Mandate                            | Central Bank   |
| Update Direct Debit Mandate                            | Central Bank   |
| Delete/Restore Direct Debit Mandate                    | Central Bank   |
| Query Direct Debit Mandate List                        | Central Bank, Payment Bank, Ancillary System                   |
| Create Standing Order for Reservation                  | Payment Bank, Ancillary System                                 |
| Update Standing Order for Reservation                  | Payment Bank, Ancillary System                                 |
| Delete/Restore Standing Order for Reservation          | Payment Bank, Ancillary System                                 |
| Query Standing Order for Reservation List              | Payment Bank, Ancillary System                                 |
| Query Standing Order for Reservation Details           | Payment Bank, Ancillary System                                 |
| Create Credit Memorandum Balance                       | Operator, Central Bank, Payment Bank                           |
| Update Credit Memorandum Balance                       | Operator, Central Bank, Payment Bank                           |
| Delete/Restore Credit Memorandum Balance               | Operator, Central Bank, Payment Bank                           |
| Credit Memorandum Balance List Query                   | Operator, Central Bank, Payment Bank                           |
| Credit Memorandum Balance Details Query                | Operator, Central Bank, Payment Bank                           |
| Create Security  | CSD  |
| Update Security  | CSD  |
| Delete/Restore Security                                | CSD  |
| Security List Query                                    | CSD, CSD Participant, External CSD, Central Bank, Payment Bank |
| Security Details Query                                 | CSD, CSD Participant, External CSD, Central Bank, Payment Bank |
| Create Auto-Collateralisation Eligibility Link         | Central Bank, Payment Bank                                     |
| Update Auto-Collateralisation Eligibility Link         | Central Bank, Payment Bank                                     |
| Delete/Restore Auto-Collateralisation Eligibility Link | Central Bank, Payment Bank                                     |

| Function  | Actor <sup>36</sup>  |
|---|--|
| Auto-Collateralisation Eligibility Link List Query  | Central Bank, Payment Bank                                     |
| Cash Discount Penalty Rate List Query               | CSD, CSD Participant, External CSD, Central Bank, Payment Bank |
| Create Close Link                                   | Central Bank, Payment Bank                                     |
| Delete/Restore Close Link                           | Central Bank, Payment Bank                                     |
| Close Link List Query                               | Central Bank, Payment Bank                                     |
| Create Securities Valuation                         | Central Bank, Payment Bank                                     |
| Delete/Restore Securities Valuation                 | Central Bank, Payment Bank                                     |
| Securities Valuation List Screen                    | Central Bank, Payment Bank                                     |
| Create Security CSD Link                            | CSD, External CSD  |
| Update Security CSD Link                            | CSD, External CSD  |
| Delete/Restore Security CSD Link                    | CSD, External CSD  |
| Security CSD Link List Query                        | CSD, External CSD  |
| Security CSD Link Details Query                     | CSD, External CSD  |
| Create Securities Subject to Cash Penalties         | CSD  |
| Update Securities Subject to Cash Penalties         | CSD  |
| Delete/Restore Securities Subject to Cash Penalties | CSD  |
| Securities Subject to Cash Penalties List Query     | CSD  |
| Create Daily Price                                  | CSD  |
| Delete/Restore Daily Price                          | CSD  |
| Daily Price List Query                              | CSD  |
| Create Euro Foreign Exchange Rate                   | Central Bank <sup>38</sup>                                     |
| Delete Euro Foreign Exchange Rate                   | Central Bank <sup>39</sup>                                     |
| Euro Foreign Exchange Rate List Query               | Central Bank, Payment Bank, CSD, CSD Participant External CSD  |
| Security Penalty RateList Query                     | CSD, CSD Participant, External CSD                             |
| Create Securities Account                           | CSD  |

<sup>38</sup> Only the ECB is granted with the privilege to manage the Euro Foreign Exchange Reference Rate.

<sup>39</sup> Only the ECB is granted with the privilege to manage the Euro Foreign Exchange Reference Rate.

| Function                                   | Actor <sup>36</sup>  |
|--|--|
| Update Securities Account                  | CSD  |
| Delete/Restore Securities Account          | CSD  |
| Securities Account Details Query           | CSD, CSD Participant, External CSD   |
| Securities Account List Query              | CSD, CSD Participant, External CSD   |
| Create CMB Securities Account Link         | CSD, CSD Participant, External CSD   |
| Update CMB Securities Account Link         | CSD, CSD Participant, External CSD   |
| Delete/Restore CMB Securities Account Link | CSD, CSD Participant, External CSD   |
| CMB Securities Account Link List Query     | CSD, CSD Participant, External CSD   |
| Create CSD Account Link                    | CSD, External CSD  |
| Update CSD Account Link                    | CSD, External CSD  |
| Delete/Restore CSD Account Link            | CSD, External CSD  |
| CSD Account Link List Query                | CSD, External CSD  |
| Create User                                | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Update User                                | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Delete/Restore User                        | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query User List                            | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query User Details                         | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Create Role                                | Operator, CSD, Central Bank  |
| Update Role                                | Operator, CSD, Central Bank  |
| Delete/Restore Role                        | Operator, CSD, Central Bank  |
| Query Role List                            | Operator, CSD, Central Bank  |
| Create Certificate DN                      | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Update Certificate DN                      | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |

| Function                                 | Actor <sup>36</sup>  |
|--|--|
| Delete/Restore Certificate DN            | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query Certificate DN List                | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Create User Certificate DN Link          | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Delete/Restore User Certificate DN Link  | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query User Certificate DN Link List      | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Create Attribute Domain                  | CSD, Central Bank  |
| Update Attribute Domain                  | CSD, Central Bank  |
| Delete/Restore Attribute Domain          | CSD, Central Bank  |
| Attribute Domain Details Query           | CSD, Central Bank  |
| Attribute Domain List Query              | CSD, Central Bank  |
| Create Attribute Reference               | CSD, Central Bank  |
| Update Attribute Reference               | CSD, Central Bank  |
| Delete/Restore Attribute Reference       | CSD, Central Bank  |
| Attribute Reference Details Query        | CSD, Central Bank  |
| Attribute Reference List Query           | CSD, Central Bank  |
| Create Market-Specific Attribute         | CSD, Central Bank  |
| Update Market-Specific Attribute         | CSD, Central Bank  |
| Delete/Restore Market-Specific Attribute | CSD, Central Bank  |
| Market-Specific Attribute List Query     | CSD, Central Bank  |
| Market-Specific Attribute Details Query  | CSD, Central Bank  |
| Grant Privilege                          | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Revoke Privilege                         | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query Granted Privilege List             | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |

| Function                                     | Actor <sup>36</sup>  |
|--|--|
| Query Granted Privilege Details              | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Grant Role                                   | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Revoke Role                                  | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query Granted Role List                      | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query Granted Role Details                   | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Create Secured Group                         | CSD, Central Bank  |
| Update Secured Group                         | CSD, Central Bank  |
| Delete/Restore Secured Group                 | CSD, Central Bank  |
| Secured Group Details Query                  | CSD, Central Bank  |
| Secured Group List Query                     | CSD, Central Bank  |
| Create Message Subscription Rule             | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Update Message Subscription Rule             | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Delete/Restore Message Subscription Rule     | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Query Message Subscription Rule List         | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Query Message Subscription Rule Details      | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Create Message Subscription Rule Set         | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Update Message Subscription Rule Set         | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Delete/Restore Message Subscription Rule Set | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Query Message Subscription Rule Set List     | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |

| Function  | Actor <sup>36</sup>  |
|---|--|
| Query Message Subscription Rule Set Details           | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Create Restriction Type                               | CSD, Central Bank  |
| Update Restriction Type                               | CSD, Central Bank  |
| Delete/Restore Restriction Type                       | CSD, Central Bank  |
| Restriction Type List Query                           | CSD, Central Bank  |
| Restriction Type Details Query                        | CSD, Central Bank  |
| Create Restriction Type Rule                          | CSD, Central Bank  |
| Update Restriction Type Rule                          | CSD, Central Bank  |
| Delete/Restore Restriction Type Rule                  | CSD, Central Bank  |
| Restriction Type Rule List Query                      | CSD, Central Bank  |
| Create CoSD Rule Set                                  | CSD  |
| Update CoSD Rule Set                                  | CSD  |
| Delete/Restore CoSD Rule Set                          | CSD  |
| CoSD Rule Set List Query                              | CSD  |
| CoSD Rule Set Details Query                           | CSD  |
| Create CoSD Rule                                      | CSD  |
| Update CoSD Rule                                      | CSD  |
| Delete/Restore CoSD Rule                              | CSD  |
| CoSD Rule List Query                                  | CSD  |
| CoSD Rule Details Query                               | CSD  |
| Create Technical Address Network Service Link         | Operator, CSD, Central Bank  |
| Delete/Restore Technical Address Network Service Link | Operator, CSD, Central Bank  |
| Query Technical Address Network Service Link List     | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Create Routing  | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Delete/Restore Routing                                | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |



| Function                             | Actor <sup>36</sup>  |
|--------------------------------------|--|
| Update Routing                       | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query Routing List                   | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Create DN BIC Routing                | Operator, Central Bank, Payment Bank, Ancillary System                                     |
| Update DN BIC Routing                | Operator, Central Bank, Payment Bank, Ancillary System                                     |
| Delete/Restore DN BIC Routing        | Operator, Central Bank, Payment Bank, Ancillary System                                     |
| Query DN BIC Routing List            | Operator, Central Bank, Payment Bank, Ancillary System                                     |
| Create Report Configuration          | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Update Report Configuration          | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Delete/Restore Report Configuration  | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Query Report Configuration List      | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Query Report Configuration Details   | CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System           |
| Query Service Items List             | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Query Service Items Details          | Operator, CSD, Central Bank, CSD Participant, External CSD, Payment Bank, Ancillary System |
| Create Invoice Configuration         | Operator, Central Bank   |
| Update Invoice Configuration         | Operator, Central Bank   |
| Delete/Restore Invoice Configuration | Operator, Central Bank   |
| Query Invoice Configuration List     | Operator, Central Bank   |
| Query Invoice Configuration Details  | Operator, Central Bank   |
| Create VAT                           | Operator, Central Bank   |

| Function           | Actor <sup>36</sup>    |
|--------------------|------------------------|
| Update VAT         | Operator, Central Bank |
| Delete/Restore VAT | Operator, Central Bank |
| Query VAT List     | Operator, Central Bank |

Via U2A mode, CRDM offers to CRDM Actors a dual authorisation concept, the Four-Eyes-Principle. Detailed description of the CRDM graphical user interface is provided into the CRDM User Handbook.

## 1.2.5 Security

This section aims at describing the main processes performed by CRDM in terms of security principles applied to ensure to CRDM users that they can securely exchange information with CRDM.

Secure means that the following security conditions are met:

- | Confidentiality: Ensuring that information is accessible only to authenticated and authorised CRDM Actors;
- | Integrity: Safeguarding the accuracy and completeness of information;
- | Monitoring: Detecting operational and technical problems and recording appropriate information for crisis management scenarios and future investigations;
- | Availability: Ensuring that authorised users have access to information and associated assets when required;
- | Auditability: Ensuring the possibility to establish whether a system is functioning properly and that it has worked properly.

### 1.2.5.1 Confidentiality

The confidentiality of data in CRDM is ensured by the possibility to grant specific access rights for any given set of data, as detailed in section 1.2.2. In conjunction with mechanisms of authentication<sup>40</sup> and authorisation applying to all requests received by CRDM in both A2A and U2A mode as well as through the DMT channel, this guarantees that each CRDM Actor's data is treated confidentially and is not accessible to non-authorized CRDM Actors.

In addition to these standard mechanisms, the principle of data segregation is applied on the static and transactional data belonging to CSD, CBs, CSD Participants, External CSDs, Ancillary Systems and Payment Banks in order to ensure a strict separation of their respective data in CRDM.

### 1.2.5.2 Integrity

Within CRDM, various business validations ensure the integrity of information. If a business validation fails, CRDM has a concept of Error handling in place. The requested action is not processed and CRDM provides the user with detailed information regarding the nature of the error via DMT, A2A or U2A.

---

<sup>40</sup> Authentication means determining whether someone or something (function, component...) is who or what it is declared to be  
All rights reserved.

In U2A mode, CRDM offers users in addition the possibility to further ensure the integrity of data, data requests and communications via usage of a dual authorisation concept, the Four-Eyes-Principle. If this option is chosen for a specified set of CRDM operations, a second independent verification and confirmation is required before an operation becomes active in CRDM. If, for example, a critical set of Reference Data should be modified and the person requesting the change is only allowed to do so under the Four-Eyes Principle, then a second person of the same Party has to confirm the correctness of the request. Otherwise, the requested Reference Data change is not implemented.

### 1.2.5.3 Monitoring

CRDM operational monitoring provides tools to the CRDM Operator for the detection in real-time of functional or operational problems.

Technical monitoring allows for the detection of hardware and software problems via real-time monitoring of the technical components involved in the processing, including the network connections.

In addition, the monitoring provides the CRDM Operator with an overview of the message flows in CRDM.

### 1.2.5.4 Availability

The overall availability of the CRDM services is ensured by the infrastructure design. The technical environment for the CRDM core system follows a “two regions/four sites” approach to ensure availability throughout the widest possible range of system failures.

### 1.2.5.5 Auditability

CRDM provides an audit trail with which it is possible e.g. to reconstruct who updated which data when. In order to ensure sustainability, CRDM archives all data by storing for a harmonised period of ten years all inbound and outbound messages (except queries) in their original format.

## 1.3 Reference data model

This section provides a detailed description of all the reference data objects stored by CRDM. More in detail, section 1.3.1 identifies some common information that are used for all reference data objects and the validity period attributes that have to be specified for all reference data objects having a limited validity period (see section 1.4.3.3). The following sections describe into detail the conceptual data model of the different CRDM reference data components, i.e.:

- party data management (§.1.3.2)
- cash account data management (§.1.3.3)
- access rights management (§.1.3.6)
- message subscription configuration (§.1.3.7)
- network configuration (§.1.3.8)
- report configuration (§.1.3.9)
- restriction type management (§.1.3.10)
- configuration parameters (§.1.3.14)

- business day management configuration (§.1.3.15)

### 1.3.1 Common information

All reference data items have the following set of attributes in common for audit trail and reference data change management purposes:

**TABLE 82 – COMMON INFORMATION ATTRIBUTES**

| Attribute            | Description  |
|----------------------|--|
| Technical Identifier | This attribute is the automatically assigned primary identifier for a new item of reference data. The technical identifier in combination with a sequential revision number is used to ensure uniqueness within multiple occurrences of a single reference data item, which has undergone multiple updates.  |
| Revision Number      | Given a technical identifier, this attribute marks every update of the item’s attributes to ensure the uniqueness of a given item which has undergone several revisions.   |
| Deletion Status      | It defines whether the reference data may be available for processing in other services or common components. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>• Active</li> <li>• Deleted</li> </ul> The reference data item is available for processing only if its deletion status is “Active” and its approval status (see below) is “Approved”.   |
| Approval Status      | The attribute defines whether the reference data object is approved or revoked by an authorised system user, is awaiting approval by the system user, or was rejected owing to business validation errors. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>• Approved</li> <li>• Awaiting Approval</li> <li>• Rejected</li> <li>• Revoked.</li> </ul> In case of updates of a reference data item submitted according to the Four-Eyes principle, the modified version of the data is created with status "Awaiting Approval" and it becomes either “Approved” or “Revoked” only after the decision of the second, independent, authorised system user. |

Furthermore, a System Entity Identifier attribute links each new reference data item to a Central Bank or to the CRDM Operator for data segregation purposes.

Finally, some reference data items may have one or two additional attributes specifying a validity period:

**TABLE 83 – VALIDITY PERIOD ATTRIBUTES**

| Attribute | Description |
|-----------|-------------|
|-----------|-------------|

|                          |  |
|--------------------------|--|
| Valid From <sup>41</sup> | It specifies the date (inclusive) from which the reference data item is valid. |
| Valid To <sup>42</sup>   | It specifies the date (inclusive) until when the reference data item is valid. |

These two attributes are indicated explicitly for the relevant entities in the data model descriptions.

To ensure the audit trail documenting events and status changes, Common Reference Data Management keeps the date and time of every change and the unique identifier of the system user requesting the change.

**TABLE 84 – AUDIT TRAIL ATTRIBUTE**

| Attribute | Description             |
|-----------|-------------------------|
| Timestamp | Timestamp of the change |

The audit trail record has an association with the system user (or the application) responsible for the change and to the before and after images of the records, resulting from the change.

Some examples below illustrate the concepts of revision and history in combination with the status transitions related to the attributes Deletion Status and Approval Status of Reference Data objects.

Example 1: Common Reference Data Management allows the maintenance of a reference data object (not requiring a data history), i.e. some of its attributes are updated according to the Four-Eyes principle. In this scenario, the latest revision of the object with Deletion Status = “Active” and Approval Status = “Approved” is used as a baseline for the maintenance request processing.

**TABLE 85 – BEFORE THE PROCESSING**

| Technical Identifier | Revision | Attributes | Deletion Status | Approval Status |
|----------------------|----------|------------|-----------------|-----------------|
| 20101968             | 5        | ABCD       | Active          | Approved        |

When updated according to the Four-Eyes principle, the processing immediately creates a new revision of the object with an Approval Status set to “Awaiting Approval”. The status allows authorised users (i.e. the ones authorised either to approve or revoke it), to access the object for approval or revocation, but excludes this revision of the object for any other types of processing in other services or components. After the processing (and until the approval of the new revision by a second authorised user), the old revision of the object is still available for processing in other services or components.

**TABLE 86 – AFTER THE FIRST STEP OF THE PROCESSING**

| Technical Identifier | Revision | Attributes | Deletion Status | Approval Status   |
|----------------------|----------|------------|-----------------|-------------------|
| 20101968             | 5        | ABCD       | Active          | Approved          |
| 20101968             | 6        | XYZ        | Active          | Awaiting Approval |

When the second user approves the update, a new revision of the object is created in order to update its Approval Status and set it to "Approved". This makes the new version of the object (i.e. with the new values for the updated attributes) available for processing in other services.

<sup>41</sup> Opening Date for certain items.

<sup>42</sup> Closing Date for certain items.

**TABLE 87 – AFTER THE APPROVAL**

| Technical Identifier | Revision | Attributes | Deletion Status | Approval Status   |
|----------------------|----------|------------|-----------------|-------------------|
| 20101968             | 5        | ABCD       | Active          | Approved          |
| 20101968             | 6        | XYZ        | Active          | Awaiting Approval |
| 20101968             | 7        | XYZ        | Active          | Approved          |

Example 2: A duly authorised system user maintains an item of a reference data object subject to a data history and based on the Two-Eyes principle to create a new version of that item valid as of a future date.

**TABLE 88 – BEFORE THE PROCESSING**

| Technical Identifier | Revision | Valid From | Attributes | Deletion Status | Approval Status | Ref. Identifier | Tech. Identifier |
|----------------------|----------|------------|------------|-----------------|-----------------|-----------------|------------------|
| 20101968             | 3        | 2020-01-01 | ABC        | Active          | Approved        | 19581027        |                  |

In this scenario, a new version of the item is created with the specified validity period and it is linked to the same object (identified with “Ref. Tech. Identifier”). As a result, two different items exist for the same object, but with different validity periods.

**TABLE 89 – AFTER THE PROCESSING**

| Technical Identifier | Revision | Valid From | Attributes | Deletion Status | Approval Status | Ref. Identifier | Tech. Identifier |
|----------------------|----------|------------|------------|-----------------|-----------------|-----------------|------------------|
| 20101968             | 3        | 2020-01-01 | ABC        | Active          | Approved        | 19581027        |                  |
| 13021972             | 0        | 2020-03-15 | XYZ        | Active          | Approved        | 19581027        |                  |

Example 3: For a reference object with a data history, a duly authorised system user maintains an existing item of a reference data object for an existing validity date and based on the Two-Eyes principle.

**TABLE 90 – BEFORE THE PROCESSING**

| Technical Identifier | Revision | Valid From | Attributes | Deletion Status | Approval Status | Ref. Identifier | Tech. Identifier |
|----------------------|----------|------------|------------|-----------------|-----------------|-----------------|------------------|
| 20101968             | 3        | 2020-01-01 | ABC        | Active          | Approved        | 19581027        |                  |

In this scenario, a new revision of the item is created with the new attributes and the same validity period and it is linked to the same object. As before the processing, one single item is linked to the relevant object, but with different values of the attributes when compared to the previous revision.

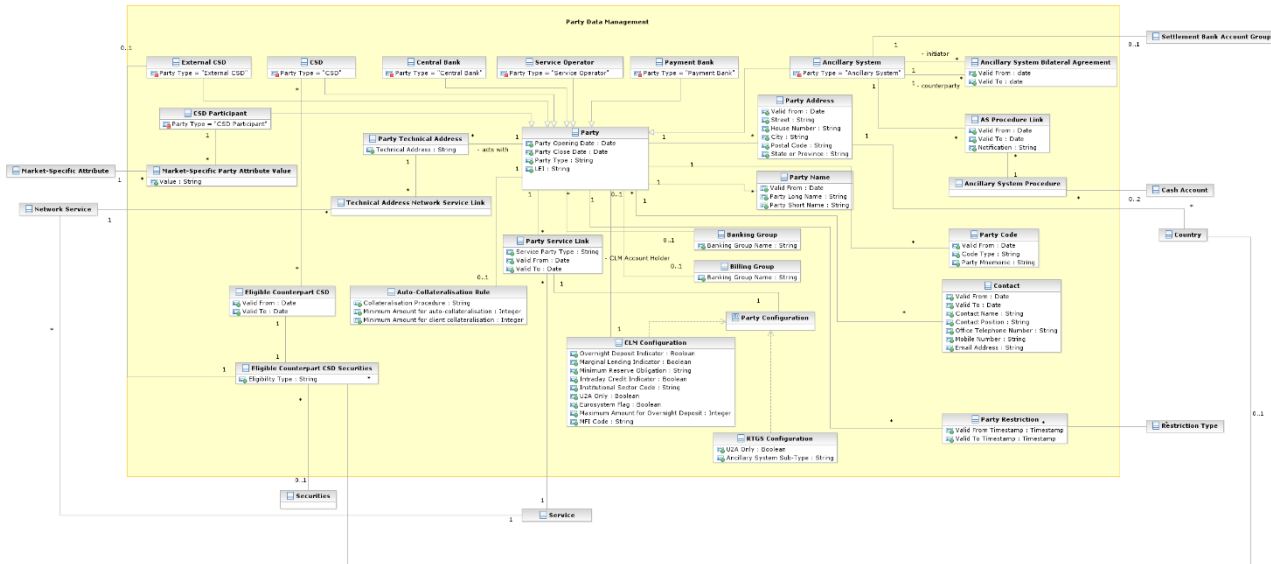
**TABLE 91 – AFTER THE PROCESSING**

| Technical Identifier | Revision | Valid From | Attributes | Deletion Status | Approval Status | Ref. Identifier | Tech. Identifier |
|----------------------|----------|------------|------------|-----------------|-----------------|-----------------|------------------|
| 20101968             | 3        | 2020-01-01 | ABC        | Active          | Approved        | 19581027        |                  |
| 20101968             | 4        | 2020-01-01 | DEF        | Active          | Approved        | 19581027        |                  |

### 1.3.2 Party data management

#### 1.3.2.1 Data Model of the component

The following diagram shows the conceptual data model for Party Data Management.



### 1.3.2.2 Description of the component

This component allows the management of reference data related to parties, according to the hierarchical structure described in chapter 1.2.2.1.9.

The CRDM Operator is the only party on the top level of the hierarchy and it is responsible for the setup of each party of the second level, i.e. each Central Bank and each CSD. Similarly, each party belonging to the second level (i.e. a Central Bank or a CSD) is responsible for the setup of all parties of its community (i.e. Payment Banks, Ancillary Systems for Central Banks; CSD Participants and External CSDs for CSDs), represented by parties of the third level.

The Party Data Management component allows the managements of all the relationships between all the parties belonging to the hierarchy.

In order for a Party to be active within a specific Service (e.g. RTGS), it must be linked to the Service. One Party may be configured to participate in different Services and may play different roles in each of them.

For example, as far as Payment Banks are concerned, when they are linked to the TIPS Service, the relevant Central Bank must specify whether the Payment Bank participates in TIPS as a TIPS Participant or as a reachable Party.

The following section describes all the reference data objects related to the Party Data Management component.

### 1.3.2.3 Description of the entities

#### 1. Party

This entity includes all party reference data that do not require a data history, i.e. all the attributes having only one valid value for a given party, regardless the point in time taken into account.

| ATTRIBUTE          | DESCRIPTION   |
|--------------------|---|
| Party Opening Date | Opening date of the party.  |
| Party Closing Date | Closing date of the party.  |
| Party Type         | It specifies a classification for the party. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Operator</li> <li>  Payment Bank</li> <li>  Central Bank</li> <li>  Ancillary System</li> <li>  CSD</li> <li>  CSD Participant</li> <li>  External CSD</li> </ul> |



| ATTRIBUTE | DESCRIPTION  |
|-----------|--|
| LEI       | It specifies the Legal Entity Identifier associated to the party.<br>It is mandatory if the party must be enabled to RTGS or CLM |

The party reference data that require a data history are the entities *Party Code*, *Party Name*, *Party Address*, *Contact* and *Party-Service Link*, described below. Each party is linked at least to one *Party Code*, *Party Name* and may be linked to a *Party Address*. One or more Party-Service Links may be defined to link a specific Party to one or more Services. In addition, each party is linked to one or many *Party Technical Addresses*.

At any given point in time, a party may be referenced in a single *Banking Group* and a single Billing Group while an Ancillary System may act as the leader of a single *Settlement Bank Account Group*. Both are identified by a name.

Participation to Banking Groups, Billing Groups and Settlement Bank Account Groups requires validity periods to be specified when adding the entity to the group. Each *Party* may be linked to one or many *Party Restrictions*<sup>43</sup>. In addition, each *Party* defined by a CSD (i.e. a CSD Participant) may be linked to one or many *Market-Specific Attributes*<sup>44</sup>.

Finally, each *Party* defined as a CB and all Parties defined as a payment bank and offering auto-collateralisation are linked to an *Auto-collateralisation Rule* (see below).

## 2. Party Code

This entity includes the information used to identify a *Party* from a business perspective. Each legal entity is identified in the market by its primary BIC, based on ISO 9362 standard. A legal entity may establish multiple legal relationships with several Central Banks and CSDs in the hierarchical party model. As a consequence, a legal entity may be defined multiple times in the hierarchical party model, possibly multiple times for each legal relationship with a Central Bank or a CSD. The combination of <Central Bank BIC/CSD BIC, Party BIC> ensures the uniqueness of the *Party* in the hierarchical party model, i.e. any BIC is unique within a given *System Entity* (see section 1.3.14)<sup>45</sup>.

*Party codes* may change in time, but only one *Party code* for each *Party* must be valid at any given point in time. For this reason, it is also necessary to specify the validity period for each *Party Code*.

| ATTRIBUTE      | DESCRIPTION   |
|----------------|---|
| Valid From     | Starting validity date for the party code.  |
| Code Type      | Code type for the party. Currently, only BIC (as defined by ISO 9362 standard) is foreseen. |
| Party Mnemonic | Actual value for the party code, i.e. a BIC11 for the party.                                |

Each *Party Code* is linked to its relevant *Party*.

<sup>43</sup> For each party restriction, a period of validity and a restriction type must be specified.

<sup>44</sup> For each market-specific attribute, a valid value must be specified.

<sup>45</sup> CRDM business rules prevent multiple Parties with the same Party BIC from being active in RTGS, CLM or TIPS simultaneously. This is checked upon creation of the related Party Service Link (see subsection 8).

### 3. Party Name

This entity includes the Party Long Names and Party Short Names in a chronological sequence. This is due to the fact that party names may change in time, but only one long name and one short name for each *Party* are valid at any given point in time.

| ATTRIBUTE        | DESCRIPTION                                |
|------------------|--|
| Valid From       | Starting validity date for the party name. |
| Party Long Name  | Full name of the party.                    |
| Party Short Name | Short name of the party.                   |

Each *Party Name* is linked to its relevant *Party*.

### 4. Party Address

This entity includes legal address information in a chronological basis for specific Party Types (i.e. “*Operator*”, “*CSD*”, “*CB*”, “*Payment Banks*” and “*Ancillary Systems*”). This is due to the fact that party legal addresses may change in time, but only one legal address for each *Party* is valid at any given point in time.

| ATTRIBUTE         | DESCRIPTION                                   |
|-------------------|---|
| Valid From        | Starting validity date for the party address. |
| Street            | Name of the street for the address.           |
| House Number      | House number for the address.                 |
| City              | Name of the city for the address.             |
| Postal Code       | Postal code for the address.                  |
| State or Province | State or province for the address.            |

Each *Party Address* is linked to its relevant *Party* and *Country*.

### 5. Contact

This entity includes contact details for the party including the validity period of the record.

| ATTRIBUTE               | DESCRIPTION  |
|-------------------------|--|
| Valid From              | Starting validity date for the contact.  |
| Valid To                | Ending validity date for the contact.  |
| Contact Name            | It specifies the name of the contact person.   |
| Contact Position        | It specifies the position of the contact person in the related institution (e.g. Settlement Manager) |
| Office Telephone Number | It specifies the office telephone number of the contact.   |
| Mobile Number           | It specifies the mobile number of the contact.   |
| Email Address           | It specifies the e-mail address of the contact.  |

## 6. Party Technical Address

This entity includes information related to all technical addresses defined for a *Party*. Each Party Technical Address uniquely identifies a possible recipient technical address the *Party* can use for the receipt of specific messages from the different services.

| ATTRIBUTE         | DESCRIPTION   |
|-------------------|---|
| Technical Address | Unique technical address of a party (i.e. a distinguished name) |

Each *Party Technical Address* is linked to its relevant *Party* and to one or many *Network Services* (see section 1.3.8).

## 7. Auto-Collateralisation Rule

This entity includes all configuration data concerning auto-collateralisation rules required in T2S for each CB and payment banks offering auto-collateralisation.

| ATTRIBUTE                                 | DESCRIPTION   |
|---|---|
| Collateralisation Procedure               | It specifies the type of collateralisation procedure application for the CB. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Pledge</li> <li>  Pledge Sub-account</li> <li>  Repo</li> <li>  For payment banks this attribute always equals "Repo".</li> </ul> |
| Minimum amount for auto-collateralisation | This attribute shall specify the minimum amount to be sourced in an autocollateralisation operation.<br><br>This attribute will only be available for Payment Banks.  |

| ATTRIBUTE                                   | DESCRIPTION   |
|---|---|
| Minimum amount for client collateralisation | <p>This attribute shall specify the minimum amount to be sourced in a client collateralisation operation.</p> <p>This attribute will only be available for Payment Banks.</p> |

Each *Auto-collateralisation Rule* is linked to its relevant *Party*, i.e. to the CB or payment bank to which the rule applies. Conversely, each CB and each payment bank offering auto-collateralisation is linked to an Auto-collateralisation Rule.

## 8. Party Service Link

Each Party-Service Link identifies a link (with a service-specific participation type) between a single Party and a single Service; multiple links can be defined in order to allow the same Party to access different Services, the same Service to be accessed by different Parties and, in certain cases, the same Party to access the same Service with different participation types.

| ATTRIBUTE          | DESCRIPTION   |
|--------------------|---|
| Service Party Type | <p>Service-specific classification for the Party. Certain values may be used only in conjunction with specific Services and specific Party Types defined at Party level.</p> <p>The exhaustive list of possible values for the TIPS Service is as follows:</p> <ul style="list-style-type: none"> <li>  TIPS Operator</li> <li>  TIPS Central Bank</li> <li>  TIPS Participant</li> <li>  TIPS Reachable Party</li> <li>  TIPS Ancillary System</li> <li>  MPL-Only Participant</li> </ul> <p>The exhaustive list of possible values for the CLM Service is as follows:</p> <ul style="list-style-type: none"> <li>  Operator</li> <li>  CLM CB Account Holder</li> <li>  CLM CB Technical Account Holder</li> <li>  CLM Transit Account Holder</li> <li>  CLM Account Holder</li> <li>  Institution managing minimum reserve without account in CLM</li> </ul> <p>The exhaustive list of possible values for the RTGS Service is as follows:</p> <ul style="list-style-type: none"> <li>  Operator</li> <li>  RTGS CB Account Holder</li> <li>  RTGS Transit Account Holder</li> </ul> |

|             |   |
|-------------|---|
|             | <ul style="list-style-type: none"> <li>  RTGS Account Holder</li> <li>  Ancillary System</li> </ul>   |
| AS Sub-Type | <p>Specifies the type of Ancillary System where appropriate in RTGS. Mandatory and only allowed when the Party is an Ancillary System.</p> <p>The exhaustive list of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  High-Value-Payment-Systems (HVPS)</li> <li>  Retail-Payment-Systems (RPS)</li> <li>  Instant-Payment-Systems (IPS)</li> <li>  Security-Settlement-Systems (SSS)</li> <li>  Foreign-Exchange-Settlement-Systems (FXS)</li> <li>  Money-Market-Settlement-Systems (MMS)</li> <li>  Central-Counter-Parties (CCP)</li> <li>  Other (OTH)</li> </ul> |
| Valid From  | Date from which the Party Service Link is valid.  |
| Valid To    | Date until which the Party Service Link is valid.   |

Each *Party Service Link* is linked to its relevant *Party, Service and Party Configuration*. Due to the requirements of the TIPS participation model, multiple Payment Banks identified with the same Party Code (i.e. BIC) cannot be linked to the TIPS *Service* at the same time. The same applies to ECONS2, CLM and RTGS.

## 9. Party Configuration

This entity is linked to its to the Party Service Link and specifies the required information to enable a party for a specific Service.

### 9.1 RTGS Configuration

This specific Party Configuration specifies the additional configuration required for a Party enabled for the RTGS Service.

| ATTRIBUTE | DESCRIPTION  |
|-----------|--|
| U2A Only  | <p>It specifies whether the party can interact with the RTGS Service in U2A mode only.</p> <p>If so, service related push report configurations and message subscriptions will not be available.</p> |

### 9.2 CLM Configuration

This specific Party Configuration specifies the additional configuration required for a Party enabled for the CLM Service.

| ATTRIBUTE                            | DESCRIPTION   |
|--------------------------------------|---|
| Overnight Deposit Indicator          | It specifies whether the party is enabled for Overnight Deposit.  |
| Marginal Lending Indicator           | It specifies whether the party is enabled for Marginal Lending.   |
| Minimum Reserve Obligation           | Indicates if an institution is subject to minimum reserve requirement or not and the type of the minimum reserve calculation.<br><br>Exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Direct</li> <li>  Pool</li> <li>  Indirect</li> <li>  No</li> </ul> |
| Intraday Credit Indicator            | Specifies whether the Party is allowed to receive intraday credit.<br><br>Informational purpose; not used in any application process.   |
| Institutional Sector Code            | It specifies the financial corporations sector classification to which the party belongs.   |
| U2A Only                             | It specifies whether the party can interact with the CLM Service in U2A mode only.<br><br>If so, service related push report configurations and message subscriptions will not be available.  |
| Eurosystem Flag                      | It specifies whether a Central Bank is a Euro area Central Bank or not.   |
| Maximum Amount for Overnight Deposit | It specifies the maximum amount for overnight deposits when the related Central Bank is not a Euro area Central Bank.   |
| MFI Code                             | It specifies the Monetary Financial Institution Code  |

A CLM Configuration entity may be linked to a *Party* for identifying the leading CLM account holder.

## 10. Ancillary System Bilateral Agreement

This entity includes information related to all the bilateral agreements defined for an *Ancillary System* with other *Ancillary Systems* for cross-AS settlement, defined by the related Central Bank.

| ATTRIBUTE    | DESCRIPTION  |
|--------------|--|
| Valid From   | Starting validity date for the bilateral agreement.                                |
| Valid To     | Ending validity date for the bilateral agreement.                                  |
| Initiator    | It specifies the initiator <i>Ancillary System</i> for the bilateral agreement.    |
| Counterparty | It specifies the counterparty <i>Ancillary System</i> for the bilateral agreement. |

## 11. Ancillary System Procedure Link

This entity links *Ancillary Systems* to *Ancillary System Procedures* on a many-to-many basis.

| ATTRIBUTE    | DESCRIPTION   |
|--------------|---|
| Valid From   | Starting validity date for the ancillary system procedure link.                                 |
| Valid To     | Ending validity date for the ancillary system procedure link.                                   |
| Notification | Indicates whether the ancillary system opts for single or global notification for AS transfers. |

Each *Ancillary System Procedure Link* is linked to its relevant *Ancillary System* and may be linked up to 2 Cash Accounts depending on the specific *Ancillary System Procedure*.

## 12. Eligible Counterpart CSD

This entity includes all configuration data allowing each CSD to define the CSDs it accepts as counterpart for settlement in T2S. The set of relevant securities is specified in the *Eligible Counterpart CSD Securities* entity(see below).

| ATTRIBUTE  | DESCRIPTION   |
|------------|---|
| Valid From | Date from which eligible counterpart CSD is valid.      |
| Valid To   | Date until which the eligible counterpart CSD is valid. |

Each occurrence of this entity is linked to the relevant *Investor CSD* and *Eligible Counterpart CSD Securities*.

## 13. Eligible Counterpart CSD Securities

This entity includes all configuration data concerning the definition of securities, linked to an eligible counterpart CSD, for which a given investor CSD allows settlement.

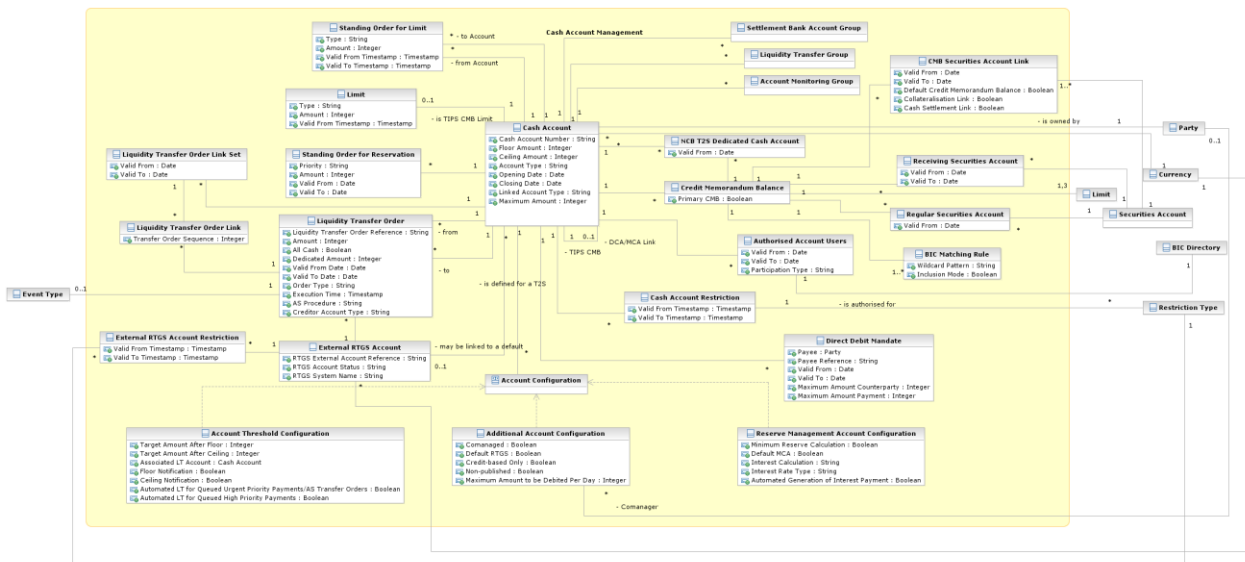
| ATTRIBUTE        | DESCRIPTION  |
|------------------|--|
| Eligibility Type | It specifies whether the eligibility for settlement in T2S is defined with respect to a single security or to a set of securities (either issued by the same CSD or issued in the same country). The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Securities</li> <li>  Issuer CSD</li> <li>  Country</li> </ul> |

Each occurrence of this entity is linked to the relevant occurrence of *Eligible Counterpart CSD*. In addition, depending on the eligibility type, it is linked to the relevant security, or issuer CSD (to allow settlement in T2S for all the securities issued by the CSD) or country of issuance (to allow settlement in T2S for all the securities issued in the country).

### 1.3.3 Cash account data management

#### 1.3.3.1 Data model of the component

The following diagram shows the conceptual data model for Cash Account Data Management.





### 1.3.3.2 Description of the component

This component allows the management of reference data and configuration related to *Cash Accounts* and their links to the relevant *Limits*, *Currencies*, *Cash Accounts Restrictions*, *Direct Debit Mandates*, *Standing Order definitions and monitoring groups*.

### 1.3.3.3 Description of the entities

#### 1. Cash Account

This entity includes all *Cash Account* reference data. An authorised Central Bank user can create and maintain Cash Accounts for its Parties. An authorised Payment Bank user (corresponding to a TIPS Participant) can create and maintain TIPS Credit Memorandum Balances (CMB) on the TIPS Accounts owned by its Party. Similarly, an authorised TIPS Ancillary System user can create and maintain TIPS Credit Memorandum Balances (CMB) on the TIPS AS Technical Account owned by its Party.

Authorised users can create and maintain Cash Accounts and related Direct Debit Mandates, Standing Order definitions for liquidity transfers, reservations and limits.

| ATTRIBUTE           | DESCRIPTION  |
|---------------------|--|
| Cash Account Number | It specifies the unique cash account number.   |
| Floor Amount        | It specifies the lower threshold for notifying the cash manager or triggering a rule-based liquidity transfer. |
| Ceiling Amount      | It specifies the upper threshold for notifying the cash manager or triggering a rule-based liquidity transfer. |

|                     |   |
|---------------------|---|
| <p>Account Type</p> | <p>It specifies a classification for the cash account. The exhaustive list of possible values for the TIPS Service is as follows:</p> <ul style="list-style-type: none"> <li>  TIPS Account</li> <li>  TIPS AS Technical Account</li> <li>  TIPS Transit Account<sup>46</sup></li> <li>  TIPS Credit Memorandum Balance</li> </ul> <p>The exhaustive list of possible values for the RTGS Service is as follows:</p> <ul style="list-style-type: none"> <li>  RTGS DCA</li> <li>  Ancillary System Guarantee Funds Account</li> <li>  RTGS Sub-account</li> <li>  RTGS CB Account</li> <li>  RTGS Dedicated Transit Account</li> <li>  Ancillary System Technical Account</li> </ul> <p>The exhaustive list of possible values for the CLM Service is as follows:</p> <ul style="list-style-type: none"> <li>  Main Cash Account</li> <li>  Overnight Deposit Account</li> <li>  CLM CB Account</li> <li>  CB ECB Account</li> <li>  ECB Mirror Account</li> <li>  CLM Dedicated Transit Account for T2S</li> <li>  CLM Dedicated Transit Account for TIPS</li> <li>  CLM Dedicated Transit Account for RTGS</li> <li>  Marginal Lending Account</li> <li>  CLM Technical Account for ECONSII</li> </ul> <p>The exhaustive list of possible values for the ECONS II Service is as follows:</p> <ul style="list-style-type: none"> <li>  CB Contingency Account</li> <li>  Contingency Cash Account</li> <li>  Contingency Technical Account (for Ancillary Systems)</li> <li>  Contingency Transit Account</li> </ul> <p>The exhaustive list of possible values for T2S is as follows:</p> <ul style="list-style-type: none"> <li>  T2S Central Bank Account</li> <li>  T2S Dedicated Cash Account</li> </ul> |
|---------------------|---|

<sup>46</sup> A Transit Account per currency exists in TIPS and it belongs to a Central Bank. The Transit Account for euro belongs to the European Central Bank.  
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|                     |  |
|---------------------|--|
| Linked Account Type | Specifies whether the cash account is linked to another cash account in CRDM or to an account defined in another RTGS system (for T2S Dedicated Cash Accounts only). |
| Opening Date        | Opening date of the cash account.  |
| Closing Date        | Closing date of the cash account.  |

Each *Cash Account* is linked to its relevant owner *Party* and *Currency*. In addition, it may be linked to one or many *Cash Account Restrictions*<sup>47</sup>, to one *External RTGS Account* and one or many *Account Configuration* entities. Certain types of *Cash Account* are additionally linked to other Cash Accounts for different purposes, as described below.

Mandatory links:

- | RTGS Sub-Account to its related RTGS DCA
- | TIPS Credit Memorandum Balance to its related TIPS Account or TIPS AS Technical Account
- | Contingency Cash Account to the related Main Cash Account
- | Contingency Technical Account to AS Technical Account
- | CB Contingency Account to the related CLM CB Account

Optional links:

- | Overnight Deposit Account to the MCA of the CLM Account Holder allowed to instruct on it
- | Marginal Lending Account to the MCA of the CLM Account Holder allowed to instruct on it
- | RTGS Dedicated Cash Account to the related MCA for authorisation purposes in ECONSII, connecting the RTGS DCA belonging to an Ancillary System Settlement Bank Account Group to an MCA which in turn will be linked to a Contingency Account
- | RTGS Dedicated Cash Account to MCA and vice versa on a 1:1 basis for Automated Liquidity Transfers (using "Associated LT Account" field; see sub-section 7. Account Threshold Configuration).

Each Cash Account may be linked to one or many BICs defined as "Authorised Account Users"<sup>48</sup>. Each TIPS Credit Memorandum Balance may be linked to only one "Authorised Account User"<sup>49</sup>

A Cash Account may be linked to one or many monitoring groups as *Settlement Bank Account Group*, *Liquidity Transfer Group* and *Account Monitoring Group*.

<sup>47</sup> For each cash account restriction, a period of validity and a restriction type must be specified.

<sup>48</sup> For each Authorised Account User related to T2 accounts a period of validity and a participation type must be specified. Available participation types are: Direct, Indirect, Multi Addressee (Branch of Direct Participant or Credit Institution), Addressable BIC (Correspondent or Branch of Direct Participant). For accounts in RTGS, exclusion rules may also be defined to prevent the related BIC(s) from being included in the RTGS directory. For Multi-Addressee and Addressable BIC participation, the BIC(s) may also be specified by using wildcard characters. Optionally, for Authorised Account User related to TIPS Accounts or TIPS CMB, a Maximum IP Amount can be defined.

<sup>49</sup> The maximum amount defined per currency is captured in CRDM into a system parameter. The parameter is used as a default value when configuring the Authorised Account User entity.

Any subsequent update of such a system parameter, requested by the Operator, e.g. stemming from an update of the EPC Rulebook, shall trigger a revalidation of the content of the existing Maximum IP Amount values captured into the Authorised Account User entity. In particular for each User BIC:

- if the 'Maximum IP Amount' value is below the new maximum amount, the Maximum IP Amount will show the new maximum amount;
- if the 'Maximum IP Amount' value is above or equal to the new maximum amount, the value will remain unchanged.

It is worth noting that, for the sake of transparency the Audit Trail data will store and continue showing the values inserted by the customer (even when they are below the current default maximum amount for the given currency).

In addition, a Cash Account may be linked to one or many Credit Memorandum Balances and one or may Liquidity Transfer Order Link Sets.

## 2. Limit

This entity includes all reference data related to *Limits* defined on TIPS Credit Memorandum Balances, RTGS Dedicated Cash Accounts and Credit Memorandum Balances for T2S. Common Reference Data Management shall allow a Payment Bank (linked to the TIPS or RTGS *Service*) to define and maintain limits related to the usage of a TIPS Credit Memorandum Balance or RTGS Dedicated Cash Account.

| ATTRIBUTE            | DESCRIPTION   |
|----------------------|---|
| Limit Type           | <p>It specifies a classification for the limit. The exhaustive list of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  TIPS CMB Limit</li> <li>  External guarantee</li> <li>  Unsecured credit</li> <li>  Auto-collateralisation</li> </ul>  |
| Limit Amount         | <p>It specifies the value set for the limit amount. If set to zero, the relevant Cash Account cannot be debited.</p> <p>Moreover, it specifies the limit amount for the credit consumer for the relevant T2S Dedicated cash account. If the party has no limit for the relevant T2S Dedicated cash account, it must be set to zero.</p> |
| Valid From Timestamp | It specifies the date and time from which the limit is valid.   |

Each *Limit* is linked to its relevant *Cash Account* and may be linked to its relevant *Credit Memorandum Balance*.

## 3. Credit Memorandum Balance

This entity includes all reference data for Credit Memorandum Balances defined on T2S Dedicated Cash Accounts . The Credit Memorandum Balance is the mechanism to track the credit provision of a payment bank to one of its clients for a T2S Dedicated Cash Account on which the payment bank can set and monitor the external guarantee limit, the unsecured credit limit and the auto-collateralisation limit. The T2S Actor can create a Credit Memorandum Balance for the payment bank when a CB creates a new T2S Dedicated Cash Account for the payment bank and it specifies the relevant BICs of this payment bank (the authorised system user can define a set of BICs selecting them one by one or using wildcards to specify multiple BICs at the same time. Single BICs and wildcards can be specified either in positive or negative mode, in order to include or exclude them from the set of BICs that will be linked to the Credit Memorandum Balance). T2S requires the CB the setup of the auto-collateralisation limit for the same T2S Dedicated Cash Account at the same time<sup>50</sup>. The T2S

<sup>50</sup> If not specified, the limit is set up to zero by default.  
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Actor can also create a Credit Memorandum Balance for a given T2S Dedicated Cash Account when the payment bank holding the account authorises one of its clients to use this account for settlement (by specifying the relevant BICs of this client) in the same way described above for the payment bank). The authorised system user can define a set of BICs selecting them one by one or using wildcards to specify multiple BICs at the same time. Single BICs and wildcards can be specified either in positive or negative mode, in order to include or exclude them from the set of BICs that will be linked to the Credit Memorandum Balance. In this case, T2S requires the set up of three client limits (for external guarantee, unsecured credit and auto-collateralisation) for the combination of BICs of the client and T2S Dedicated Cash Account<sup>51</sup>.

| ATTRIBUTE   | DESCRIPTION   |
|-------------|---|
| Primary CMB | Boolean attribute specifying whether the credit memorandum balance is the primary one for the specified T2S Dedicated Cash Account. |

Each Credit Memorandum Balance is linked to the relevant T2S Dedicated Cash Account and occurrences of the BIC Directory (i.e. the BICs of the relevant payment bank or CB). In addition, it is also linked to one or three Limits and it may be linked to one or many CMB Securities Account Links and to one Securities Account of the credit provider for the collateral. Finally, in the case of CB collateralisation, it is linked to the Securities Account holding the collateral securities positions related to the reverse (collateral settlement transactions) not reimbursed at the end of the settlement day and it may be linked to a T2S Dedicated Cash Account of the CB providing the intraday credit (this account is also used during the EOD period for collateral relocation).

#### 4. CMB Securities Account Link

This entity specifies the links between each Securities Account and all the relevant Credit Memorandum Balances as of a given date. For each new securities account, T2S requires the assignment of the securities account to one or more T2S Dedicated Cash Accounts of at least one payment bank that acts as liquidity provider. On this basis, T2S creates a new CMB Securities Account Link for each selected T2S Dedicated Cash Account, each of which references the Credit Memorandum Balance (of one of the selected T2S dedicated cash accounts) that was previously created for the party (i.e. the CSD participant) holding the Securities Account. Each Securities Account must have a default T2S Dedicated Cash Account.

<sup>51</sup> If not specified, these limits are set up to zero by default.  
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| ATTRIBUTE                         | DESCRIPTION   |
|-----------------------------------|---|
| Valid From                        | It specifies the date from which the CMB securities account link is valid.  |
| Valid To                          | It specifies the date to which the CMB securities account link is valid.  |
| Default Credit Memorandum Balance | Boolean attribute specifying whether the credit memorandum balance is the balance of the default T2S dedicated cash account for the securities account.   |
| Collateralisation Link            | Boolean attribute specifying whether T2S can use the securities, earmarked as collateral and held on the securities account, for auto-collateralisation operations on the T2S dedicated cash account it is linked with through the credit memorandum balance. |
| Cash Settlement Link              | Boolean attribute specifying whether T2S can use the link between the securities account and the T2S dedicated cash account for the settlement of the cash leg of a settlement instruction.   |

Each *CMB Securities Account Link* is linked to the relevant *Securities Account* and *Credit Memorandum Balance*.

## 5. Standing Order for Limit

This entity includes all *Standing Order for Limit* reference data. An authorised Payment Bank user can create and maintain *Standing Order for Limit* entities on the Accounts owned by its Party.

| ATTRIBUTE  | DESCRIPTION   |
|------------|---|
| Type       | It specifies the type of the Standing Order for Limit.<br><br>The exhaustive list of possible types is as follows:<br><ul style="list-style-type: none"> <li>  Bilateral</li> <li>  Multilateral</li> </ul> |
| Amount     | It specifies the value set for the Standing Order for Limit amount.   |
| Valid From | It specifies the date from which the Standing Order for Limit is valid.   |
| Valid To   | It specifies the date until which the Standing Order for Limit is valid.  |

Each *Standing Order for Limit* is linked to source and destination Cash Accounts.

## 6. Standing Order for Reservation

This entity includes all *Standing Order for Reservation* reference data. An authorised Payment Bank user can create and maintain *Standing Order for Reservation* entities on the Accounts owned by its Party.

| ATTRIBUTE  | DESCRIPTION  |
|------------|--|
| Priority   | It specifies the type of the Standing Order for Reservation.<br><br>The exhaustive list of possible types is as follows: <ul style="list-style-type: none"> <li>  Blocked</li> <li>  High</li> <li>  Urgent</li> </ul> |
| Amount     | It specifies the value set for the Standing Order for Reservation amount.  |
| Valid From | It specifies the date from which the Standing Order for Reservation is valid.  |
| Valid To   | It specifies the date until which the Standing Order for Reservation is valid.   |

Each *Standing Order for Reservation* is linked to the related Cash Account.

## 7. Liquidity Transfer Order Link Set

This entity includes all reference data for *Liquidity Transfer Order Link Sets*, i.e. groups of *Liquidity Transfer Orders* linked to an individual *T2S Dedicated Cash Account*, which can be used for sequencing of transfers from an individual *T2S Dedicated Cash Account* to the corresponding RTGS accounts.

| ATTRIBUTE  | DESCRIPTION   |
|------------|---|
| Valid From | It specifies the date from which the liquidity transfer order link set is valid.  |
| Valid To   | It specifies the date until which the liquidity transfer order link set is valid. |

Each *Liquidity Transfer Order Link Set* is linked to one or many *Liquidity Transfer Order Links* and to the relevant *T2S Dedicated Cash Account*.

## 8. Liquidity Transfer Order Link

This entity includes all reference data for *Liquidity Transfer Order Links*.

| ATTRIBUTE               | DESCRIPTION  |
|-------------------------|--|
| Transfer Order Sequence | It specifies the sequence in which the relevant liquidity transfer order is executed within the link set. The value of this attribute is unique within all individual instances of each Liquidity Transfer Order Link Set. |

Each *Liquidity Transfer Order Link* is linked to the relevant *Liquidity Transfer Order* and *Liquidity Transfer Order Link Set*.

## 9. Liquidity Transfer Order

This entity includes all *Liquidity Transfer Order* reference data. An authorised Payment Bank user can create and maintain *Liquidity Transfer Order* entities on the Accounts owned by its Party.

| ATTRIBUTE                          | DESCRIPTION  |
|------------------------------------|--|
| Liquidity Transfer Order Reference | It specifies the unique reference assigned to the liquidity transfer order, by the instructing party.  |
| Amount                             | It specifies the value set for the Liquidity transfer Order amount.  |
| All Cash                           | Boolean attribute specifying whether the liquidity transfer order transfers any remaining liquidity on the debit cash account. When this attribute is set to “true”, then the Amount attribute must be set to zero.  |
| Dedicated Amount                   | Boolean attribute specifying whether the liquidity transfer order transfers a dedicated amount stemming from a specific business event triggering the liquidity transfer order. For example, in the case of corporate actions (CARL) the liquidity transfer order transfers the amount of the corporate action. When this attribute is set to “true”, then the Amount attribute must be set to zero. |
| Valid From Date                    | It specifies the date from which the Liquidity transfer Order is valid.  |
| Valid To Date                      | It specifies the date until which the Liquidity transfer Order is valid.   |
| Order Type                         | It specifies a classification for the liquidity transfer order. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Predefined</li> <li>  Standing Order</li> </ul>   |
| Execution Time                     | It specifies the execution time of the liquidity transfer order, if it is not based on a specific event.   |
| AS Procedure                       | Standing Order link to an AS procedure initiation. Possible values: <ul style="list-style-type: none"> <li>  Procedure C, automated start of mandatory procedure</li> <li>  Procedure C, manual start of optional procedure</li> <li>  Procedure D, automated start of mandatory procedure</li> </ul>  |

Each Liquidity transfer Order is linked to the related Cash Accounts or External RTGS Account and may be linked to one among an Event Type, an execution time or an AS Procedure.

## 10. External RTGS Account

This entity includes all reference data for External RTGS Cash Accounts which CB business users can define for a payment bank or a settlement bank in T2S. It includes all the External RTGS Accounts used for the repatriation of liquidity to the relevant RTGS system at the end of settlement day and all the External RTGS Accounts referenced in any predefined and standing Liquidity Transfer Order or in any immediate Liquidity Transfer.



| ATTRIBUTE                       | DESCRIPTION  |
|---------------------------------|--|
| RTGS External Account Reference | Account number of the external RTGS cash account within the relevant RTGS system.  |
| RTGS Account Status             | Business status for the external RTGS cash account. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Open</li> <li>  Closed</li> </ul> |
| RTGS System Name                | It specifies the name of the RTGS system in which the external RTGS account is held.   |

Each External RTGS Account is linked to the relevant RTGS System and Currency. Furthermore, it may be linked to one or many T2S Dedicated Cash Accounts, Liquidity Transfer Orders and External RTGS Account Restrictions<sup>52</sup>. Applying a specific restriction to an External RTGS Account results in applying the same restriction to all the T2S dedicated cash accounts linked to the same External RTGS Account. Similarly, removing a specific restriction from an external RTGS account results in removing the same restriction from all the T2S Dedicated Cash Accounts linked to the same External RTGS Account.

Any External RTGS Account can be closed by the authorised CB business user only if none of the following conditions is met:

- | There is a pending payment instruction specifying the External RTGS Account;
- | The External RTGS Account has an active link to a T2S Dedicated Cash Account;
- | The External RTGS Account is referenced in a valid Liquidity Transfer Order.

## 11. Direct Debit Mandate

This entity includes all *Direct Debit Mandate* reference data. An authorised user can create and maintain *Direct Debit Mandate* entities on the Accounts under its data scope.

<sup>52</sup> For each restriction, a period of validity and a restriction type must be specified.  
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| ATTRIBUTE                   | DESCRIPTION  |
|-----------------------------|--|
| Payee Reference             | Reference of the Payee Party to be put in the generated transfers.               |
| Valid From                  | It specifies the date from which the Liquidity transfer Order is valid.          |
| Valid To                    | It specifies the date until which the Liquidity transfer Order is valid.         |
| Maximum Amount Counterparty | Maximum Amount allowed to be debited by the payee Party during a business day.   |
| Maximum Amount Payment      | Maximum Amount of a direct debit order allowed to be debited by the payee Party. |

Each Direct Debit Mandate is linked to the Cash Account to be debited and Payee Party allowed to debit the account.

## 12. Account Threshold Configuration

This specific *Account Configuration* includes the required attributes to configure the notifications for the related *Cash Account*.

| ATTRIBUTE  | DESCRIPTION   |
|--|---|
| Target Amount After Floor  | It specifies the target amount to be reached if the configured floor amount is breached.  |
| Target Amount After Ceiling  | It specifies the target amount to be reached if the configured ceiling amount is breached.  |
| Associated LT Account  | Linked Cash Account (defined between an RTGS DCA and and MCA belonging to the same party in a 1:1 relationship) to be used when generating automated liquidity transfers and rule-based liquidity transfers in case of pending high/urgent payments and AS transfers. |
| Floor Notification   | It specifies whether notifications are sent when the configured floor amount is breached.   |
| Ceiling Notification   | It specifies whether notifications are sent when the configured ceiling amount is breached.   |
| Account to be credited for ceiling breach  | It specifies the Cash Account to be credited in the event of a ceiling breach.  |
| Account to be debited for floor breach   | It specifies the Cash Account to be debited in the event of a floor breach.   |
| Rule-based liquidity transfers for queued urgent payment orders/AS transfer orders | Boolean attribute specifying whether an automated liquidity transfer should be triggered from the Associated LT Account when an urgent payment order or AS transfer order is queued.  |
| Rule-based liquidity transfers for queued high priority payment orders             | Boolean attribute specifying whether an automated liquidity transfer should be triggered from the Associated LT Account when an urgent payment order, AS transfer order or high priority payment order is queued.   |

### 13. Reserve Management Account Configuration

This specific *Account Configuration* includes the attributes required by CLM for Reserve Management processing for the related *Cash Account*. It applies to all Cash Account types in CLM, RTGS, TIPS and T2S to be included in the minimum reserve calculation.

| ATTRIBUTE   | DESCRIPTION  |
|---|--|
| Minimum Reserve Calculation                                 | It specifies whether the related Cash Account balance should be considered in the minimum reserve calculation or not.  |
| Default MCA   | It specifies whether the related Cash Account is considered the Default MCA for reserve management processing.   |
| Interest Calculation  | It specifies whether interest is calculated in the related account balance.  |
| Interest Rate Type  | <p>It specifies the rate type used for interest calculation, allowing a flexible configuration of interest calculation on accounts not subject to minimum reserve obligation.</p> <p>The exhaustive list of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  Minimum Reserve Interest Rate</li> <li>  Minimum Reserve Penalty Rate type 1</li> <li>  Minimum Reserve Penalty Rate type 2</li> <li>  Excess Reserve Interest Rate (exempt tier)</li> <li>  Excess Reserve Interest Rate (non-exempt tier)</li> <li>  Overnight Deposit Interest Rate</li> <li>  Marginal Lending Interest Rate</li> <li>  No Interest Rate Applicable</li> </ul> |
| Automated Generation of Interest Payment (System Generated) | Flag to enable the automated generation of interest payments, requiring the definition of a Leading CLM Account Holder at Party-Service Link level.  |

#### 14. Additional Account Configuration

This specific *Account Configuration* includes additional attributes that may be required for the complete configuration of settlement Services for the related *Cash Account*.

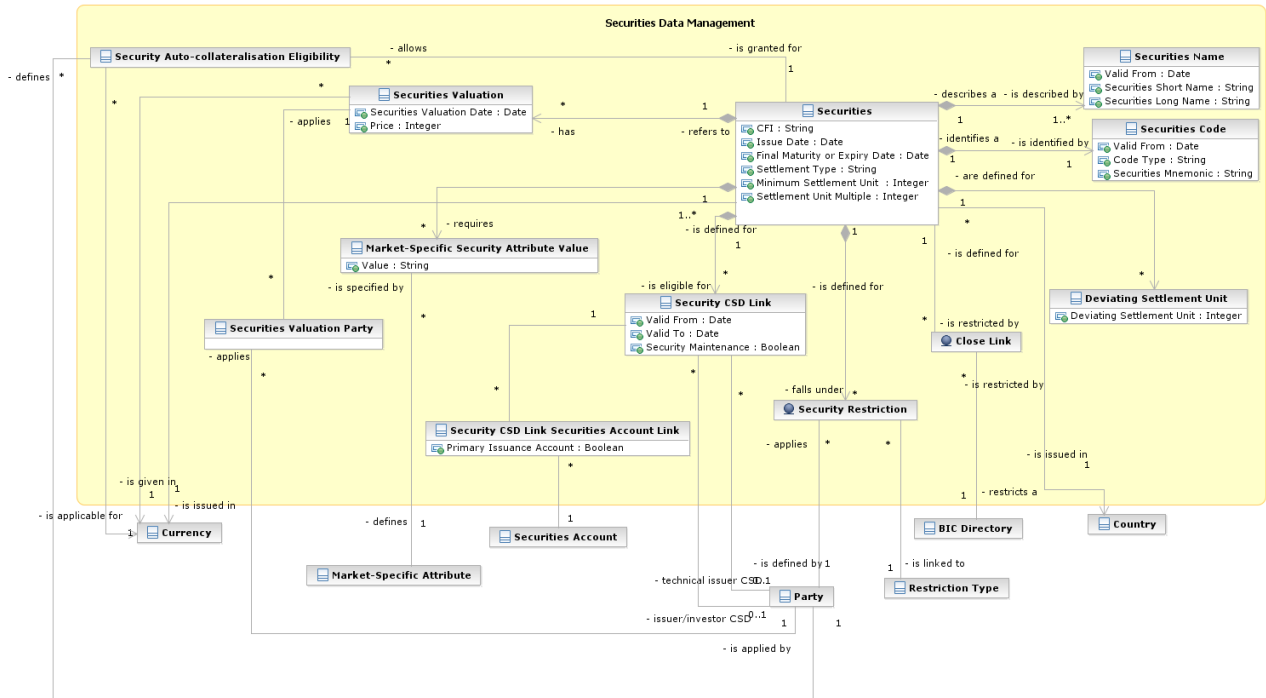
| ATTRIBUTE                              | DESCRIPTION   |
|--|---|
| Comanaged                              | It specifies whether a Cash Account is enabled for co-management.   |
| Default RTGS                           | It specifies whether a Cash Account is the default for RTGS Service.  |
| Credit-based Only                      | It specifies whether a Cash Account can only have a positive balance.   |
| Non-published                          | It specifies whether a Cash Account has to be excluded from publication in the CLM Repository or RTGS Directory.          |
| Maximum amount for direct debit orders | It specifies the maximum amount allowed to be debited from the Cash Account based on direct debit orders per business day |

Each Additional Account Configuration can be linked to the Party defined as Co-manager.

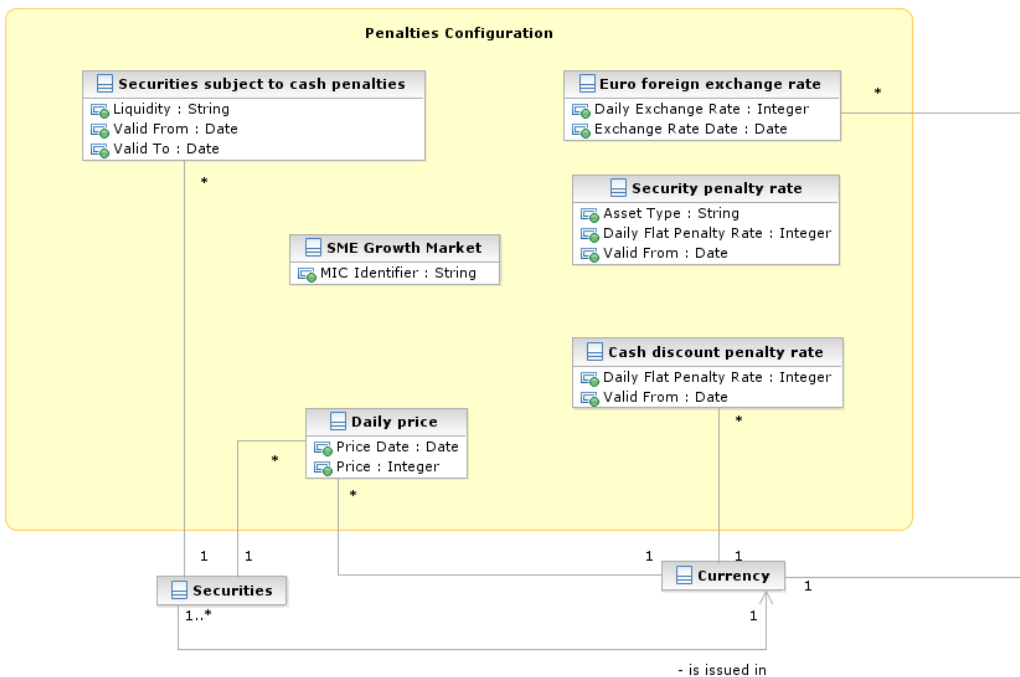
### 1.3.4 Securities Data Management

#### 1.3.4.1 Data model of the component

The following diagram depicts the conceptual data model for Securities Data Management. The scope of securities reference data is limited to the information that T2S requires for settlement.



The following diagram depicts the conceptual data model for Penalties configuration related to Securities.



### 1.3.4.2 Description of the component

This component provides the services to manage securities reference data, their eligibility for settlement in issuer and investor CSDs and settlement restrictions. It supports the maintenance of close links, valuation prices and the eligibilities of securities in specific currencies for auto-collateralisation offered by NCBs or payment banks in T2S.

The functions described below allow the authorised T2S system users (i.e. CSD system administrators) to input their own securities and to access and maintain them, i.e. to create new securities or to update or delete already existing securities as well as managing the cash penalties configuration. When updating a security, each change is applied either as a revision or as an historic item, according to what is specified in the relevant request.

### 1.3.4.3 Description of the entities

#### 1. Securities

| This entity specifies all securities reference data that do not require a data history, i.e. all the attributes having only one valid value for a given security, regardless of the point in time taken into account.ATTRIBUTE | DESCRIPTION  |
|--|--|
| CFI  | Classification of the security according to ISO/DIS 10962:2015(E) standards.   |
| Issue Date   | Date from which settlement is allowed for the security.  |
| Final Maturity or Expiry Date  | Final maturity or expiry date of the security.   |
| Settlement Type  | Type of settlement foreseen for the security. The exhaustive list of possible values is as follows:<br><ul style="list-style-type: none"><li>  Units</li><li>  Nominal</li></ul> |
| Minimum Settlement Unit  | Minimum unit of the security in accordance with the value specified in the Settlement Type attribute.  |
| Settlement Unit Multiple   | Settlement Unit multiple of the security in accordance with the value specified in the Settlement Type attribute.  |

The entity Securities Name requires a data history. Each security has at least one corresponding item in the Securities Name entity. In addition, each security has one corresponding item in the Securities Code entity. Each security inherits a country identifier for the country of issuance through the relationship with the Country entity and inherits a currency identifier for its currency of issuance from the Currency entity. Furthermore, it

may also be linked to one or many Deviating Settlement Units (see below), Security Restrictions, Market-Specific Attributes and to one or many combinations of Parties (CBs or payment banks) offering auto-collateralisation and Currencies eligible for auto-collateralisation. Furthermore, each instance of Securities is linked to one or several issuers or technical issuer CSDs and can be linked to one or many investor CSDs by using Security CSD link and one or many parties for the definition of the relevant Close Links. Finally, each security is linked to all its valuation data (see below).

## 2. Securities Code

This entity defines the identifiers of a security from a business perspective. The ISIN, based on ISO 6166 standard, uniquely identifies a security. The ISIN does not change during the life time of a security, however the model supports the association of more than one occurrence to a single security, which allows managing exceptional cases of input errors.

The model allows only one ISIN to be valid at a given point in time.

| ATTRIBUTE           | DESCRIPTION   |
|---------------------|---|
| Valid From          | Starting date of validity for the securities code.  |
| Code Type           | Code type assigned to the security. Currently, only ISIN (as defined by ISO 6166 standard) is foreseen. |
| Securities Mnemonic | Actual value for the securities code, i.e. the ISIN for the security.                                   |

The Securities Code entity inherits the Securities Identifier attribute from the Securities entity to link the security with its associated ISIN.

## 3. Securities Name

This entity specifies the Securities Long Name and Securities Short Name of a security on a time line basis as a security name may change in time owing, for example, to the renaming of the issuer. Therefore, several names may exist for a security, although only one name can exist for a security at any given point in time, requiring T2S to store a Securities Name on a timeline basis.

| ATTRIBUTE             | DESCRIPTION                                      |
|-----------------------|--|
| Valid From            | Starting date of validity for the security name. |
| Securities Short Name | Short description of the security.               |
| Securities Long Name  | Long description of the security.                |

The Securities Name entity inherits a securities identifier attribute from the Securities entity to link the security name to the underlying security.

## 4. Deviating Settlement Unit

This entity specifies the odd lots, in which securities are eligible for settlement. Every security has a multiple settlement unit. A multiple of that defines the standard lot sizes eligible for settlement on condition of being All rights reserved.

equal or greater than the minimum settlement unit. However, securities exist that have several odd lot sizes outside of the standard settlement multiple. Therefore, T2S stores such deviations from the standard multiple in this entity to perform validations on whether T2S can settle the quantity or nominal amount for the security specified in the Settlement Instruction.

| ATTRIBUTE                 | DESCRIPTION                               |
|---------------------------|---|
| Deviating Settlement Unit | Deviating settlement unit for a security. |

The Deviating Settlement Unit entity inherits the Security Identifier attribute from the Securities entity to link a deviating settlement unit to the underlying security.

## 5. Securities Valuation

This entity stores dirty prices for securities, with the haircut already deducted, for the valuation of securities positions for auto-collateralisation in T2S. Both CBs and payment banks offering auto-collateralisation, provide prices for the securities each has identified as eligible for auto-collateralisation.

| ATTRIBUTE                 | DESCRIPTION                           |
|---------------------------|---------------------------------------|
| Securities Valuation Date | Date for which the valuation applies. |
| Price                     | Price of the security.                |

The Securities Valuation entity inherits a currency identifier attribute for the currency of the valuation price from the Currency entity. The entity also inherits a securities identifier attribute from the Securities entity to link a valuation price to the underlying security. Finally, each Securities Valuation is linked to all the parties applying the price, i.e. either a CB (euro or non-euro) or a payment bank.

## 6. Securities subject to cash penalties

This entity defines the scope of securities subject to cash penalties.

| ATTRIBUTE  | DESCRIPTION  |
|------------|--|
| Liquidity  | It specifies whether a security is liquid or not. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Liquid</li> <li>  Illiquid</li> </ul> |
| Valid From | Starting date of validity for the configuration of the penalties.  |
| Valid To   | Ending date of validity for the configuration of the penalties.  |

The Securities subject to cash penalties entity inherits the Security Identifier attribute from the linked Securities entity.



## 7. SME Growth Market

This entity is a catalogue of Market Identifier Codes (MIC Identifiers) corresponding to trading venues (Place of Trade). The catalogue is maintained by the T2S Operator only.

| ATTRIBUTE      | DESCRIPTION   |
|----------------|---|
| MIC Identifier | It specifies the Market Identifier Code according to ISO 10383. |

## 8. Security penalty rate

This entity stores the Security penalty rates according to the asset type. The maintenance of security penalty rates is performed by T2S Operator only.

| ATTRIBUTE               | DESCRIPTION  |
|-------------------------|--|
| Asset Type              | It specifies the type of the asset related to the security penalty rate. |
| Daily flat penalty rate | It specifies the value for the security penalty rate.                    |
| Valid From              | Starting date of validity for the security penalty rate.                 |

## 9. Cash discount penalty rate

This entity stores the Cash Discount Penalty Rates for each currency. The maintenance of cash discount penalty rates related to Euro currency is performed by T2S Operator only based on values provided by the European Central Bank.

For other currencies, maintenance is performed by the Central Bank responsible for the currency.

| ATTRIBUTE               | DESCRIPTION   |
|-------------------------|---|
| Daily flat penalty rate | It specifies the value for the cash discount penalty rate (i.e. discount rate of the currency). |
| Valid From              | Starting date of validity for the cash discount penalty rate.                                   |

The Cash Discount Penalty Rate entity inherits a currency identifier attribute for the currency of the rate from the Currency entity.

## 10. Euro Foreign Exchange Rate

This entity stores the Euro Foreign Exchange Rates against the Euro for each currency. The maintenance of Euro foreign exchange rates is performed by the European Central Bank according to the official exchange rates.

| ATTRIBUTE           | DESCRIPTION  |
|---------------------|--|
| Daily Exchange Rate | It specifies the exchange rate for the linked currency against the Euro. |
| Valid From          | Starting date of validity for the Euro foreign exchange rate.            |

The Euro Foreign Exchange Rate entity inherits a currency identifier attribute for the currency of the rate from the Currency entity.

### 11. Daily Price

This entity stores the Daily Prices to be used for the daily calculation of cash penalties. The maintenance of daily prices is performed by the Securities Maintaining Entity responsible for the security the price applies to.

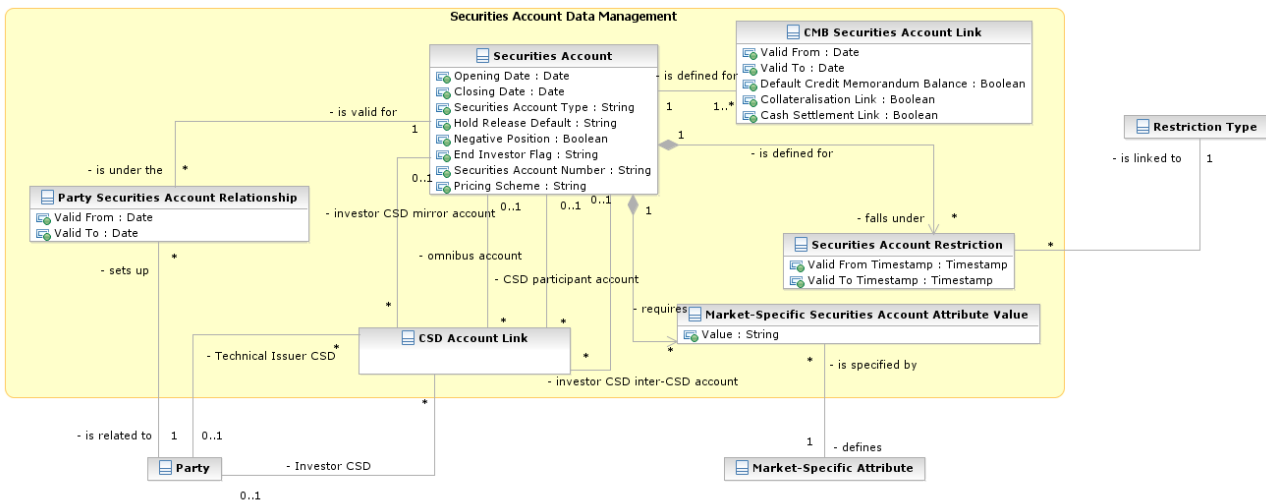
| ATTRIBUTE           | DESCRIPTION  |
|---------------------|--|
| Daily Exchange Rate | It specifies the exchange rate for the linked currency against the Euro. |
| Valid From          | Starting date of validity for the Euro foreign exchange rate.            |

The Euro Foreign Exchange Rate entity inherits a currency identifier attribute for the currency of the rate from the Currency entity.

## 1.3.5 Securities Account Data Management

### 1.3.5.1 Data model of the component

The following diagram depicts the conceptual data model for Securities Account Data Management.



### 1.3.5.2 Description of the component

This component allows the management of reference data related to Securities Accounts and their links to the relevant parties, CSDs restrictions and eligible currencies, plus the configuration of all the links defined between securities accounts for cross-CSD settlement. The functions described below allow the authorised T2S system users (i.e. CSD system administrators) to input their own Securities Accounts and to access and maintain them, i.e. to create new Securities Accounts or to update or delete already existing Securities Accounts. When updating a Securities Account, each change is applied either as a revision or as a data history, according to what is specified in the relevant request.

### 1.3.5.3 Description of the entities

#### 1. Securities Account

This entity includes all Securities Account reference data required for settlement in T2S.

| ATTRIBUTE                 | DESCRIPTION   |
|---------------------------|---|
| Securities Account Number | It specifies the unique securities account number.  |
| Opening Date              | Legal opening date for the securities account.  |
| Closing Date              | Legal closing date for the securities account.  |
| Securities Account Type   | It specifies a classification for the securities account for the maintenance of CSD-account links. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  CSD Participant Account</li> <li>  CSD Mirror Account</li> <li>  Inter-CSD Account</li> <li>  T2S Technical Offset Account<sup>53</sup></li> <li>  CSD Omnibus Account</li> <li>  Issuance Account</li> </ul> |
| Hold Release Default      | Default setting for specific settlement instructions related to the securities account. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Hold</li> <li>  Release</li> </ul>   |
| Negative Position         | Boolean attribute specifying whether the securities account can hold a negative position in a security.   |
| End Investor Flag         | It specifies information to identify securities accounts where allocation instructions are posted. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  No account allocations</li> <li>  FOP account allocations</li> <li>  DVP/FOP account allocations</li> </ul>   |
| Pricing Scheme            | It is the option to configure the pricing scheme of the customer. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Account</li> <li>  ISIN</li> </ul>   |

Each Securities Account is linked to the Party (i.e. CSD or CSD participant) that operates the account. This link is time-dependent, as a CSD may transfer the relationship of a securities account from one account operator/sub-custodian to another account operator/sub-custodian within the same CSD<sup>54</sup>.

When opening a new Securities Account, the first link between the Securities Account and the relevant Party is automatically created in T2S and the start date of its validity period equals the opening date of

<sup>53</sup> This category is foreseen for direct holding markets.

<sup>54</sup> As a consequence, for each link a period of validity must be specified.

the Securities Account. When transferring the relationship of a Securities Account from one accountoperator / sub-custodian to another, the following mandatory attributes are specified by the CSD: the party identifiers of the two parties between which the CSD wishes to transfer the relationship, the date as of which the new link between the Securities Account and the new party is valid, the new CMB Securities AccountLinks for the Securities Account. A relationship transfer results in the simultaneous:

- I Closing of the old relationship (by setting the end date of its validity period);
- I Creation of the new relationship (by creating a new link and setting the start date of its validity period);
- I Replacement of the CMB Securities Account Links of the old account operator/sub-custodian with the links of the new one;
- I Finally, the new account operator / sub-custodian is able to view those transactions and positions ofthe end-investor account that existed in T2S prior to the transfer (e.g. positions, restrictions and settlement instructions);

Each Securities Account may then be linked to one or many Credit Memorandum Balances to offer auto-collateralisation for specific T2S Dedicated Cash Accounts and it is linked to one or many CMB Securities Account Links.

In addition, each Securities Account may be linked to one or many Securities Account Restrictions<sup>55</sup> and Market-Specific Attributes<sup>56</sup>.

## 2. CSD Account Link

This entity includes all reference data concerning the configuration of CSD account links for cross-CSD settlement in T2S.

| ATTRIBUTE  | DESCRIPTION  |
|------------|--|
| Valid From | This attribute specifies the date from which the CSD account link is valid from.   |
| Valid To   | This attribute specifies the date from which the CSD account link is valid to. An occurrence of the CSD account link requires a value in this attribute when the relationship is removed/closed. |

Each CSD Account Link includes the following elements:

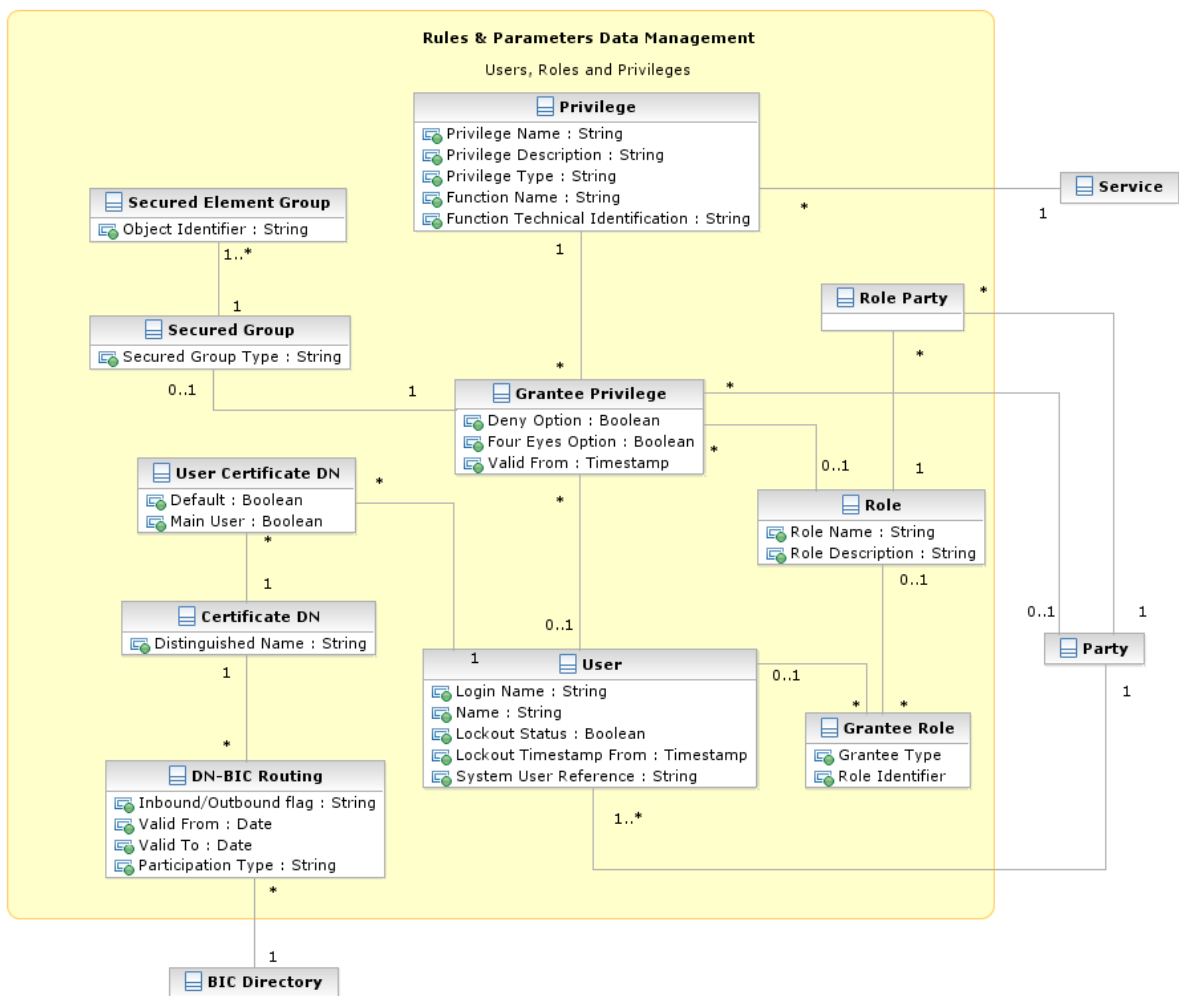
<sup>55</sup> For each securities account restriction, a period of validity and a restriction type must be specified.

<sup>56</sup> For each market-specific attribute, a valid value must be specified.

- | A link to the party playing the role of the investor CSD;
- | A link to the party playing the role of the technical issuer CSD;
- | A link to a CSD participant account (within the relevant investor CSD)<sup>57</sup>;
- | A link to an omnibus account (within the relevant technical issuer CSD);
- | A link to a mirror account (within the relevant investor CSD);
- | A link to an inter-CSD account (within the relevant investor CSD).

### 1.3.6 Access rights management

The following diagram shows the conceptual data model for *Users*, *Roles* and *Privileges* management.



Each function of any given *Service* is linked to a *Privilege* (i.e. the privilege that allows triggering this function), which is the means used for granting (or denying) access to functions (and data) to selected *Parties*, *Users* and *Roles*.

<sup>57</sup> This link is not specified for any CSD accounts link related to the default configuration of an omnibus account.

*Privileges* are created and maintained by the CRDM Operator. *Privileges* can be granted or revoked by a party administrator. A set of *Privileges* can be grouped into a *Role*. Each *Role* can be assigned one or more *Privileges*. Each *Party* and *User* can be assigned several *Privileges*, optionally through one or more *Roles*. *Roles* are created and managed by the CRDM Operator, Central Bank and CSD party administrators. The management of *Roles* includes both their maintenance (i.e. update and logical deletion) and the possibility to grant or revoke other *Privileges*. Central Banks may configure specific roles to be granted to their own Payment Banks in order to grant them with proper access to functions. In turn, party administrators of Payment Banks can use *Roles* and *Privileges* granted by the relevant Central Bank in order to assign proper access rights to their own system users.

Based on the granted set of *Roles* and *Privileges*, all system users are authorised to input their own reference data objects and to access and maintain them, i.e. to create new objects or to update or delete already existing objects. For each system user, the specific set of available functions and data are determined by the relevant access rights.

## 1. User

This entity includes all reference data for *Users*. This concept includes not only users interacting with the different services in U2A mode and triggering functions via ad hoc screens, but also connecting through A2A mode or the DMT and using functions via A2A messages or DMT files.

| ATTRIBUTE              | DESCRIPTION   |
|------------------------|---|
| Login Name             | Username to be provided for authentication.                                   |
| Name                   | Full name of the user.  |
| Lockout Status         | Boolean attribute specifying whether the user is blocked from logging in.     |
| Lockout Timestamp From | Timestamp specifying the date and the time from which the user is locked out. |
| System User Reference  | The unique system user reference associated to the user.                      |

Users are linked to the *Party* they belong to and to one or many *Roles*. Each *User* can be linked to one or many *Certificate DNs*<sup>58</sup>.

## 2. Certificate DN

This entity includes all reference data for *Certificate DN*.

| ATTRIBUTE          | DESCRIPTION                          |
|--------------------|--------------------------------------|
| Distinguished Name | It specifies the distinguished name. |

Each *Certificate DN* can be linked to one or many *Users*<sup>59</sup>.

<sup>58</sup> The link between a *User* and a *Certificate DN* also contains a "Default" flag specifying whether the *Certificate DN* identifies the default *User* associated to the related *Distinguished Name* and a "Main User" flag specifying that it is the single *User* enabled for the TIPS Service.

<sup>59</sup> The link between a *User* and a *Certificate DN* also contains a "Default" flag specifying whether the *Certificate DN* identifies the default *User* associated to the related *Distinguished Name* and a "Main User" flag specifying that it is the single *User* enabled for the TIPS Service.

### 3. Privilege

This entity includes all reference data for *Privileges*.

| ATTRIBUTE                         | DESCRIPTION  |
|-----------------------------------|--|
| Privilege Name                    | Name of the privilege.   |
| Privilege Description             | Description of the privilege.  |
| Privilege Type                    | It specifies a classification for the privilege. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  System, i.e. the associated function does not apply to a specific reference data object type.</li> <li>  Object, i.e. the associated function applies to a specific reference data object type.</li> </ul> |
| Function Name                     | Name of the function associated to the privilege.  |
| Function Technical Identification | It specifies all the data needed in order to identify and to trigger the function, e.g. the type of function (query, report, etc.), the type of interaction (push, pull, interactive), the set of required input parameters for the function and so forth.   |

Each *Privilege* can be granted to one or many *Roles*, *Users* or *Parties*, and is linked to a single *Service*. When granting a *Privilege* to a *Role*, *User* or *Party*, the following Boolean attributes are set:

- | Deny Option, to specify whether the associated function is allowed or explicitly denied to the grantee;
- | Administration Option, to specify whether the grantee of the privilege is allowed to grant the same privilege to another *Party*, *User* or *Role*;
- | Four-Eyes Option, to specify whether the grantee of the privilege is allowed to use the associated function according to the Two-Eyes or Four-Eyes principle (this attribute is relevant only for privileges related to functions that can be used both according to the Two-Eyes and to the Four-Eyes principle) .

T2S specific object privileges, i.e. privileges related to functions that apply to specific T2S Reference data objects can be granted:

- | In relation to a single Reference data “secured” object only (e.g. a single securities account);
- | In relation to a “secured” group of Reference data objects (e.g. a set of T2S dedicated cash accounts).

For each Object Privilege, the set of object types associated to it is already given by definition, i.e. it is determined by the specific function associated to the Privilege (e.g. the privilege to display a security can only be granted for securities and not for other Reference data object types).



## 4. Role

This entity includes all reference data for *Roles*.

| ATTRIBUTE        | DESCRIPTION              |
|------------------|--------------------------|
| Role Name        | Name of the role.        |
| Role Description | Description of the role. |

Each *Role* can be linked to one or many *Privileges*. Moreover, each *Role* can be linked to many *Parties* and *Users*.

Party administrators can grant Roles to *Parties* and *Users* in order to set up their change approval configuration, i.e. the applicable combination of change type (e.g. create, update, delete) and update type (i.e. Two-Eyes mode or Four-Eyes mode) for all the relevant functions and reference data objects.

## 5. Secured Object

This entity includes all reference data for *Secured Objects*.

| ATTRIBUTE           | DESCRIPTION   |
|---------------------|---|
| Secured Object Type | <p>It specifies a classification for the secured object. The current exhaustive list<sup>60</sup> of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  Security</li> <li>  Party</li> <li>  Securities Account</li> <li>  T2S Dedicated Cash Account</li> </ul> |

Each Secured Object is linked to the relevant Reference data object (which is of the same type expressed by the Secured Object Type attribute), may belong to one or many Secured Groups.

## 6. Secured Group

This entity includes all reference data for *Secured Groups*, i.e. set of Reference data Secured Objects.

<sup>60</sup> The current list covers the actual business requirements expressed by the market. It can be enlarged with other object types at a later stage, in order to cover possible additional business needs.

| ATTRIBUTE          | DESCRIPTION   |
|--------------------|---|
| Secured Group Type | <p>It specifies a classification for the secured group. The current exhaustive list of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  Security</li> <li>  Party</li> <li>  Securities Account</li> <li>  T2S Dedicated Cash Account</li> </ul> |

Each Secured Group is linked to one or many *Secured Objects* (which are of the same type expressed by the Secured Group Type attribute).

## 7. DN-BIC Routing

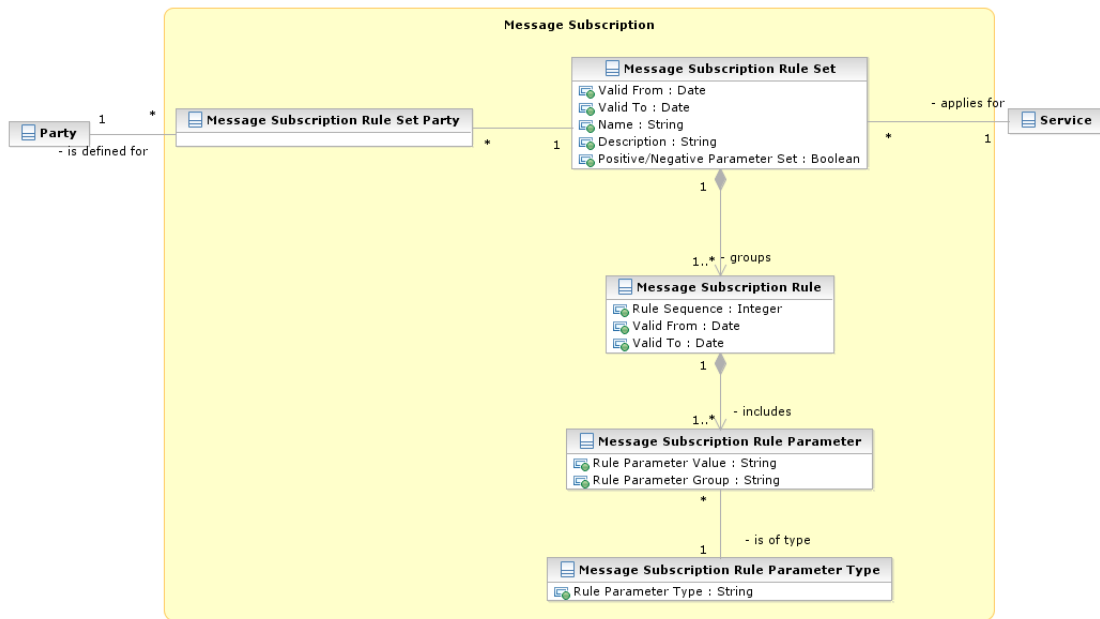
This entity includes all reference data for DN-BIC Routing, i.e. links between DNs and BICs for inbound and outbound communication. In the former case, different DNs can be linked to different BICs and vice versa. In the outbound case, the same BIC can only be linked to a single DN. However different BICs can still be linked to the same DN.

| ATTRIBUTE             | DESCRIPTION   |
|-----------------------|---|
| Inbound/Outbound flag | <p>Attribute specifying whether the routing relationship is for inbound or outbound communications.</p> <p>If set to Outbound, no more than one DN can be linked to the same BIC.</p> |
| Valid From            | Date from which the DN-BIC Routing is valid.  |
| Valid To              | Date until which the DN-BIC Routing is valid.   |
| Participation Type    | It specifies the participation type to match the correct Authorised Account User.   |

Each *DN-BIC Routing* entry can be linked to one or many *Certificate DNs* and *one or many BICs*.

### 1.3.7 Message subscription configuration

The following diagram shows the conceptual data model for *Message Subscription* management.



*Message Subscription* allows *Parties* to configure the specific set of messages they want to receive from a given *Service*.

Each *Party* can set up several *Message Subscription Rule Sets*. Each *Message Subscription Rule Set* defines the messages one or many interested *Parties* receive via a sequence of *Message Subscription Rules*. Each *Message Subscription Rule* specifies the parameters (e.g. message type, cash account) that have to be taken into account to identify the messages to be sent to the interested *Parties*.

## 1. Message Subscription Rule Set

This entity defines the set of message subscription rules defined by each *Party*.

| ATTRIBUTE                       | DESCRIPTION  |
|---------------------------------|--|
| Valid From                      | It specifies the date from which the rule set is valid.  |
| Valid To                        | It specifies the date to which the rule set is valid.  |
| Name                            | The name assigned to the message subscription rule set.  |
| Description                     | It represents the description assigned to the message subscription rule set.                     |
| Positive/Negative Parameter Set | It specifies whether the message subscription rule set must be used in positive or negative way. |

Each *Message Subscription Rule Set* is linked to the relevant *Party*, to one or many interested *Parties* (i.e. the parties that receive all the messages identified by the message subscription rule set), to a specific *Service* and to a set of *Message Subscription Rules*.

## 2. Message Subscription Rule

This entity defines the *Message Subscription Rules* defined by each *Party*.

| ATTRIBUTE     | DESCRIPTION   |
|---------------|---|
| Rule Sequence | It specifies the order in which the rule is processed within the relevant rule set. |
| Valid From    | It specifies the date from which the rule is valid.                                 |
| Valid To      | It specifies the date to which the rule is valid.                                   |

Each *Message Subscription Rule* belongs to a single *Message Subscription Rule Set* and it is linked to a set of *Message Subscription Rule Parameters*.

### 3. Message Subscription Rule Parameter

This entity includes the message subscription rule parameters defined within each message subscription rule.

| ATTRIBUTE            | DESCRIPTION   |
|----------------------|---|
| Rule Parameter Group | It specifies the group of the rule parameter. All the groups within a message subscription rule include the same number of rule parameters. A rule is matched when all the rule parameters of at least one of its groups are matched. |
| Rule Parameter Value | It specifies a valid value for the rule parameter.  |

Each *Message Subscription Rule Parameters* belongs to a single *Message Subscription Rule* and it is linked to a specific *Message Subscription Rule Parameter Type*.

### 4. Message Subscription Rule Parameter Type

This entity defines all message subscription rule parameters types.

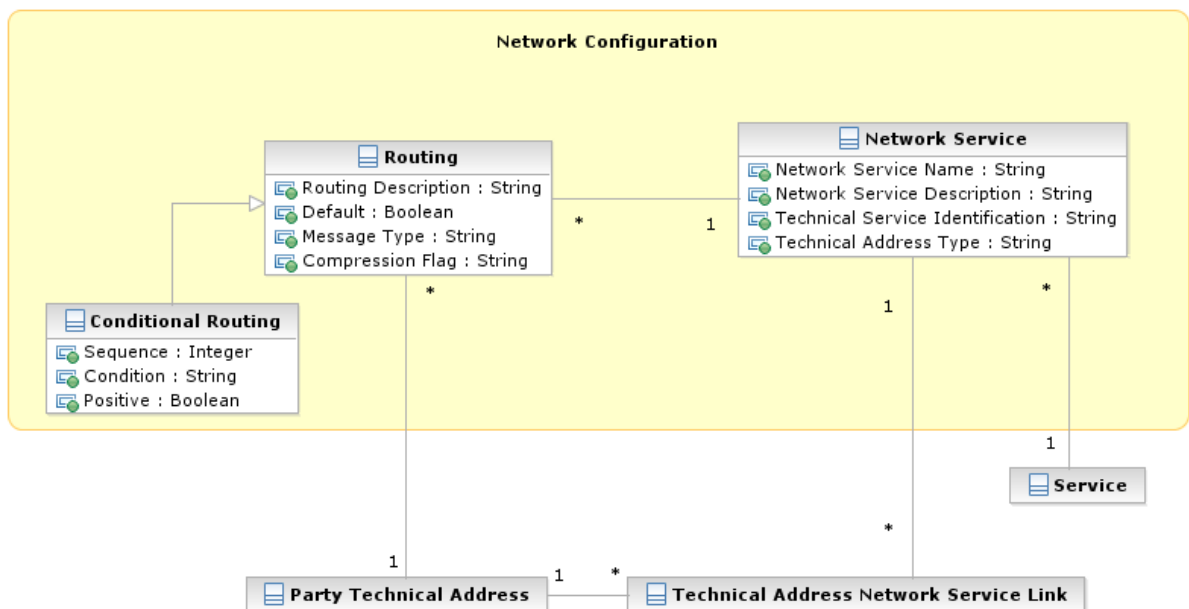
| ATTRIBUTE           | DESCRIPTION  |
|---------------------|--|
| Rule Parameter Type | It specifies a classification for the message subscription rule parameters. The exhaustive list of possible values for RTGS/CLM and TIPS is as follows: <ul style="list-style-type: none"> <li>  Message type</li> <li>  Cash account number</li> <li>  Debit/Credit indicator</li> <li>  Multi-addressee BIC</li> <li>  Business case</li> <li>  Priority</li> <li>  Underlying message type</li> </ul> |

The exhaustive list of possible values T2S is as follows:

- | Message type
- | Instruction type
- | Message status
- | Party
- | Securities account number
- | ISIN
- | T2S Dedicated cash account number
- | Instruction status
- | ISO Transaction code
- | Currency
- | Already matched flag
- | Settlement Transaction Condition Code
- | Business sending party
- | System User Reference
- | Instructing party

### 1.3.8 Network configuration

The following diagram shows the conceptual data model for Network Configuration.



*Network Configuration* allows parties to configure routing information that the various *Services* use to deliver outgoing messages to them.

## 1. Network Service

This entity stores reference data of all network services available in the different *Services*.

| ATTRIBUTE                        | DESCRIPTION  |
|----------------------------------|--|
| Network Service Name             | Name of the network service.   |
| Network Service Description      | Description of the network service.  |
| Technical Service Identification | It specifies all the data needed in order to identify and to use a network service <sup>61</sup> .             |
| Technical Address Type           | It specifies the type of technical address for the network service (e.g. BIC, Distinguished Name, IP address). |

Each *Network Service* is linked to all the *Party Technical Addresses* it provides and to the *Service* it refers to.

## 2. Routing

This entity allows Parties to configure routing information that the various *Services* use to deliver outgoing messages to them. Each Party can define a default routing configuration that is used when no specific routing conditions are defined for the same party and for a specific outgoing message.

Routing conditions apply to T2S only.

| ATTRIBUTE           | DESCRIPTION  |
|---------------------|--|
| Routing Description | Description of the routing configuration.  |
| Default             | Identifies the default routing configuration for a given Party.  |
| Message Type        | Specifies the message type for which a specific routing configuration applies (for non-default configurations).  |
| Compression Flag    | It specifies the type of compression selected. The exhaustive list of possible compression values is as follows: <ul style="list-style-type: none"> <li>  No Compression</li> <li>  ZIP Algorithm</li> </ul> |

Each *Routing* configuration is linked to the relevant *Party Technical Address* and *Network Service*.

## 3. Conditional Routing

This entity is a specialisation of the Routing entity and defines configuration of routing conditions (i.e. non-default routing configurations).

Routing conditions are available for T2S only.

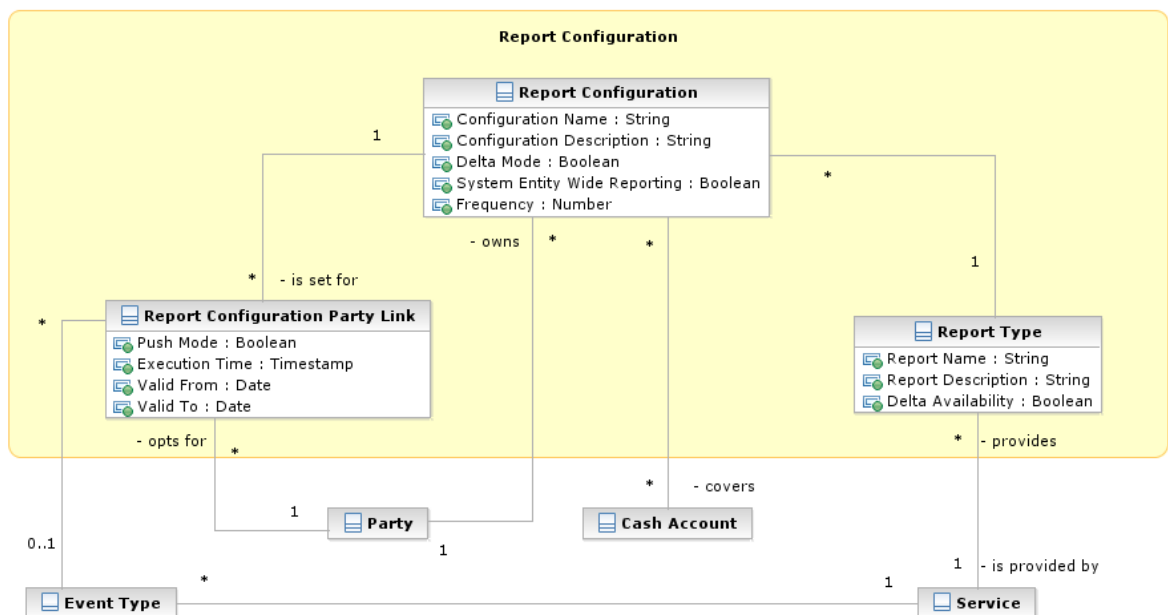
<sup>61</sup> The actual data to be stored for the technical identification of a network service is clarified during the detailed specification phase.

| ATTRIBUTE | DESCRIPTION   |
|-----------|---|
| Sequence  | It specifies the order in which the routing conditions for the same party are processed.  |
| Condition | It specifies the set of conditions applicable for a specific routing configuration. The exhaustive list of possible criteria for the specification of these criteria is as follows: <ul style="list-style-type: none"> <li>  Size boundaries</li> <li>  Currency</li> <li>  Message type</li> </ul>   |
| Positive  | This Boolean attribute specifies whether the set of conditions represent a positive or negative list. A positive setting would specify the combinations of size boundaries, currencies and message types that routes to a specific technical address using a specific network service. A negative setting would specify the combinations of size boundaries, currencies and message types that is not routed to the same technical address, via said network service. |

Each routing condition, being a specialisation of the *Routing* entity, is linked as well to the relevant *Party*, *Party Technical Address* and *Network Service*.

### 1.3.9 Report configuration

The following diagram shows the conceptual data model for report configuration.



*Report configuration* allows parties to configure the specific set of reports they want either to receive (push mode) or to download (pull mode) from the various *Services*.

## 1. Report Type

This entity defines all types of reports available in the different *Services*.

| ATTRIBUTE          | DESCRIPTION   |
|--------------------|---|
| Report Name        | Name of the report type.  |
| Report Description | Description of the report type.   |
| Delta Availability | Boolean attribute specifying whether the report is also available in delta mode, i.e. with the possibility for the recipient to get only the changes since the last time the recipient got the same report. |

Each *Report Type* can be referenced by many *Report Configurations* and is linked to one or more *Services*.

## 2. Report Configuration

This entity stores all reference data for report configurations. Each *Report Configuration* specifies a type of report, its data scope (i.e. full or delta report), the set of parties entitled to get said type of report and the mode they get it (i.e. push or pull).

| ATTRIBUTE                    | DESCRIPTION  |
|------------------------------|--|
| Configuration Name           | Name of the report configuration.  |
| Configuration Description    | Description of the report configuration.   |
| Delta Mode                   | Boolean attribute specifying whether the recipient gets the report linked to the report configuration in delta mode or in full mode.   |
| System Entity Wide Reporting | Boolean attribute specifying whether the recipient gets the report for data belonging to the entire system entity.   |
| Frequency                    | Frequency in hours for the generation of the delta TIPS reports. Not relevant for full reports, which will be generated daily and cover a 24-hour period. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  3 hours</li> <li>  6 hours</li> <li>  12 hours</li> </ul> |

Each *Report Configuration* is linked to the relevant *Report Type* and to one or many *Parties* entitled to get the same *Report Type*<sup>62</sup>.

Additionally, for specific reports<sup>63</sup> a *Report Configuration* may be linked to a *Cash Account*.

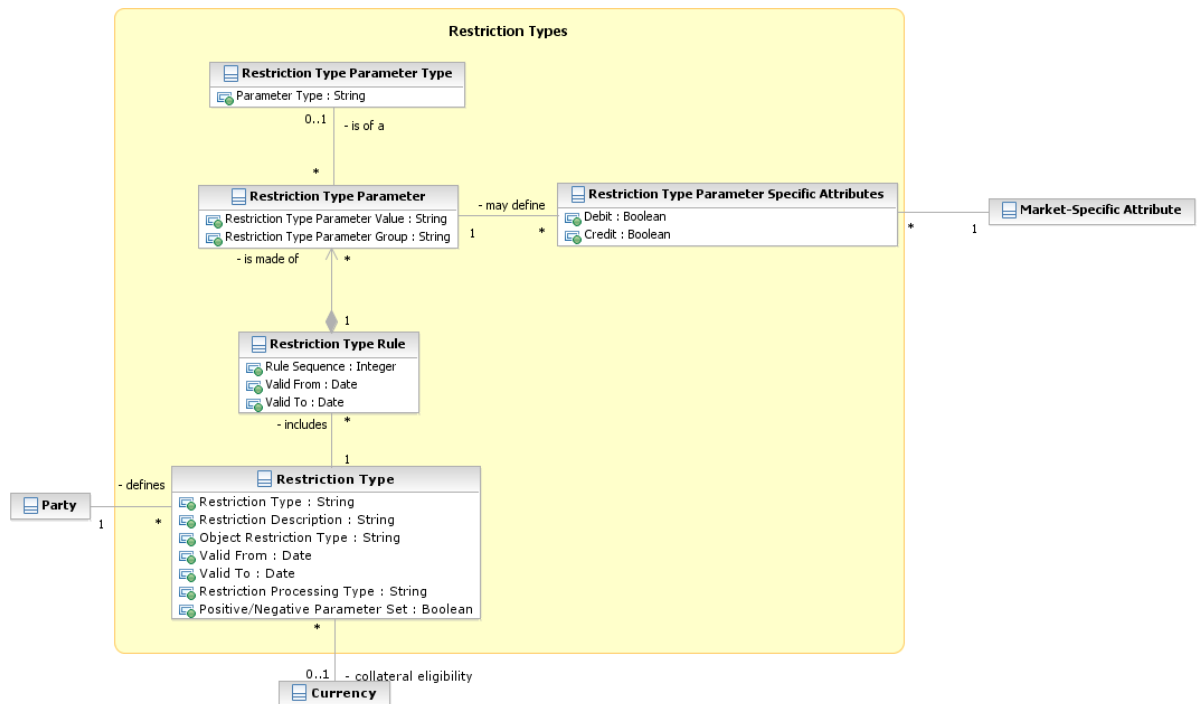
<sup>62</sup> For each of these links a Boolean value specifies whether the party receives its report in push mode or if it downloads it in pull mode. A validity period can be defined by giving a valid from and valid to date.

<sup>63</sup> The coverage at account level is foreseen for camt.053 in RTGS/CLM Services only.



### 1.3.10 Restriction type management

The following diagram shows the conceptual data model for *Restriction Types* management.



It is possible for the CRDM Operator, CSDs and T2S CBs to define restriction types. A restriction type is a set of attributes that define specific processing characteristics for one of the following object types: *System Entities, Parties, Securities, Securities Accounts, Cash Accounts, Settlement Instructions, Securities Positions, Cash Balances* and *External RTGS Accounts*.

Moreover, T2S supports multiple concurrent restrictions on *Securities, Securities Positions, T2S Dedicated Cash Accounts, Parties, Securities Positions, Cash Balances* and *External RTGS Accounts*.

On T2S side, for each *Restriction Type*, optionally, one or many *Restriction Type Rules* define the set of possible actions that can be performed on the restricted object, the set of parties or party types that are allowed or not allowed to perform such actions, and the type of processing T2S shall apply for the restriction type. Each *Restriction Type Rule* specifies a matrix of parameters, i.e. a set of groups of parameters, each of which including a list of parameter values for a given set of parameter types.

#### 1. Restriction Type

This entity includes all the information concerning the harmonised restriction types defined and maintained by the CRDM Operator and available to all Parties as well as Restriction Types defined by CSDs and T2S CBs.

| ATTRIBUTE               | DESCRIPTION  |
|-------------------------|--|
| Restriction Type        | It specifies a code defined by the CRDM Operator, CSD or CB to identify the restriction. |
| Restriction Description | Description of the restriction.  |
| Valid From              | It specifies the date from which the restriction type is valid.                          |
| Valid To                | It specifies the date to which the restriction type is valid.                            |

|  |  |
|--|--|
| <p>Object Restriction Type</p>           | <p>It specifies a classification for the object type on which the restriction applies. The exhaustive list of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  Party</li> <li>  Cash Account</li> <li>  Security</li> <li>  Securities Account</li> <li>  Securities Position</li> <li>  Cash Balance</li> <li>  External RTGS Account</li> <li>  Settlement Instruction</li> <li>  Intra-Position Movement Instruction</li> <li>  Intra-Balance Movement Instruction</li> </ul>  |
| <p>Restriction Processing Type</p>       | <p>It specifies a classification for the type of processing that shall apply for the restriction. The exhaustive list of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  Blocking: blocking of a party, cash account, securities account or security from settlement; blocking of Securities Position or Cash Balance for a specific purpose</li> <li>  Rejection: rejection in Settlement Instruction validation</li> <li>  CSD Validation Hold: setting the CSD validation status automatically to “Hold” when accepting a Settlement Instruction</li> <li>  Reservation: creating a reservation of a Cash Balance or a Securities Position for a specific purpose</li> <li>  Balance Type / Earmarking: define and manage position types for Securities Positions</li> <li>  Earmarking for Auto-collateralisation: specific earmarking for auto-collateralisation</li> <li>  Deliverable: without any restriction</li> <li>  Collateralised: used for sub-pledged collateral transactions</li> <li>  CoSD Blocking: it does not support any partial execution</li> </ul> |
| <p>Positive / Negative Parameter Set</p> | <p>It specifies whether the rules of the restriction type represent a positive or negative set of parameters. A positive parameter set shall specify the conditions requiring the system to apply the restriction. A negative parameter set shall specify the conditions for which the system shall not apply the restriction.</p>   |

Each *Restriction Type* is linked to the specifying *Party* (i.e. a CSD, a CB or the CRDM Operator) and can be linked to one or many *Restriction Type Rule*. In addition, in the case of “Earmarking for Auto-collateralisation” *Restriction Processing Type*, it is linked to the relevant *Currency*.

## 2. Restriction Type Rule

This entity defines the *Restriction Type Rules* defined by each CDS or CB or by the CRDM Operator. Authorised system users can add or delete *Restriction Type Rules* or reorder the sequence of rules within a *Restriction Type*.

| ATTRIBUTE     | DESCRIPTION   |
|---------------|---|
| Rule Sequence | It specifies the order in which the rules are processed within the relevant rule set. |
| Valid From    | It specifies the date from which the rule is valid.                                   |
| Valid To      | It specifies the date to which the rule is valid.                                     |

Each *Restriction Type Rule* belongs to a single *Restriction Type* and it is linked to one or many *Restriction Type Parameters*.

## 3. Restriction Type Parameter

This entity includes the restriction type parameters defined within each restriction type rule. Authorised system users can configure matrices of parameters for their *Restriction Type Rules* by adding, updating or deleting *Restriction Type Parameters*.

| ATTRIBUTE                        | DESCRIPTION   |
|----------------------------------|---|
| Restriction Type Parameter Group | It specifies the group of the restriction type parameter. All the groups within a restriction type rule include the same number of restriction type parameters. A rule is matched when all the restriction type parameters of at least one of its groups are matched. |
| Restriction Type Parameter Value | It specifies a valid value for the restriction type parameter.  |

Each *Restriction Type Parameter* belongs to a single *Restriction Type Rule* and it is linked either to a specific *Restriction Type Parameter Type* or to a *Market-Specific Attribute*<sup>64</sup>.

## 4. Restriction Type Parameter Type

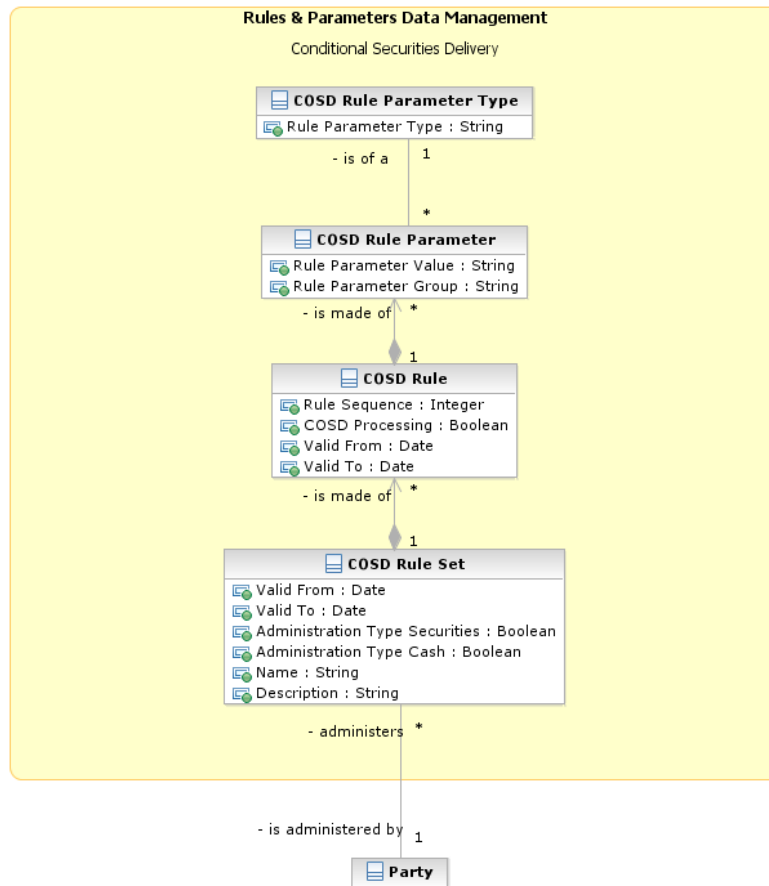
This entity defines all restriction type parameter types.

<sup>64</sup> For each link to a Market-Specific Attribute, two Boolean attributes specify if the relevant parameter value applies to the credit leg, to the debit leg or to both legs of a settlement instruction.

| ATTRIBUTE      | DESCRIPTION   |
|----------------|---|
| Parameter Type | <p>It specifies a classification for the restriction type parameter type. The exhaustivelist of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  Securities movement type, whose possible values are RECE (Receive), DELI (Deliver) and ZERO.</li> <li>  Payment, whose possible values are APMT (Against payment) and FREE (Free of payment / Separate payment)</li> <li>  Transaction identification</li> <li>  Party type of the account owner</li> <li>  Party type of the party instructing on behalf of the account owner</li> <li>  Specific party</li> <li>  Security Identifier</li> <li>  Matching status</li> <li>  Debited Position/Balance</li> <li>  Credited Position/Balance</li> <li>  Securities Account</li> <li>  Cash Account</li> <li>  Credit / Debit Indicator</li> <li>  Country of issuance</li> <li>  Cash Account Type</li> <li>  Settlement currency</li> </ul> |

### 1.3.11 Conditional Securities Delivery

The following diagram shows the conceptual data model for *Conditional Securities Delivery* management.



*Conditional Securities Delivery (CoSD)* allows CSDs to set up rules-based, date-dependent configurations of conditional securities delivery.

Each CSD can set up its *CoSD Rule Set*. Each *CoSD Rule Set* defines a sequence of *CoSD Rules*. Each *CoSD Rule* specifies the triggering conditions (e.g. settlement currency, transaction type, place of settlement) that have to be met for having a conditional securities delivery and the processing conditions (e.g. securities blocking) that T2S applies in case a conditional securities delivery is triggered.

## 1. CoSD Rule Set

This entity defines the set of CoSD rules defined by each CSD.

| ATTRIBUTE   | DESCRIPTION   |
|-------------|---|
| Valid From  | It specifies the date from which the rule set is valid.                       |
| Valid To    | It specifies the date to which the rule set is valid.                         |
| Name        | The name of the Conditional Securities Delivery Rule Set.                     |
| Description | It specifies the description of the Conditional Securities Delivery Rule Set. |

|                                |   |
|--------------------------------|---|
| Administration Type Securities | It defines whether T2S shall block securities when an instruction is marked for conditional delivery. |
| Administration Type Cash       | It defines whether T2S shall block cash when an instruction is marked for conditional delivery.       |

Each *CoSD Rule Set* is linked to the relevant CSD and to a set of *CoSD Rules*.

## 2. CoSD Rule

This entity defines the *CoSD rules* defined by each CSD.

| ATTRIBUTE       | DESCRIPTION   |
|-----------------|---|
| Rule Sequence   | It specifies the order in which the rules are processed within the relevant rule set.                             |
| CoSD Processing | Boolean attribute specifying if the settlement instruction that matches with the rule is to settle conditionally. |
| Valid From      | It specifies the date from which the rule is valid.   |
| Valid To        | It specifies the date to which the rule is valid.   |

Each *CoSD Rule* belongs to a single *CoSD Rule Set*, it is linked to a set of *CoSD Rule Parameters* and it maybe linked to one or many *CoSD Processing Conditions*.

## 3. CoSD Rule Parameter

This entity includes the CoSD rule parameters defined within each CoSD rule.

| ATTRIBUTE            | DESCRIPTION   |
|----------------------|---|
| Rule Parameter Group | It specifies the group of the rule parameter. All the groups within a CoSD rule include the same number of rule parameters. A rule is matched when all the rule parameters of at least one of its groups are matched. |
| Rule Parameter Value | It specifies a valid value for the rule parameter   |

Each *CoSD Rule Parameter* belongs to a single *CoSD Rule* and it is linked to a specific *CoSD Rule Parameter Type*.

## 4. CoSD Rule Parameter Type

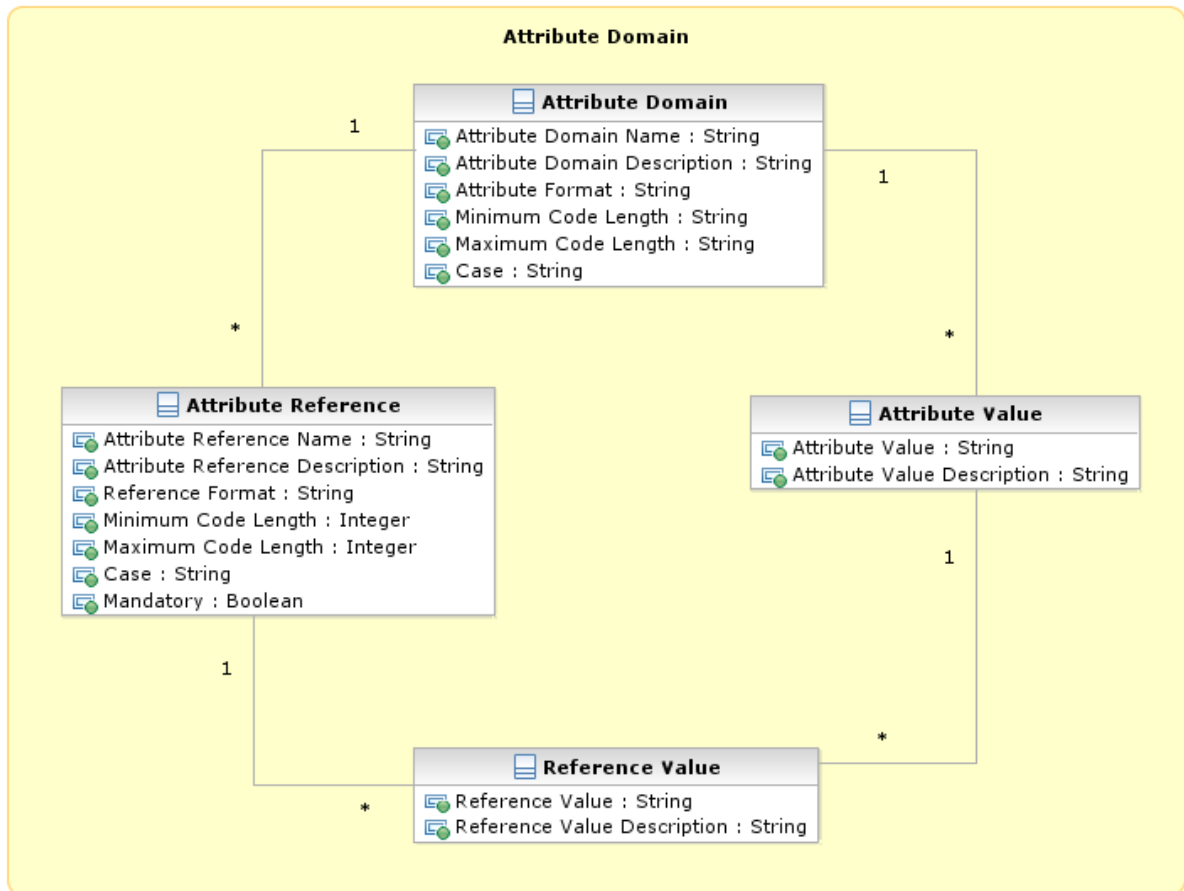
This entity defines all CoSD rule parameter types.

| ATTRIBUTE           | DESCRIPTION   |
|---------------------|---|
| Rule Parameter Type | <p>It specifies a classification for the CoSD rule parameters. The exhaustivelist of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  ISIN</li> <li>  Settlement Currency</li> <li>  CSD</li> <li>  Securities account</li> <li>  Country of issuance</li> <li>  Place of settlement</li> <li>  Transaction Type</li> <li>  Issuer CSD in T2S</li> <li>  Delivering CSD in T2S</li> <li>  Receiving CSD in T2S</li> <li>  BIC of issuer CSD in T2S</li> <li>  BIC of delivering CSD in T2S</li> <li>  BIC of receiving CSD in T2S</li> </ul> |



### 1.3.12 Attribute Domain

The following diagram shows the conceptual data model for attribute domain management.



Attribute domains provide valid lists of values allowed for an attribute. Attribute domains are used for field validations and for documenting the business definition of a value in an attribute. Furthermore, it is possible to define additional reference values, mapped to an attribute specified by an Attribute domain definition.

## 5. Attribute Domain

This entity includes all reference data for *Attribute Domains*.

| ATTRIBUTE                    | DESCRIPTION   |
|------------------------------|---|
| Attribute Domain Name        | Name of the attribute domain.   |
| Attribute Domain Description | Description of the attribute domain.  |
| Attribute Format             | It specifies a classification for the attribute format. The exhaustive list of possible values is as follows: |

|                     |  |
|---------------------|--|
|                     | <ul style="list-style-type: none"> <li>  Alphabetic</li> <li>  Alphanumeric</li> <li>  Numeric</li> </ul>  |
| Minimum Code Length | It specifies the minimum length of the code for a value in the attribute domain.   |
| Maximum Code Length | It specifies the maximum length of the code for a value in the attribute domain.   |
| Case                | <p>It specifies a classification for the case type of the attribute format. The exhaustive list of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  Upper case</li> <li>  Lower case</li> <li>  Both</li> </ul> |

Each *Attribute Domain* is linked to many attribute values (i.e. to all the values belonging to the domain) and may be linked to one or many *Attribute References*.

## 6. Attribute Reference

This entity includes all reference data for *Attribute References*.

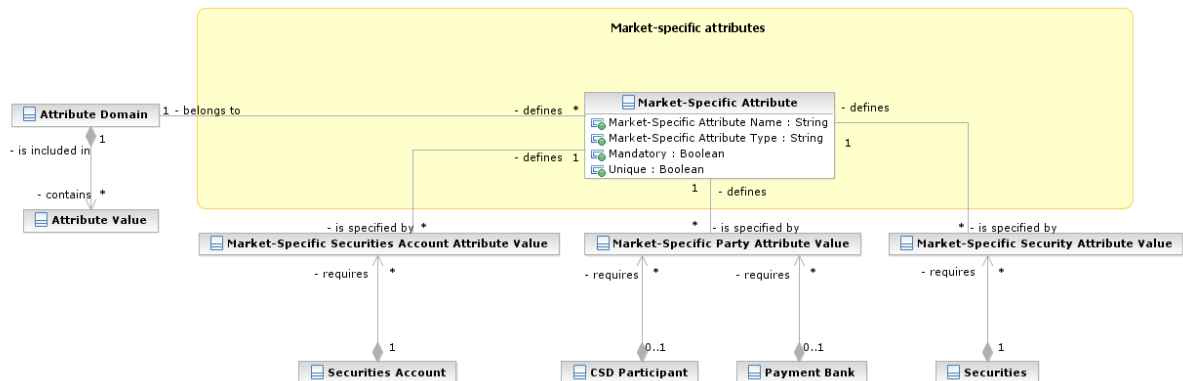
| ATTRIBUTE                       | DESCRIPTION  |
|---------------------------------|--|
| Attribute Reference Name        | Name of the attribute reference.   |
| Attribute Reference Description | Description of the attribute reference.  |
| Reference Format                | <p>It specifies a classification for the attribute reference format. The exhaustive list of possible values is as follows:</p> <ul style="list-style-type: none"> <li>  Alphabetic</li> <li>  Alphanumeric</li> <li>  Numeric</li> </ul> |
| Minimum Code Length             | It specifies the minimum length of the code for a reference value.   |

|                     |   |
|---------------------|---|
| Maximum Code Length | It specifies the maximum length of the code for a reference value.  |
| Case                | It specifies a classification for the case type of the attribute reference format. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Upper case</li> <li>  Lower case</li> <li>  Both</li> </ul> |
| Mandatory           | Boolean attribute specifying whether the input of a reference value is mandatory.   |

Each *Attribute Reference* is linked to the relevant *Attribute Domain* and to many reference values (i.e. to all the values belonging to the *Attribute Reference*).

### 1.3.13 Market-specific attributes

The following diagram shows the conceptual data model for market-specific attributes management.



It is possible for a CSD to define additional, specific attributes for its *Securities*, *Parties* and *Securities Accounts*. These attributes give the possibility to add data to *Securities*, *Parties* and *Securities Accounts* for informational purposes and for the configuration of restriction type. A CSD can configure and load its own market-specific attributes as part of its reference data migration process to CRDM. It is also possible to add further Market-Specific Attributes or changing the configuration of the existing market-specific attributes. When doing so, however, the CSD has to ensure the data integrity of the information stored in CRDM. In the same way, a CB can define additional specific attributes for its payment banks.

Only the following validations are possible for these attributes:

- | Format validation: the value assigned to an attribute is validated against the format definition for that attribute;
- | Mandatory check: if an attribute is defined as mandatory, each securities, party or securities account for which the attribute is defined must have a value assigned for it {T2S.16.790}; On this basis:
  - CRDM rejects the creation of a new security by the security-maintaining CSD, if it provides no value for a Market-Specific Attribute that it has defined as mandatory;
  - CRDM rejects the creation of a new security-CSD link by an investor CSD, if it provides no value for a Market-Specific Attribute that has been defined as mandatory;
  - CRDM rejects the creation of a new Securities Account by a CSD, if it provides no value for a Market-Specific Attribute that has been defined as mandatory;
  - CRDM rejects the creation of a new Party by a CSD/CB, if it provides no value for a Market-Specific Attribute that has been defined as mandatory;
  - CRDM rejects the creation of a new security by the CSD, if it provides no value for a Market-Specific Attribute that it has defined as mandatory;
- | Uniqueness: if an attribute is defined as unique, each Securities, Party or Securities Account for which the attribute is defined must have a value assigned for it and this value must be unique across all Securities, Parties or Securities Account.
- | Valid list value: the value assigned to an attribute must belong to a list of valid values for that attribute.

## 1. Market-Specific Attribute

This entity includes all reference data for *Market-specific attributes*.

| ATTRIBUTE                      | DESCRIPTION  |
|--------------------------------|--|
| Market-Specific Attribute Name | Name of the market-specific attribute.   |
| Market-Specific Attribute Type | Type of the market-specific attribute. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Security</li> <li>  Party</li> <li>  Securities Account</li> </ul> |
| Mandatory                      | Boolean attribute specifying whether providing a value for the market-specific attribute type is mandatory.  |
| Unique                         | Boolean attribute specifying whether the value provided for the market-specific attribute type has to be unique.   |

Each *Market-Specific Attribute* can be linked to one or many *Securities*, *Parties* or *Securities Accounts*<sup>65</sup>, and to the relevant Attribute Domain.

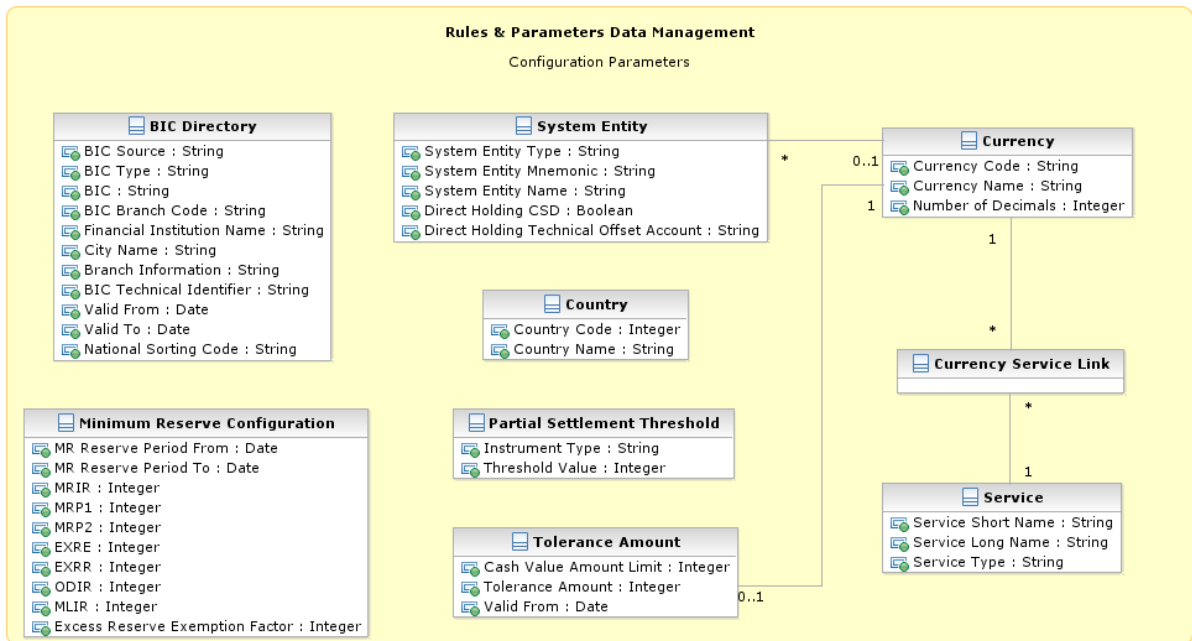
### 1.3.14 Configuration parameters

This section describes all reference data concerning the following rules and parameters:

- | Country;
- | Currency;
- | System entity;
- | BIC Directory;
- | Service;
- | Minimum Reserve Configuration.

The following diagram shows the conceptual data model for Configuration Parameters management.

<sup>65</sup> For each link between a market specific attribute and a specific security, party or securities account the value assigned to the security, to the party or to the securities account must be specified.



## 1. Country

This entity includes all reference data related to countries defined in the different Services.

| ATTRIBUTE    | DESCRIPTION  |
|--------------|--|
| Country Code | Numeric code of the country according to the ISO 3166-1:2020 alpha-2 standard. |
| Country Name | Name of the country according to the ISO 3166-1:2020 alpha 2 standard.         |

## 2. Currency

This entity includes all reference data related to *Currencies* defined in the different Services .

| ATTRIBUTE          | DESCRIPTION   |
|--------------------|---|
| Currency Code      | Unique code of the currency according to the ISO 4217 standard. |
| Currency Name      | Name of the currency.   |
| Number of Decimals | Number of decimals in which the currency is expressed.          |

Each *Currency* is linked to one to many *Services* (which allow settlement for that *Currency*).

## 3. Partial Settlement Threshold

This entity specifies all reference data required for the definition of partial settlement thresholds in T2S. Partial settlement thresholds shall apply for each *Settlement Instruction* eligible for partial settlement. The threshold in quantity for both unit-quoted securities and nominal-quoted securities equals the minimum settlement unit and the settlement unit multiple of the underlying security defined in the se-

curities reference data. Each threshold specifies the minimum cash value and currency (for equity instruments and for debt instruments) that T2S applies to trigger partial settlement.

| ATTRIBUTE       | DESCRIPTION  |
|-----------------|--|
| Instrument Type | It specifies a classification for the threshold based on the type of instrument. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Uni-quoted securities</li> <li>  Nominal-quoted securities</li> <li>  Both types are determined by the first character of the ISO10962 Classification of Financial Instruments stored as securities reference data.</li> </ul> |
| Threshold Value | Value of the threshold as an amount in cash.   |

Each *Partial Settlement Threshold* is linked to the relevant *Currency*. The threshold in cash value for unquoted securities equals 10,000 EUR. The threshold in cash value for nominal-quoted securities equals 100,000 EUR.

#### 4. System Entity

This entity includes all reference data for system entities. System entities define the entities (i.e. Central Banks and the CRDM Operator) by which data is segregated.

| ATTRIBUTE                               | DESCRIPTION   |
|---|---|
| System Entity Type                      | It specifies a classification for the system entity. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Operator</li> <li>  Central Bank (CB)</li> <li>  Central Securities Depository (CSD)</li> </ul> |
| System Entity Mnemonic                  | It specifies a unique short code used to identify the system entity.  |
| System Entity Name                      | It specifies the full name of the system entity.  |
| Direct Holding CSD                      | Boolean attribute specifying whether the system entity is a CSD and it operates in a direct holding market.   |
| Direct Holding Technical Offset Account | It specifies the technical offset account that T2S requires for settlement of settlement instructions in a direct holding market.   |

Every reference data entity or T2S dynamic data entity owned explicitly by a CSD or CB, has an association with the relevant *System Entity*, to inherit the System Entity Identifier attribute.

Each *System Entity* is linked to its relevant *Party*, i.e. to the CRDM Operator or the Central Bank defined as a *Party* and corresponding to the same *System Entity*.

## 5. Tolerance Amount

This entity defines the set of tolerance amount values for each *Currency* eligible for settlement in T2S.

| ATTRIBUTE               | DESCRIPTION   |
|-------------------------|---|
| Cash Value Amount Limit | It specifies the cash value up to (and including) which the tolerance amount is valid.  |
| Tolerance Amount        | It specifies the tolerance amount value within the range identified by the cash value amount limit and for the linked currency. |
| Valid From              | It specifies the date from which a given set of tolerance amount values is valid.   |

The *Tolerance Amount* entity inherits the *Currency Identifier* attribute from the association to the *Currency* entity to provide the capability to define *Tolerance Amounts* per T2S settlement *Currency*.

## 6. BIC Directory

This entity includes all the information needed to identify the legal entities to which SWIFT assigned the BIC that is used to validate the input BICs as *Party* identifiers. Common Reference Data Management supports the automatic loading and update of the *BIC Directory* based on the SWIFT Bank Directory Plus.

| ATTRIBUTE                  | DESCRIPTION  |
|----------------------------|--|
| BIC Source                 | It specifies a classification for the BIC source. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Manual input</li> <li>  Automatic loading</li> </ul>    |
| BIC Type                   | It specifies a classification for the BIC type. The exhaustive list of possible values is as follows: <ul style="list-style-type: none"> <li>  Official BIC</li> <li>  Internal technical BIC</li> </ul> |
| BIC                        | 8-character BIC, consisting of the bank code (financial institution), country code and location code.  |
| BIC Branch Code            | 3-character branch code for the financial institution.   |
| Financial Institution Name | Three text fields with a length of 35 characters each to store the name of the financial institution.  |
| City Name                  | 35-character name of the city in which the financial institution resides.  |
| Branch Information         | Two text fields with a length of 35 characters each to identify the branch of the financial institution.   |



|                          |  |
|--------------------------|--|
| BIC Technical Identifier | This attribute specifies the unique technical identifier of a BIC. |
| Valid From               | It specifies the date from which the BIC is valid.                 |
| Valid To                 | It specifies the date to which the BIC is valid.                   |

## 7. Service

This entity stores information on all the different *Services* that rely on reference data stored in the Common Reference Data Management.

| ATTRIBUTE          | DESCRIPTION   |
|--------------------|---|
| Service Short Name | Identification of the Service.  |
| Service Long Name  | Extended identification of the Service.   |
| Service Type       | Defines whether the Service is a Service that belongs to the Eurosystem Market Infrastructures or not. The exhaustive list of possible values follows: <ul style="list-style-type: none"> <li>  Internal (i.e. service belonging to the Eurosystem Market Infrastructures)</li> <li>  External</li> </ul> |

Each Service may be linked to one or multiple *Currencies*.

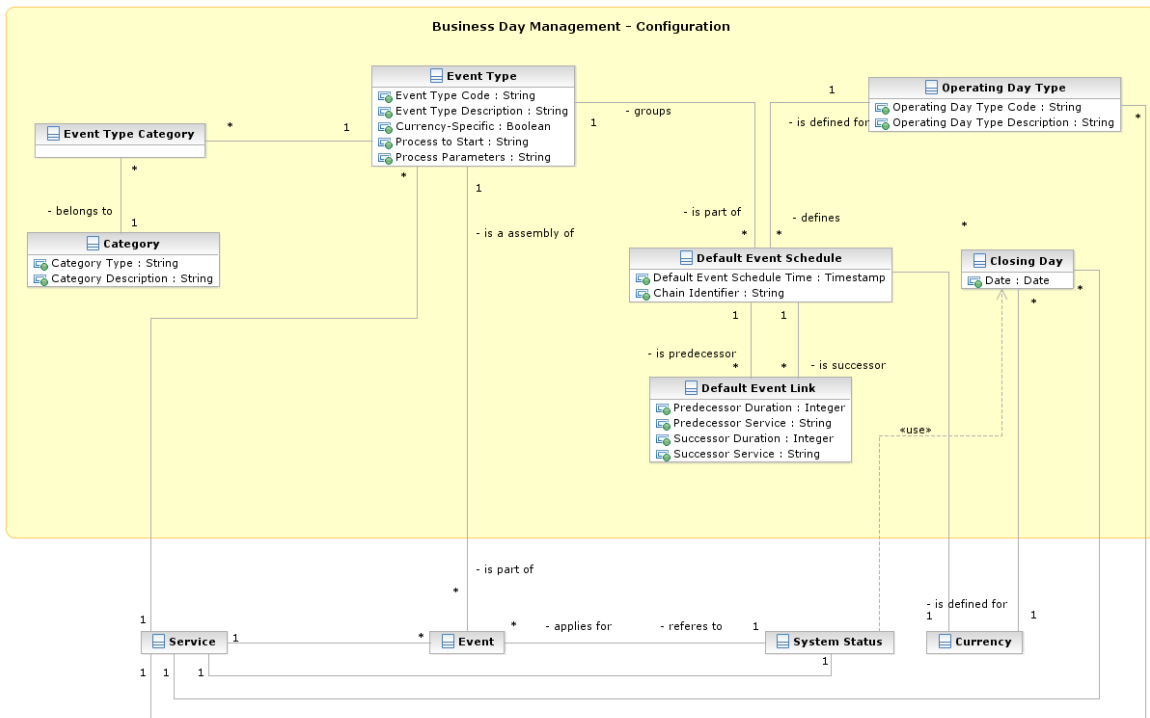
## 8. Minimum Reserve Configuration

This entity stores information on *Minimum Reserve Configuration* required by CLM Service.

| ATTRIBUTE                       | DESCRIPTION   |
|---------------------------------|---|
| Maintenance Period From         | It specifies the starting of validity for a minimum reserve period. |
| Maintenance Period To           | It specifies the ending of validity for a minimum reserve period.   |
| MRIR                            | It specifies the minimum reserve interest rate.                     |
| MRP1                            | It specifies the minimum reserve penalty rate type 1.               |
| MRP2                            | It specifies the minimum reserve penalty rate type 2.               |
| EXIR                            | It specifies the excess reserve interest rate.                      |
| ODIR                            | It specifies the overnight deposit interest rate.                   |
| MLIR                            | It specifies the marginal lending interest rate.                    |
| Excess reserve exemption factor | Factor for the calculation of the excess reserve exemption factor.  |

### 1.3.15 Business Day Management configuration

The following diagram shows the conceptual data model for Business Day Management data.



The scheduling of any actual operating day is based on a set of pre-defined Event Types that can be combined, according to different default schedules, into different Operating Day Types

## 1. Event Type

This entity includes all the information concerning the Event Types defined in CRDM for every Service. An Event Type is any possible kind of event in CRDM for every Service (e.g. EOD, SOD, Cut-off, Beginning of day time and so forth), regardless of its planned or actual triggering time.

| ATTRIBUTE              | DESCRIPTION   |
|------------------------|---|
| Event Type Code        | The unique name of the event type.  |
| Event Type Description | Description of the event type.  |
| Currency-Specific      | Boolean attribute specifying whether the event type can be triggered at different times for different currencies.   |
| Process to Start       | It specifies the process(es) that must be started in the related Service when an event of this type is triggered.   |
| Process Parameters     | It specifies all the parameters of the process(es) that must be started when an event of this type is triggered, e.g. the identification of the software component(s) to be started, the set of required input parameters, an indication whether a process completed notification is expected, etc. |

Each Event Type can be scheduled at different times for different Services, Operating Day Types and different Currencies, in case the Event Type is currency-specific. An Event Type can be linked to one or many Categories and must be linked to one Service<sup>66</sup>.

## 2. Category

This entity includes all the information concerning the entity Category defined in CRDM. Each Category is linked to one or many Event Types and defines the possible uses of that Event Type within other entities.

| ATTRIBUTE            | DESCRIPTION  |
|----------------------|--|
| Category Type        | It specifies the type of the category. The exhaustive list of possible value is: <ul style="list-style-type: none"> <li>  Business report</li> <li>  CRDM report</li> <li>  Liquidity transfer order report</li> </ul> |
| Category Description | It specifies the description of the category.  |

## 3. Operating Day Type

This entity includes all the information concerning the Operating Day Types defined in CRDM, so to allow the CRDM operator to define different kinds of operating days in each Service (e.g. to define specific settlement day types in which some Events must deviate from the standard schedule, or for testing purposes).

| ATTRIBUTE                      | DESCRIPTION                            |
|--------------------------------|--|
| Operating Day Type Code        | Code of the operating day type.        |
| Operating Day Type Description | Description of the operating day type. |

The Operating Day Type entity has a many-to-many association with the Event Type entity, which allows the CRDM operator to specify, for each Event Type of each Operating Day Type for each Service, one Default Event Schedule Time or several Default Event Schedule Times (in the case of currency-specific Event Types).

## 4. Default Event Link

This entity includes information on the predecessor/successor links between events within a specific Operating Day Type.

<sup>66</sup> The CRDM operator specifies each scheduled time via a Default Event Schedule link between the event type, an operating day type and a currency(when applicable).

| ATTRIBUTE            | DESCRIPTION   |
|----------------------|---|
| Predecessor Duration | Fixed delay between the predecessor event and the successor event, calculated on the completion of the predecessor. |
| Predecessor Service  | Service the predecessor event belongs to.   |
| Successor Duration   | Fixed delay between the predecessor event and the successor event, calculated from the start of the successor.      |
| Successor Service    | Service the successor event belongs to.   |

1.3.15.1.1.1 Each *Default Event Link* references pairs of *Default Event Schedules* in order to define couples of predecessor/successor events.

## 5. Closing Day

This entity defines the set of Closing Days for the each Service calendar.

| ATTRIBUTE | DESCRIPTION  |
|-----------|--|
| Date      | The specified date is a closing day for the linked currency. |

Each occurrence is linked to an occurrence of the Currency entity and an occurrence of Service.

It defines a specific Closing Day for the linked Currency and related Service.

## 1.4 CRDM Features

### 1.4.1 Concept

The CRDM common component allows duly authorised users to create and maintain reference data objects. CRDM objects specify reference data for the configuration of parties, securities, securities accounts, cash accounts and rules and parameters.

### 1.4.2 Overview

The CRDM common component is in charge of executing reference data maintenance instructions for the creation or the maintenance of reference data objects.

Duly authorised users belonging to CSDs, Central Banks, CSD participants, external CSDs, payment banks, ancillary systems and to the Operator can trigger Common Reference Data Management business processes according to their own specific access rights, i.e. using the functions and maintaining the common reference data objects they have been granted.

Duly authorised users of the Operator are responsible for system configuration tasks and for the management of common reference data for CSDs and Central Banks. These users can also act on behalf of other CRDM Actors in order to perform some specific actions or within some pre-defined contingency scenarios.

The CRDM common component executes immediately all reference data maintenance instructions. However, when changes to T2S-related objects are involved, this process takes place in slightly different

ways during the day-time settlement and the night-time settlement, both in terms of response time and of response messages generated by CRDM. More precisely, the processing of some reference data maintenance instructions submitted to CRDM during a T2S night-time settlement sequence may be provisionally stopped and then resumed after the end of night-time settlement sequence, in order to impede any possible impact of reference data changes on the ongoing settlement process. In this case, CRDM sends two different responses, an immediate provisional response in order to inform the relevant CRDM Actor that the reference data maintenance instruction has been queued, and a final response after the end of the night-time settlement sequence to report on the final status of the processing (See section 1.4.3.6 Reference data maintenance instructions processing for more information).

For certain TARGET services, the related reference data changes become effective in the relevant TARGET service(s), common component(s) or back-office applications in a deferred way, by means of a daily reference data propagation process. The process takes place every business day and is scheduled in order to ensure a smooth and complete reference data propagation depending on the operational schedule of the relevant Service(s)/components. Specific data changes are propagated with instant effect to certain Services/components. When any such change is carried out in CRDM, it is also propagated instantly to the relevant Service/component which takes into account with immediate effect. This applies to blocking Parties and Cash accounts in CLM, RTGS and TIPS as well as modifying CMB Limits in TIPS.

All common reference data objects can be created and maintained in U2A mode, whereas only a subset of them can be created and maintained also in A2A mode and/or through the DMT (see section 1.4.3.2 Reference data maintenance types). All reference data changes performed in U2A mode can be executed either in Two-Eyes or in Four-Eyes mode. Duly authorised users can specify the applicable mode for the functions and the common reference data objects they manage (see section 1.2.2 Access rights).

Versioning facilities and validity periods allow the implementation of data revision and data history features, in order to keep track of all past data changes, to enter changes meant to become effective as of a future date and to define common reference data objects with limited or unlimited validity.

### **1.4.3 Common reference data maintenance process**

#### **1.4.3.1 Common reference data objects**

Duly authorised users manage common reference data by creating and maintaining common reference data objects. A common reference data object is a set of logically related, self-consistent information. Parties and Cash Accounts are examples of common reference data objects. The following table provides the exhaustive list of common reference data objects defined in the CRDM and the CRDM Actors that are responsible for their management, i.e. for creating and maintaining them:

**TABLE 92 - COMMON REFERENCE DATA OBJECTS**

| AREA                    | OBJECT                                  | RESPONSIBLE CRDM ACTORS <sup>67, 68</sup>                  |
|-------------------------|---|--|
| Party                   | Party                                   | Operator, CSD, Central Bank                                |
|                         | Eligible Counterpart CSD Link           | CSD  |
|                         | Party Service Link                      | Operator, Central Bank                                     |
|                         | Banking Group                           | Central Bank   |
|                         | Billing Group                           | Central Bank   |
|                         | Ancillary System Bilateral Agreement    | Central Bank   |
|                         | Ancillary System Procedure              | Central Bank   |
| Securities              | Securities                              | CSD <sup>69</sup>  |
|                         | Securities valuation                    | Central Bank, Payment Bank                                 |
|                         | Close link                              | Central Bank, Payment Bank                                 |
|                         | Security CSD link                       | CSD  |
|                         | Auto-collateralisation eligibility link | Central Bank, Payment Bank                                 |
| Securities penalty data | Securities Subject to Cash Penalties    | CSD  |
|                         | Security penalty rate                   | Operator   |
|                         | Cash discount penalty rate              | Operator   |
|                         | Daily price                             | CSD  |
|                         | SME Growth Market                       | Operator   |
|                         | Euro Foreign Exchange Reference Rate    | Central Bank <sup>70</sup>                                 |
| Securities account      | Securities account                      | CSD  |
|                         | CSD account link                        | CSD  |
|                         | CMB securities account link             | CSD, CSD Participant                                       |
| Cash account            | Cash account                            | Central Bank, Payment Bank, Ancillary System <sup>71</sup> |
|                         | Credit Memorandum Balance               | Central Bank, Payment Bank                                 |
|                         | Limit                                   | Central Bank, Payment Bank                                 |
|                         | Authorized Account User                 | Payment Bank, Ancillary System                             |
|                         | Account Monitoring Group                | Payment Bank   |
|                         | Liquidity Transfer Order                | Central Bank, Payment Bank, Ancillary System               |
|                         | Liquidity Transfer Order Link Set       | Central Bank, Payment Bank                                 |

| AREA                               | OBJECT                          | RESPONSIBLE CRDM ACTORS <sup>67, 68</sup>         |
|------------------------------------|---------------------------------|---|
|                                    | External RTGS Account           | Central Bank                                      |
|                                    | Liquidity Transfer Group        | Central Bank                                      |
|                                    | Settlement Bank Account Group   | Central Bank                                      |
|                                    | Direct Debit Mandate            | Central Bank                                      |
|                                    | Standing Order for Limit        | Payment Bank, Ancillary System                    |
|                                    | Standing Order for Reservation  | Payment Bank, Ancillary System                    |
| Access rights management           | User                            | All   |
|                                    | Role                            | Operator, CSD, Central Bank                       |
|                                    | Privilege                       | Operator  |
|                                    | Secured Object                  | Operator, CSD, Central Bank                       |
|                                    | Secured Group                   | Operator, CSD, Central Bank                       |
|                                    | Certificate DN                  | All   |
|                                    | User-Certificate DN Link        | All   |
|                                    | Role User <sup>72</sup>         | All   |
|                                    | Role Party <sup>73</sup>        | Operator, CSD, Central Bank                       |
|                                    | Grantee Privilege <sup>74</sup> | All   |
| Message subscription configuration | Message subscription rule       | CSD, Central Bank, Payment Bank, Ancillary System |
|                                    | Message subscription rule set   | CSD, Central Bank, Payment Bank, Ancillary System |

67 "All" indicates that all types of CRDM Actors (CRDM Operator, CSDs, Central Banks, CSD Participants, External CSDs, Payment Banks, Ancillary System) have the ability to manage the object type.

68 The Actor types listed for each function refer to the default responsible Actor in normal operating conditions. However it is possible for the CRDM Operator to act on behalf of CSDs and Central Banks (and of External CSDs, CSD Participants, Payment Banks and Ancillary Systems, upon request of the relevant Central Bank): for CSD to act on behalf of their CSD Participants and External CSDs and for the Central Banks to act on behalf of their Payment Banks and Ancillary Systems, under well-defined contingency scenarios.

69 Only the Operator can maintain ISIN codes, in case of input errors by the responsible CSD.

70 Only the ECB will be allowed to maintain data for Euro Foreign Exchange reference rates.

71 The Cash Account object includes TIPS CMBs. In this respect, Payment Banks may only create and maintain TIPS CMBs, whereas Central Banks create and maintain any other account type and may create and maintain TIPS CMBs on behalf of their Payment Banks.

72 This object is related to the granting/revoking of Roles to/from Users.

73 This object is related to the granting/revoking of Roles to/from Parties.

74 This object is related to the granting/revoking of Privileges to/from Roles, Parties and Users.

| AREA  | OBJECT                                   | RESPONSIBLE CRDM ACTORS <sup>67, 68</sup> |
|---|--|---|
| Network configuration                         | DN-BIC Routing                           | All                                       |
|   | Network service                          | Operator                                  |
|   | Technical address Network service link   | Operator, CSD, Central Bank               |
|   | Routing                                  | All                                       |
| Report configuration                          | Report type                              | Operator                                  |
|   | Report configuration                     | All                                       |
| Attribute domain management<br><sup>75</sup>  | Attribute domain                         | Operator, CSD, Central Bank               |
|   | Attribute reference                      | Operator, CSD, Central Bank               |
| Business day management configuration         | Event Type                               | Operator                                  |
|   | Operating Day Type                       | Operator                                  |
|   | Closing Day                              | Operator                                  |
| Market-specific attribute configuration       | Market-specific attribute                | CSD, Central Bank                         |
| Restriction type management                   | Restriction type                         | Operator, CSD, Central Bank               |
|   | Restriction type rule                    | Operator, CSD, Central Bank               |
| Conditional securities delivery configuration | Conditional securities delivery rule     | CSD                                       |
|   | Conditional securities delivery rule set | CSD                                       |
| Billing configuration                         | Service Item                             | Operator                                  |
|   | Billing Service Configuration            | Operator                                  |
|   | Tariff                                   | Operator                                  |
|   | Invoice configuration                    | Central Bank                              |
|   | VAT                                      | Central Bank                              |
| Configuration parameters                      | Country                                  | Operator                                  |
|   | Currency                                 | Operator                                  |
|   | Currency Service Link                    | Operator                                  |
|   | Partial Settlement Threshold             | Operator                                  |
|   | System entity                            | Operator                                  |
|   | Tolerance Amount                         | Operator                                  |
|   | BIC directory                            | Operator                                  |

<sup>75</sup> Attribute domain management includes also some T2S general configuration parameters.



| AREA | OBJECT                        | RESPONSIBLE CRDM ACTORS <sup>67, 68</sup> |
|------|-------------------------------|---|
|      | Service                       | Operator                                  |
|      | Minimum Reserve Configuration | Operator                                  |

A common reference data object consists of one or more classes of information. For example, a party is a common reference data object, consisting of the following classes of information:

- | Party;
- | Party code;
- | Party name;
- | Party address;
- | Party technical address;
- | Party contact;
- | Party restriction.

Each class of information includes a defined set of attributes. For example, the class of information party name of the common reference data object party includes the following attributes:

- | the long name of the party;
- | the short name of the party;
- | the starting validity date of the party name.

The CRDM common component provides functions to maintain all common reference data objects (see section 1.4.3.2 Reference data maintenance types). Each maintenance operation on a common reference data object results in a new version of the same object. Each version of a common reference data object is called a revision of the object. Consequently, at any point in time, CRDM stores one or many revisions of each common reference data object, more precisely only one revision for newly created objects that were never maintained after their creation and N revisions for objects that were maintained N-1 times after they were created. The first revision of each common reference data object includes all the attribute values provided at creation time. After that, each maintenance request successfully processed creates a new revision for the object. This means that each revision may entail changes of many attributes of the same common reference data object at the same time. A new revision is also created when deleting and restoring a common reference data object.

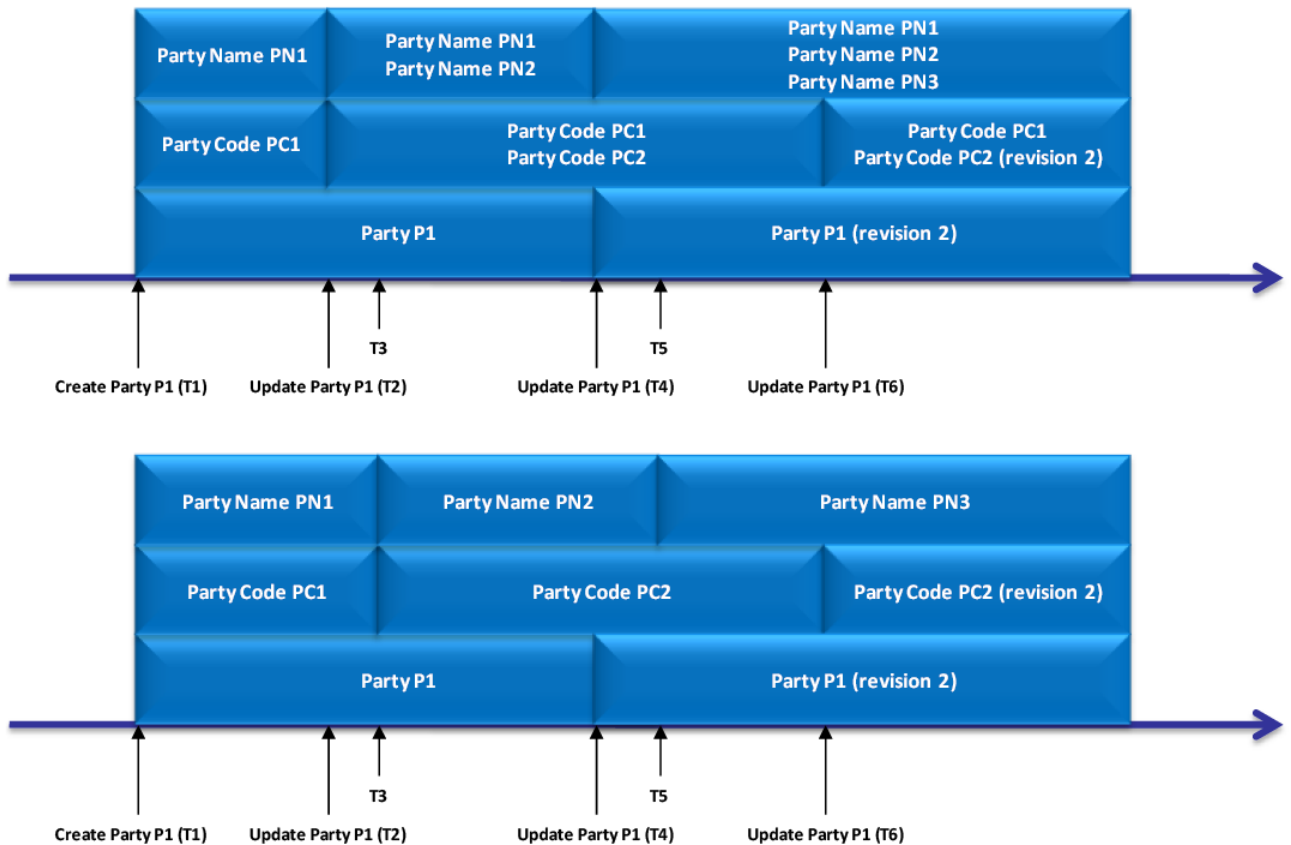
Some classes of information are subject to data history, i.e. classes of information having multiple occurrences with continuous and non-overlapping validity periods. For example, the classes of information party name and party code of the common reference data object party can be subject to data history. In fact, they include a Valid From attribute which determines the valid value of these classes of information at any given point in time.

The rest of this section provides two examples, the first one showing the difference between data revision and data history of reference data objects, the latter putting together all the concepts described so far.

**EXAMPLE 33 - EFFECT OF REFERENCE DATA MAINTENANCE INSTRUCTIONS ON PARTY, PARTY NAME AND PARTY CODE**

The following diagram illustrates the effects of some reference data maintenance instructions (including both revisions and data history) on three classes of information (party, party name and party code) of a party reference data object. More precisely, the upper part of the diagram shows, for each class of information, all the occurrences stored in CRDM at any given point in time, whereas the lower part shows only the ones that CRDM considers valid and it uses for processing.

**DIAGRAM 19 - DATA REVISION AND DATA HISTORY**



During business day T1, a duly authorised user creates a new party P1, named PN1 and with party code PC1.

Then, on business day T2, a duly authorised user updates party P1, specifying a new party name PN2 and a new party code PC2 meant to be valid as of a future date (T3). As a consequence, both party names PN1 and PN2 and both party codes PC1 and PC2 are valid, but their validity periods, from T1 to T3 and from T3 on respectively, do not overlap. This implies, for example, that from business day T2:

- Any given query or report including reference data of party P1, shows the values PN1 and PC1 for party name and party code if the query or the report refers to the time period between T2 and T3, PN2 and PC2 otherwise.
- All Settlement Instructions related to party P1 are validated against the party code PC1 during the time period between T2 and T3, against PC2 otherwise.

On business day T4, a duly authorised user updates again party P1, specifying a new party name PN3 meant to be valid as of a future date (T5) and amending the party class of information. As a

consequence, the three party names PN1, PN2 and PN3 are all valid, but without any overlap in their validity periods, whereas the amendment performed on P1 just results in a new revision of this class of information. This implies that from business day T4:

- I CRDM starts immediately using the values of the new revision of party P1 for processing.
- I CRDM considers PN2 as valid party name for party P1 from T4 to T5, PN3 from T5 on.

Finally, during business day T6, a duly authorised user updates again party P1, amending the party code PC2, already existing. As a consequence, the same party codes as before are valid, with the same validity periods, the only difference being a new value for the party code PC2. This results in CRDM starting immediately using the new value of PC2 for processing.

#### EXAMPLE 34 - CREATION OF A FINANCIAL INSTRUMENT

A duly authorised user creates a new financial instrument S1, named SN1 and with ISIN SC1:

**DIAGRAM 20 - CREATION OF A SECURITY**



This results in the creation of three classes of information for the new financial instrument, i.e. two classes of information storing the attributes of the financial instrument not subject to data history (one related to the Security and another related to the Securities Code):

**TABLE 93 - SECURITIES**

| TECHNICAL IDENTIFIER | REVISION | ISSUE DATE | FINAL MATURITY OR EXPIRY DATE | SETTLEMENT TYPE | APPROVAL STATUS |
|----------------------|----------|------------|-------------------------------|-----------------|-----------------|
| S1                   | 1        | 2015-02-04 | -                             | Units           | Active          |

**TABLE 94 - SECURITIES CODE**

| TECHNICAL IDENTIFIER | REVISION | VALID FROM | SECURITIES MNEMONIC | APPROVAL STATUS |
|----------------------|----------|------------|---------------------|-----------------|
| SC1                  | 1        | 2015-02-04 | ABC                 | Active          |

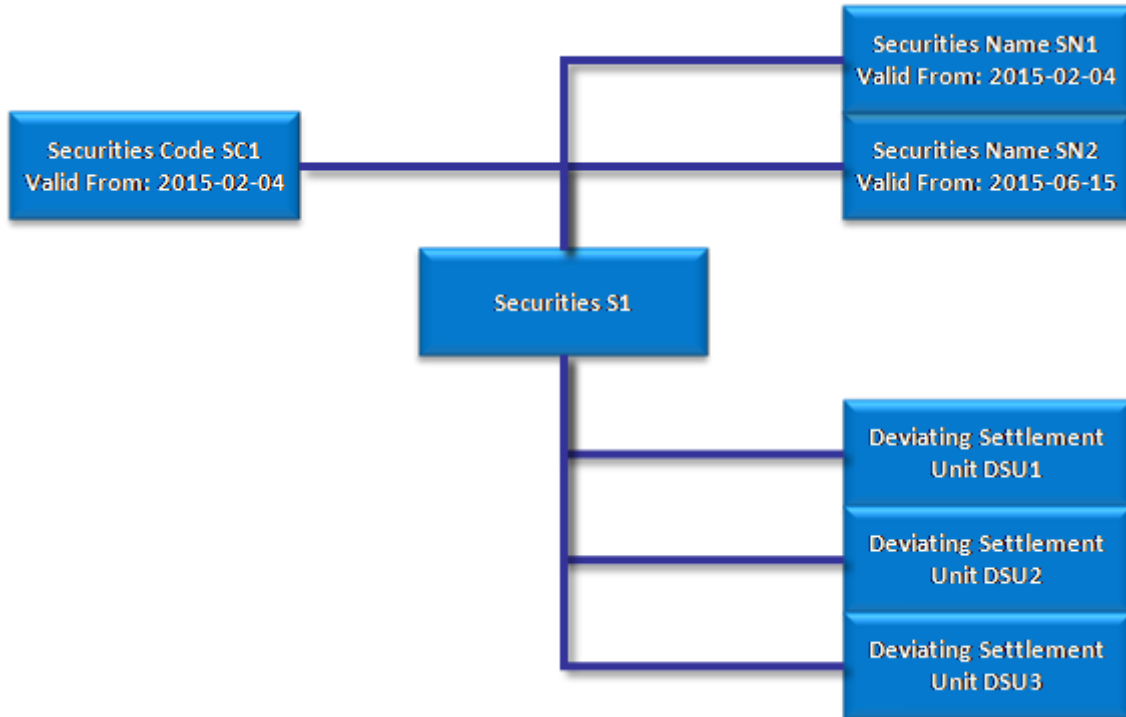
And one class of information for attributes of the financial instrument subject to data history concerning the securities name:

**TABLE 95 - SECURITIES NAME**

| TECHNICAL IDENTIFIER | REVISION | VALID FROM | SECURITIES SHORT NAME | APPROVAL STATUS |
|----------------------|----------|------------|-----------------------|-----------------|
| SN1                  | 1        | 2015-02-04 | Dummy Name            | Active          |

Then, a duly authorised user updates the financial instrument S1, creating a new name SN2, valid as of June 15th 2014, and three deviating settlement units DSU1, DSU2 and DSU3:

**DIAGRAM 21 - FIRST UPDATE OF THE SECURITY**



This results in the creation of four new classes of information for the financial instrument S1, i.e. a class of information storing the new name for the financial instrument:

**TABLE 96 - SECURITIES NAME**

| TECHNICAL IDENTIFIER | REVISION | VALID FROM | SECURITIES SHORT NAME | APPROVAL STATUS |
|----------------------|----------|------------|-----------------------|-----------------|
| SN2                  | 1        | 2015-06-15 | Dummy Name            | Active          |

and three classes of information storing the newly defined deviating settlement units:

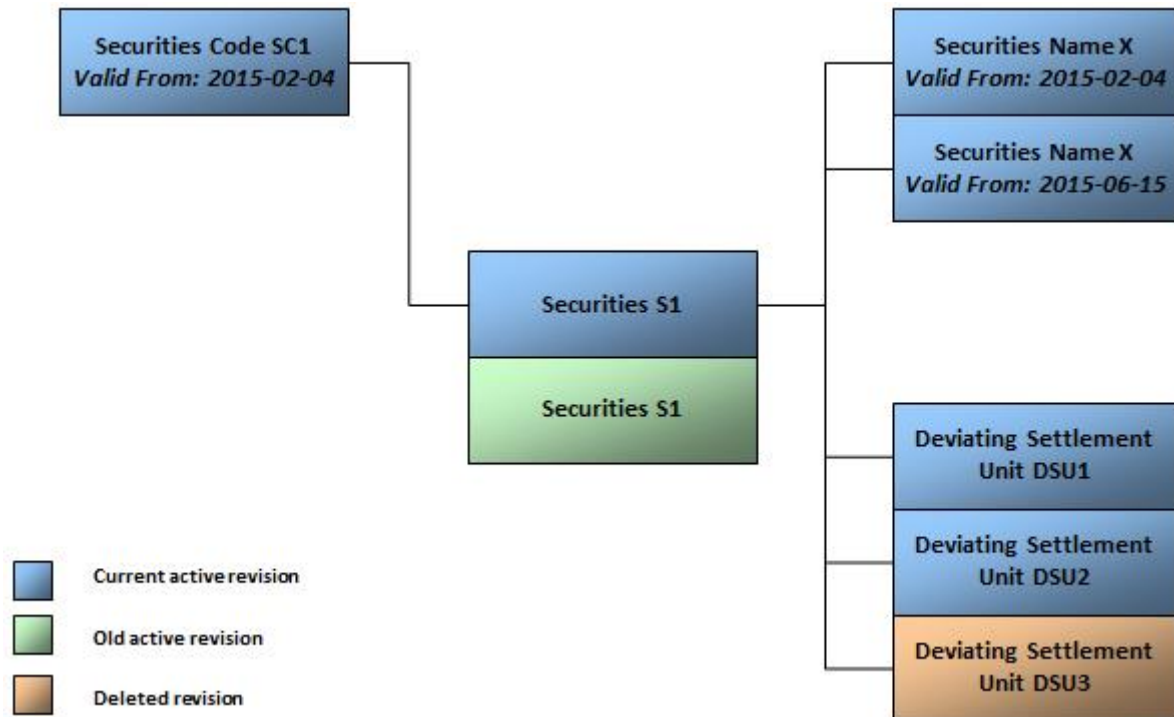
**TABLE 97 - DEVIATING SETTLEMENT UNIT**

| TECHNICAL IDENTIFIER | REVISION | DEVIATING SETTLEMENT UNIT | APPROVAL STATUS |
|----------------------|----------|---------------------------|-----------------|
| DSU1                 | 1        | 13                        | Active          |
| DSU2                 | 1        | 17                        | Active          |
| DSU3                 | 1        | 23                        | Active          |

All these new classes of information are linked to the same class of information S1 for the financial instrument.

Finally, a duly authorised user updates again the financial instrument S1, updating the expiry date and deleting the deviating settlement unit DSU3:

**DIAGRAM 22 - SECOND UPDATE OF THE SECURITY**



This results in the update of the class of information related to the financial instrument S1:

**TABLE 98 - SECURITIES**

| TECHNICAL IDENTIFIER | REVISION | ISSUE DATE | FINAL MATURITY OR EXPIRY DATE | SETTLEMENT TYPE | APPROVAL STATUS |
|----------------------|----------|------------|-------------------------------|-----------------|-----------------|
| S1                   | 1        | 2015-02-04 | -                             | Units           | Active          |
| S1                   | 2        | 2015-02-04 | 2015-08-04                    | Units           | Active          |

and the deletion of the class of information related to the deviating settlement unit DSU3:

**TABLE 99 - DEVIATING SETTLEMENT UNIT**

| TECHNICAL IDENTIFIER | REVISION | DEVIATING SETTLEMENT UNIT | APPROVAL STATUS |
|----------------------|----------|---------------------------|-----------------|
| DSU1                 | 1        | 13                        | Active          |
| DSU2                 | 1        | 17                        | Active          |
| DSU3                 | 1        | 23                        | Active          |
| DSU3                 | 2        | 23                        | Deleted         |

#### 1.4.3.2 Reference data maintenance types

The CRDM common component allows a duly authorised user to perform the following types of reference data maintenance operations on common reference data objects:

- | Create. It creates a new common reference data object.
- | update. It updates an already existing common reference data object. It is possible, with a single update, to create, update or delete one or many classes of information of a common reference data object at the same time.
- | Delete. It deletes an already existing common reference data object. Deletion is always logical and not physical. Physical deletion is performed automatically by the Common Reference Data Management service when performing the purge process following the archiving process (see section 1.4.3.4 Common reference data archiving and purging).
- | Restore<sup>76</sup>. It reactivates a previously deleted common reference data object, i.e. it updates the status of this object from deleted to active.

Besides these operations, the Common Reference Data Management service provides some specific types of reference data maintenance operations for the configuration of access rights (see section 1.2.2 Access rights for a detailed description of these operations).

CRDM allows all reference data maintenance types on all reference data objects in U2A mode, whereas it allows them only on a subset of reference data objects through the DMT and A2A mode respectively. The following table shows the exhaustive list of all the available reference data maintenance types that are possible in the DMT and in A2A mode:

**TABLE 100 – MANAGEMENT OF REFERENCE DATA OBJECTS IN DMT AND A2A MODE**

| AREA                  | OBJECT                                       | DMT FUNCTION | A2A FUNCTION           |
|-----------------------|--|--------------|------------------------|
| Party data management | Party  | Create       | Create, Update, Delete |
|                       | Party Market-Specific Attribute              | Create       | n/a                    |
|                       | Eligible counterpart CSD link                | Create       | Create                 |
|                       | Technical address network service link       | Create       | n/a                    |
| Securities            | Securities                                   | Create       | Create, Update, Delete |
|                       | Securities Market-Specific Attribute         | Create       | n/a                    |
|                       | Securities Restriction                       | Create       | n/a                    |
|                       | Securities CSD link                          | Create       | Create, Update         |
|                       | Securities valuation                         | n/a          | Create                 |
|                       | Close Link                                   | n/a          | Create, Delete         |
|                       | Auto-collateralisation eligibility link      | n/a          | Create, Delete         |
| Securities account    | Securities account                           | Create       | Create, Update, Delete |
|                       | Securities account Market-specific attribute | Create       | n/a                    |

<sup>76</sup> This function is available in U2A mode only and it is granted, for each object, with the system privilege that allows deleting the same object as well.

| AREA                               | OBJECT                        | DMT FUNCTION  | A2A FUNCTION           |
|------------------------------------|-------------------------------|---------------|------------------------|
|                                    | CMB Securities account link   | Create        | Create                 |
|                                    | CSD Account Link              | Create        | n/a                    |
| Cash account data management       | Cash account                  | Create        | Create, Update, Delete |
|                                    | Liquidity Transfer Order      | n/a           | Create, Update, Delete |
|                                    | Authorised account user       | Create        | n/a                    |
|                                    | Limit                         | Create        | Update, Delete         |
| Access rights management           | User                          | Create        | n/a                    |
|                                    | Role                          | Create, Grant | n/a                    |
|                                    | Privilege                     | Grant         | n/a                    |
|                                    | Secured Group                 | Create        | n/a                    |
|                                    | Certificate DN                | Create        | n/a                    |
|                                    | User-Certificate DN Link      | Create        | n/a                    |
| Message subscription configuration | Message subscription rule set | Create        | n/a                    |
|                                    | Message subscription rule     | Create        | n/a                    |
| Report configuration               | Report configuration          | Create        | n/a                    |
| CoSD management                    | CoSD Rule                     | Create        | n/a                    |
|                                    | CoSD Rule Set                 | Create        | n/a                    |
| Restriction Type management        | Restriction Type              | Create        | n/a                    |
|                                    | Restriction Type Rule         | Create        | n/a                    |

CRDM allows the management of all the other reference data objects listed in Reference Data Objects (see section 1.4.3.1 Common reference data objects ) in U2A mode only.

### 1.4.3.3 Validity of common reference data objects

Some common reference data objects include attributes limiting the validity period of these objects. For example, each Party service link, which defines the participation of a given payment bank or ancillary system in a specific service, common component or back-office application, includes two attributes specifying the date from which and the date to which the link is valid, i.e. the period in which said payment bank or ancillary system can operate in that service, common component or back-office application. Between the creation date and the deletion date of the link, but outside the validity period just defined, the payment bank/ancillary system is not allowed to operate in the Service, even though it is active in the CRDM repository and it can be queried and maintained by a duly authorised user.

Similarly, each CSD account link, which defines the configuration of securities accounts for cross-CSD settlement between two given CSDs, includes two attributes specifying the date from which and the date to which the link is valid, i.e. the period in which T2S can use it for cross-CSD settlement between

the two interested CSDs. Between the creation date and the deletion date of the link, but outside the validity period just defined, T2S cannot use the link for cross-CSD settlement, even though it is active and it can be queried and maintained by a duly authorised user.

The CRDM common component makes a distinction between the following two categories of common reference data objects:

- | common reference data objects with unlimited validity period,
- | common reference data objects with limited validity period.

The following table shows the exhaustive list of all the common reference data objects with unlimited validity period:

**TABLE 101 - COMMON REFERENCE DATA OBJECTS WITH UNLIMITED VALIDITY PERIOD**

| AREA                     | OBJECT  | USAGE BY T2S PROCESSES  |
|--------------------------|---|---|
| Party                    | Banking Group<br>Billing Group  | n/a   |
| Securities               | Auto-collateralisation eligibility link<br>Close link   | Taken into account by Settlement application process Realignment, CoSD, Optimising, Posting as of the next business date  |
| Securities penalty data  | SME Growth Market   | Taken into account by T2S Penalty Mechanism: <ul style="list-style-type: none"> <li>  on the current business day if provided before the deadline</li> <li>  as of the next business date if provided after the deadline</li> </ul> |
| Cash Account             | Credit memorandum balance <sup>77</sup><br>External RTGS account<br>Account Monitoring Group<br>Liquidity Transfer Group<br>Settlement Bank Account Group | Taken into account by all processes upon creation or update   |
| Access rights management | User<br>Role<br>Privilege<br>Secured object   | Taken into account by all processes upon creation or update   |

<sup>77</sup> The Credit Memorandum Balance itself has an unlimited validity period, but it contains links to Receiving and Regular Securities Accounts which have a limited validity period. These links can only be created or updated as of a future date.



| AREA                                  | OBJECT  | USAGE BY T2S PROCESSES                                      |
|---------------------------------------|---|---|
|                                       | Secured group<br>Certificate DN<br>User-Certificate DN Link<br>Role User Link<br>Role Party Link<br>Privilege Role Link |   |
| Network configuration                 | Network service<br>Technical Address Network Service Link<br>Routing  | Taken into account by all processes upon creation or update |
| Report configuration                  | Report type   | Taken into account by all processes upon creation or update |
| Attribute domain management           | Attribute domain<br>Attribute reference   | Taken into account by all processes upon creation or update |
| Business day management configuration | Event Type<br>Operating Day Type<br>Closing Day   | Taken into account by all processes upon creation or update |
| Configuration parameters              | Country<br>Currency<br>Partial settlement threshold<br>Currency Service Link<br>System entity<br>Service                | Taken into account by all processes upon creation or update |
| Billing Configuration                 | Service Items<br>Invoice Configuration<br>VAT   | Taken into account by all processes upon creation or update |

This type of common reference data object starts being valid in CRDM immediately after it has been created. Similarly, a common reference data object with unlimited validity period may be immediately updated or deleted by a duly authorised user. However, in both cases the reference data change, i.e. the creation of a new object or the update or deletion of an already existing object is made effective in the relevant Service(s) only by means of the daily reference data propagation process. T2S is an exception to this behaviour, as it does not rely on a daily data propagation process. Therefore, in T2S,

this type of reference data object starts being valid immediately after it has been created, with the exceptions listed above.

Not having a validity period, all reference data objects with unlimited validity period can only be updated intraday, i.e. changes on these reference data objects are immediately valid and it is not possible to update them as of a future date. However, some T2S processes may use certain reference data objects taking into account their successful maintenance only as of the SoD phase of the following settlement day <sup>78</sup>, as described in the column "Usage by T2S Processes" above. This list is valid both for daylight and night-time processing.

Reference data objects with limited validity period are used by other processes taking into account the start and the end of the validity period. More precisely, many processes (e.g. the T2 or T2S settlement process) rely on reference data objects that are valid on the current settlement day. This implies that these processes only consider reference data objects having a validity period with start date earlier than or equal to the current date and end date later than or equal to the current date. Some other processes, instead, may have to consider also reference data objects that are not valid on the current settlement day.

Regardless of the way common reference data object with limited validity period are propagated to the relevant Service(s), between the creation date and the deletion date of this object, it is active in the CRDM common component and it can be queried and maintained by a duly authorised user.

Common reference data objects with limited validity period can be updated either intraday, i.e. while they are in their validity period or as of a future date, i.e. before they become valid.

The following table shows the exhaustive list of all the common reference data objects with limited validity period, with the columns on the right specifying the possible maintenance operations depending on the validity period:

---

<sup>78</sup> This means, for example, that the creation of a new close link during the settlement day T will have an effect on the auto-collateralisation process as of T+1. Similarly, an update on day T of any configuration parameter stored in an attribute domain (e.g. the recycling period) will be considered by the settlement processes (e.g. the recycling process) as of day T+1.

**TABLE 102 - COMMON REFERENCE DATA OBJECTS WITH LIMITED VALIDITY PERIOD <sup>79</sup>**

| AREA  | OBJECT                                    | CREATION  | UPDATE  | DELETION   | USAGE BY T2S PROCESSES   |
|-------|---|---|---|--|--|
| Party | Party                                     | Validity date may take the value of the current date. | May take effect on the current date <sup>80</sup> . | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update.   |
|       | Auto-collateralisation Rule <sup>81</sup> | Validity date may take the value of the current date. | May take effect on the current date.                | May be performed only on objects that are not valid on the current date. | Taken into account by Settlement application process, Realignment, CoSD, Optimising, Posting as of the next business date.   |
|       | Eligible counterpart CSD link             | Validity date may take the value of the current date. | May take effect only as of a future date.           | May be performed only on objects that are not valid on the current date. | Taken into account by the settlement application process<br>Optimising as of the next business day<br><br>Taken into account by all other processes upon creation or update. |
|       | Party Service Link                        | Validity date may take the value of the current date. | May take effect on the current date.                | May be performed only on objects that are not valid on the current date. | n/a  |

79 In the following table, the columns 'Creation/Update/Deletion' clarify whether it is possible to perform a given maintenance operation on each object with immediate effect in the CRDM. For example, if a user updates an object on which updates "may take effect on the current date", they are able, should they wish to do so, to perform changes that become immediately valid in the CRDM. On the contrary, if the update "may take effect only as of a future date" then it is not possible to perform intraday changes on the object. The possibilities described in the table represent the level of flexibility offered to the user. Within these limitations, the user decides exactly when a specific modification should take effect.

This is not applicable to the Party Code, which cannot be updated if it is currently active.

80 This is not applicable to the Party Code, which cannot be updated if it is currently active.

Note that Auto-Collateralisation Rule is not a stand-alone Reference Data object but rather a class of information belonging to the Party object. It is included in this table for clarity with reference to its usage by other T2S processes. For more information on Reference Data objects and classes of information see section Reference data objects.

81 Note that Auto-Collateralisation Rule is not a stand-alone Reference Data object but rather a class of information belonging to the Party object. It is included in this table for clarity with reference to its usage by other T2S processes. For more information on Reference Data objects and classes of information see section Reference data objects.

| AREA       | OBJECT                               | CREATION  | UPDATE   | DELETION   | USAGE BY T2S PROCESSES   |
|------------|--------------------------------------|---|--|--|--|
|            | Ancillary System Bilateral Agreement | Validity date may take the value of the current date. | May take effect on the current date.   | May be performed only on objects that are not valid on the current date.   | n/a  |
|            | Ancillary System Procedure           | Validity date may take the value of the current date. | May take effect on the current date.   | May be performed only on objects that are not valid on the current date.   | n/a  |
| Securities | Securities                           | Validity date may take the value of the current date. | May take effect on the current date <sup>82</sup><br><br>Maturity date may take the value of the next business date at the earliest. <sup>83</sup> | May be performed only on objects that are not valid on the current date. A matured Security can only be deleted if the transformation detection period following the maturity date has passed. | Taken into account by all processes upon creation or update.   |
|            | Securities Valuation                 | Validity date may take the value of the current date. | n/a  | n/a  | Taken into account by the settlement application process Realignment, CoSD, Optimising, Posting as of the next business date |

82 In order to ensure the reimbursement of the intraday credit and prevent the cancellation of reverse collateral on the same day of its creation, any update of Securities attributes Issue Date, Minimum Settlement Unit, Settlement Unit Multiple, Deviating Settlement Unit or Settlement Type is allowed only under one of the two following conditions:

- l the update applies to a security created on the current settlement day;
- l the update applied to a security created before the current settlement day and not eligible for auto-collateralisation since the start of day. The second condition implies that, in case of securities eligible for auto-collateralisation, CRDM will queue the security update and only apply it during EOD procedure of the current day.

83 Note that Securities Valuation Party is not a stand-alone Reference Data object but rather a class of information belonging to the Securities Valuation object. It is included in this table for clarity with reference to its usage by other T2S processes. For more information on Reference Data objects and classes of information see section Reference data objects.

| AREA                    | OBJECT                                   | CREATION  | UPDATE                                    | DELETION  | USAGE BY T2S PROCESSES  |
|-------------------------|--|---|---|---|---|
|                         | Securities Valuation Party <sup>84</sup> | Validity date may take the value of the current date. | n/a                                       | n/a   | Taken into account by the settlement application process<br>Realignment, CoSD, Optimising, Posting as of the next business date   |
|                         | Security CSD link                        | Validity date may take the value of the current date. | May take effect only as of a future date. | May be performed only on objects that are not valid on the current date.  | Taken into account by the settlement application process<br>Optimising as of the next business day<br><br>Taken into account by all other processes upon creation or update.  |
| Securities Penalty data | Securities subject to cash penalties     | Validity date may take any value.                     | May take effect on the current date.      | May be performed only on objects that are not valid on the current date. If the object is past its validity period, the deletion can only be performed if the validity period ended in the month preceding the one before the current business date's or earlier. | Taken into account by T2S Penalty Mechanism :<br><br><ul style="list-style-type: none"> <li>  on the current business day if provided before the deadline</li> <li>  as of the next business date if provided after the deadline</li> </ul> |
|                         | Security penalty rate                    | Validity date may take the value of the current date. | May take effect on the current date.      | May be performed on objects that are valid on the current date.   | Taken into account by T2S Penalty Mechanism:  |

<sup>84</sup> When creating a Restriction type on date d, if the specified Restriction Processing Type is 'Rejection' or 'CSD Validation Hold', the validity date can take the value of d+2 at the earliest. In all other cases it can take the value of d+1 at the earliest.

| AREA | OBJECT                               | CREATION  | UPDATE                               | DELETION  | USAGE BY T2S PROCESSES  |
|------|--------------------------------------|---|--------------------------------------|---|---|
|      |                                      |   |                                      |   | <ul style="list-style-type: none"> <li>  on the current business day if provided before the deadline</li> <li>  as of the next business date if provided after the deadline</li> </ul>  |
|      | Cash discount penalty rate           | Validity date may take the value of the current date. | May take effect on the current date. | May be performed on objects that are valid on the current date. | Taken into account by T2S Penalty Mechanism: <ul style="list-style-type: none"> <li>  on the current business day if provided before the deadline</li> <li>  as of the next business date if provided after the deadline</li> </ul> |
|      | Daily price                          | Validity date may take any value.                     | May take effect on the current date. | May be performed on objects that are valid on the current date. | Taken into account by T2S Penalty Mechanism: <ul style="list-style-type: none"> <li>  on the current business day if provided before the deadline</li> <li>  as of the next business date if provided after the deadline</li> </ul> |
|      | Euro foreign exchange reference rate | Validity date may take any value.                     | May take effect on the current date. | May be performed on objects that are valid on the current date. | Taken into account by T2S Penalty Mechanism: <ul style="list-style-type: none"> <li>  on the current business day if provided before the deadline</li> </ul>  |

| AREA               | OBJECT                      | CREATION  | UPDATE   | DELETION   | USAGE BY T2S PROCESSES   |
|--------------------|-----------------------------|---|--|--|--|
|                    |                             |   |  |  | <ul style="list-style-type: none"> <li>as of the next business date if provided after the deadline</li> </ul>  |
| Securities account | Securities account          | Validity date may take the value of the current date. | May take effect on the current date. <sup>85</sup> | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update.   |
|                    | CSD account link            | Validity date may take the value of the current date. | May take effect only as of a future date.          | May be performed only on objects that are not valid on the current date. | <p>Taken into account by the settlement application process<br/>Optimising as of the next business day</p> <p>Taken into account by all other processes upon creation or update.</p>                                     |
|                    | CMB securities account link | Validity date may take the value of the current date. | May take effect only as of a future date.          | May be performed only on objects that are not valid on the current date. | <p>Taken into account by the settlement application process<br/>Realignment, CoSD<br/>Optimising &amp; Posting as of the next business day</p> <p>Taken into account by all other processes upon creation or update.</p> |
| Cash account       | Cash account                | Validity date may take the value of the current date. | May take effect on the current date.               | May be performed only on objects that are not valid                      | Taken into account by all processes upon creation or update.   |

85 In order to avoid undue negative securities positions and cash balances, any update of Securities Accounts "Negative Position" attribute is allowed only under one of the two following conditions:

- updates applied to a securities account inside the End of Day period take effect immediately;
- updates applied to a securities account outside the End of Day period are queued and executed at the start of the following End of Day period;

| AREA | OBJECT                            | CREATION  | UPDATE                               | DELETION   | USAGE BY T2S PROCESSES   |
|------|-----------------------------------|---|--------------------------------------|--|--|
|      |                                   |   |                                      | on the current date.   |  |
|      | Liquidity Transfer Order          | Validity date may take the value of the current date. | May take effect on the current date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update  |
|      | Liquidity transfer order link set | Validity date may take the value of the current date. | May take effect on the current date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update  |
|      | Standing Order for Reservation    | Validity date may take the value of the current date. | May take effect on the current date. | May be performed only on objects that are not valid on the current date. | n/a  |
|      | Direct Debit Mandate              | Validity date may take the value of the current date. | May take effect on the current date. | May be performed only on objects that are not valid on the current date. | n/a  |
|      | Authorised Account User           | Validity date may take the value of the current date. | May take effect on the current date. | May be performed only on objects that are not valid on the current date. | n/a  |
|      | Limit                             | Validity date may take the value of the current date. | May take effect on the current date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update, with the exception of new Limits created for combinations of BIC+BIC Branch Code, T2S DCA and Limit Type for which a Limit already exists. In the |



| AREA                        | OBJECT                        | CREATION   | UPDATE                                    | DELETION   | USAGE BY T2S PROCESSES   |
|-----------------------------|-------------------------------|--|---|--|--|
|                             |                               |  |   |  | latter case, the new Limit will be taken into account at the start of the business day following the creation. To modify an existing limit with immediate effect, the user should use the Update function. |
| Message subscription        | Message subscription rule set | Validity date may take value of the next business day at the earliest. | May take effect only as of a future date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update  |
|                             | Message subscription rule     | Validity date may take value of the next business day at the earliest. | May take effect only as of a future date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update  |
| Report configuration        | Report configuration          | Validity date may take value of the next business day at the earliest. | May take effect only as of a future date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update  |
| Restriction type management | Restriction type              | Validity date may take value of the next business day at the earliest. | May take effect only as of a future date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update  |
|                             | Restriction type rule         | Validity date may take value of the next business day at the earliest. | May take effect only as of a future date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update  |

| AREA  | OBJECT                                   | CREATION   | UPDATE                                    | DELETION   | USAGE BY T2S PROCESSES                                      |
|---|--|--|---|--|---|
| Conditional securities delivery configuration | Conditional securities delivery rule set | Validity date may take value of the next business day at the earliest. | May take effect only as of a future date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update |
|   | Conditional securities delivery rule     | Validity date may take value of the next business day at the earliest. | May take effect only as of a future date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update |
| Network configuration                         | DN-BIC Routing                           | Validity date may take the value of the current date.                  | May take effect on the current date.      | May be performed only on objects that are not valid on the current date. | n/a   |
| Configuration parameters                      | BIC Directory                            | Validity date may take the value of the current date.                  | May take effect on the current date.      | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update |
|   | Tolerance amount                         | Validity date may take the value of the current date.                  | May take effect only as of a future date. | May be performed only on objects that are not valid on the current date. | Taken into account by all processes upon creation or update |

For the purpose of T2S, these lists are valid both for daylight and night-time processing.

For parties securities accounts and cash accounts the validity period is defined by an Opening Date and a Closing Date attribute. Between these two dates the common reference data object, i.e. the party, the securities account or the cash account, is valid, meaning that Eurosystem Market Infrastructure Services can use it for processing (e.g. for settlement purposes). Outside this period, the common reference data object can only be queried or maintained in the CRDM common component by a duly authorised user.

A similar situation occurs for securities, where the validity period is defined by an Issue Date attribute and a Final Maturity or Expiry Date attribute. Between these two dates T2S can use the relevant securities for settlement purpose. Outside this period, the same securities can only be queried or maintained by a duly authorised user.

Securities valuations have normally a validity period of one day, specified by a Securities Valuation Date attribute. In case the relevant CB or payment bank is not able to provide securities valuations in due time, i.e. before the T2S valuation process starts (see section Settlement day high level processes), on a given settlement day, then T2S uses for the valuation process the last available securities valuations that were sent on one of the previous days. In this case, the validity period of these securities valuations last for several days, i.e. until the relevant CB or payment bank sends in due time for the T2S valuation process for the next settlement day a new feed for these securities valuations.

#### 1.4.3.4 Common reference data archiving and purging

The CRDM common component archives new reference data and their changes three calendar months<sup>86</sup> after they were created or changed. After archiving, the Common Reference Data Management service purges, i.e. physically deletes reference data from the production data base three calendar months after they were deleted. For example, a party has to be deleted before the Common Reference Data Management service can purge it. This implies that a party is never purged, unless a duly authorised user makes the decision to delete it.

These two processes, i.e. the archiving and the purge processes, present some specificities when they are applied to reference data objects. This section provides a detailed description of such specificities.

The purge process applies in different ways, depending on the type of reference data object. More precisely:

- I Some reference data objects have to be deleted by a duly authorised user before CRDM can purge them. For example, a party has to be deleted before CRDM can purge it. This implies that a party is never purged, unless a duly authorised user makes the decision to delete it. In this case, the condition triggering the purge process is the deletion of the reference data object and CRDM purges this party three calendar months after it has been deleted.
- I CRDM can purge some reference data objects without the need for these objects to be deleted by a duly authorised user. For example, CRDM can purge an eligible counterparty CSD link, a daily price or a securities valuation even if they have not been deleted. More precisely, CRDM purges these reference data objects three calendar months after the end of their validity period<sup>87</sup>. In this case the triggering condition is the expiration of the validity period. In the specific case of daily prices, data is retained if still relevant for penalty calculations (i.e. if no newer applicable prices covering the retention period have been provided for the same ISIN).

The following table shows the condition triggering the purge process for each reference data object in CRDM. For objects that are not listed, the relevant purge triggering condition is the logical deletion of the object itself:

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<sup>86</sup> This is the duration of the retention period, application configuration parameter set up by the T2S Operator (See section 1.6.1 Data configuration ).

<sup>87</sup> This means, for a securities valuation, three calendar months after the business day which this securities valuation refers to.

**TABLE 103 - PURGE TRIGGERING CONDITIONS**

| AREA                     | OBJECT                                  | TRIGGERING CONDITION                                   |
|--------------------------|---|--|
| Party                    | Party                                   | Deletion   |
|                          | Eligible counterpart CSD link           | End of validity period                                 |
| Securities               | Securities                              | Deletion   |
|                          | Securities valuation                    | End of validity period                                 |
|                          | Close Link                              | Deletion   |
|                          | Security CSD link                       | End of validity period                                 |
|                          | Auto-collateralisation eligibility link | Deletion   |
| Securities penalty data  | Securities subject to cash penalties    | Deletion   |
|                          | Security penalty rate                   | Deletion   |
|                          | Daily price                             | End of validity period and applicability <sup>88</sup> |
|                          | SME Growth Market                       | Deletion   |
|                          | Euro Foreign Exchange Reference Rate    | Deletion   |
| Securities account       | Securities account                      | Deletion   |
|                          | CSD account link                        | End of validity period                                 |
|                          | CMB securities account link             | End of validity period                                 |
| Cash account             | Cash account                            | Deletion   |
|                          | Credit memorandum balance               | Deletion   |
|                          | Liquidity transfer order                | End of validity period                                 |
|                          | Liquidity transfer order link set       | End of validity period                                 |
|                          | External RTGS account                   | Deletion   |
|                          | Limit                                   | Deletion   |
| Access rights management | User                                    | Deletion   |
|                          | Role                                    | Deletion   |
|                          | Privilege                               | Deletion   |
|                          | Secured object                          | Deletion   |
|                          | Secured group                           | Deletion   |

88 A Daily Price is considered no longer applicable when its value is not used for dates within the three months prior to the current business date. Since Daily Price data is replicated daily if newer values are not provided, a single Daily Price would remain applicable for a given ISIN until a newer one also covering at least the three-month period prior to the current business date is created.

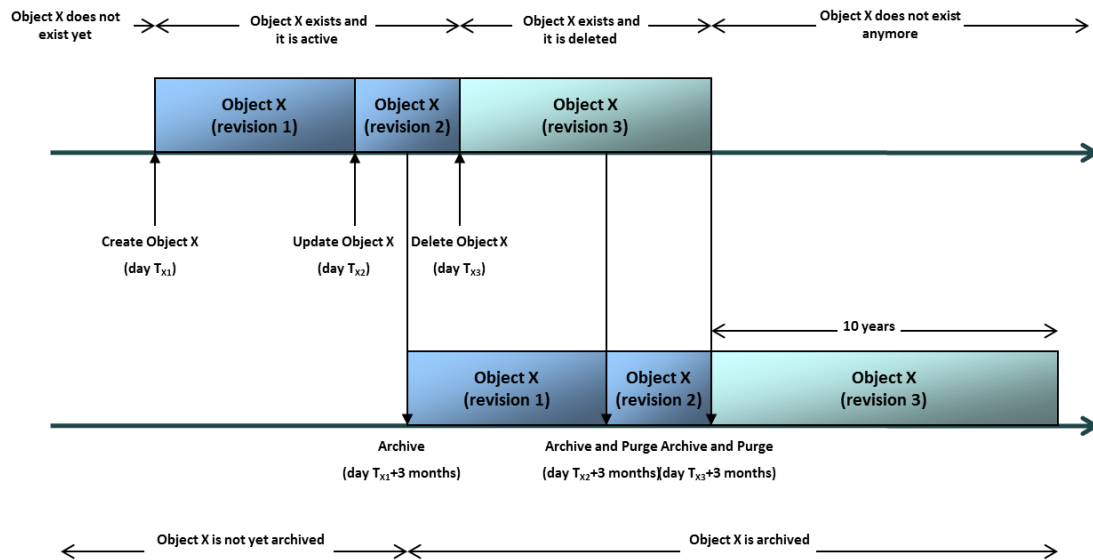
| AREA  | OBJECT                                   | TRIGGERING CONDITION |
|---|--|----------------------|
|   | Certificate DN                           | Deletion             |
|   | User-Certificate DN Link                 | Deletion             |
| Message subscription                          | Message subscription rule                | Deletion             |
|   | Message subscription rule set            | Deletion             |
| Network configuration                         | Routing                                  | Deletion             |
|   | Network service                          | Deletion             |
|   | Technical Address Network Service Link   | Deletion             |
| Report configuration                          | Report type                              | Deletion             |
|   | Report configuration                     | Deletion             |
| Attribute domain management                   | Attribute domain                         | Deletion             |
|   | Attribute reference                      | Deletion             |
| Scheduling configuration                      | Even type                                | Deletion             |
|   | Operating day type                       | Deletion             |
|   | Closing day                              | Deletion             |
| Market-specific attribute configuration       | Market-specific attribute                | Deletion             |
| Restriction type management                   | Restriction type                         | Deletion             |
|   | Restriction type rule                    | Deletion             |
| Conditional securities delivery configuration | Conditional securities delivery rule     | Deletion             |
|   | Conditional securities delivery rule set | Deletion             |
| Billing configuration                         | Service item                             | Deletion             |
| Configuration parameters                      | Country                                  | Deletion             |
|   | Currency                                 | Deletion             |
|   | Partial settlement threshold             | Deletion             |
|   | System entity                            | Deletion             |
|   | Tolerance amount                         | Deletion             |
|   | BIC directory                            | Deletion             |

To ensure data consistency is preserved, a special case is represented by the purge of Securities and Securities Accounts. For securities, the system automatically purges also all link objects (i.e. Close Links, Eligible Counterpart CSD Links, Auto-collateralisation Eligibility Links and Security CSD Links with Maintenance Flag = False) that reference the purged Security, regardless of whether the links themselves have been logically deleted. For Securities Accounts, the system purges also all the CMB

Securities Account Links that reference the purged Securities Account, regardless of whether the links themselves have been logically deleted.

The following example illustrates how the Common Reference Data Management service archives and purges the different revisions of a generic common reference data object.

**EXAMPLE 35 - ARCHIVING AND PURGING AFTER DELETION OF A COMMON REFERENCE DATA OBJECT**



In this example, a duly authorised user creates intra-day, on business day  $T_{x1}$ , a common reference data object X. This results in the creation of the first revision of the object X.

During business day  $T_{x2}$  (with  $T_{x2} < T_{x1} +$  three calendar months ) a duly authorised user updates the common reference data object X changing one (or many) of its attribute(s). This results in the creation of a new revision (2) for X.

On business day  $T_{x1} +$  three calendar months, the archiving process copies the first revision of the common reference data object X into the archiving data base. It is worth mentioning that:

- I the CRDM common component does not purge the archived revision, as it still refers to a period of time that expired on  $T_{x2}$ , i.e. since less than three calendar months;
- I the CRDM common component does not archive the second revision of the common reference data object X, as it was created on  $T_{x2}$ , i.e. since less than the duration of the retention period.

During business day  $T_{x3}$  (with  $T_{x3} < T_{x2} +$  three calendar months), a duly authorised user deletes the common reference data object X. This results in the creation of a new revision (3) for the same object.

On business day  $T_{x2} +$  three calendar months, the archiving process copies the second revision of the common reference data object X into the archiving data base. In this case:

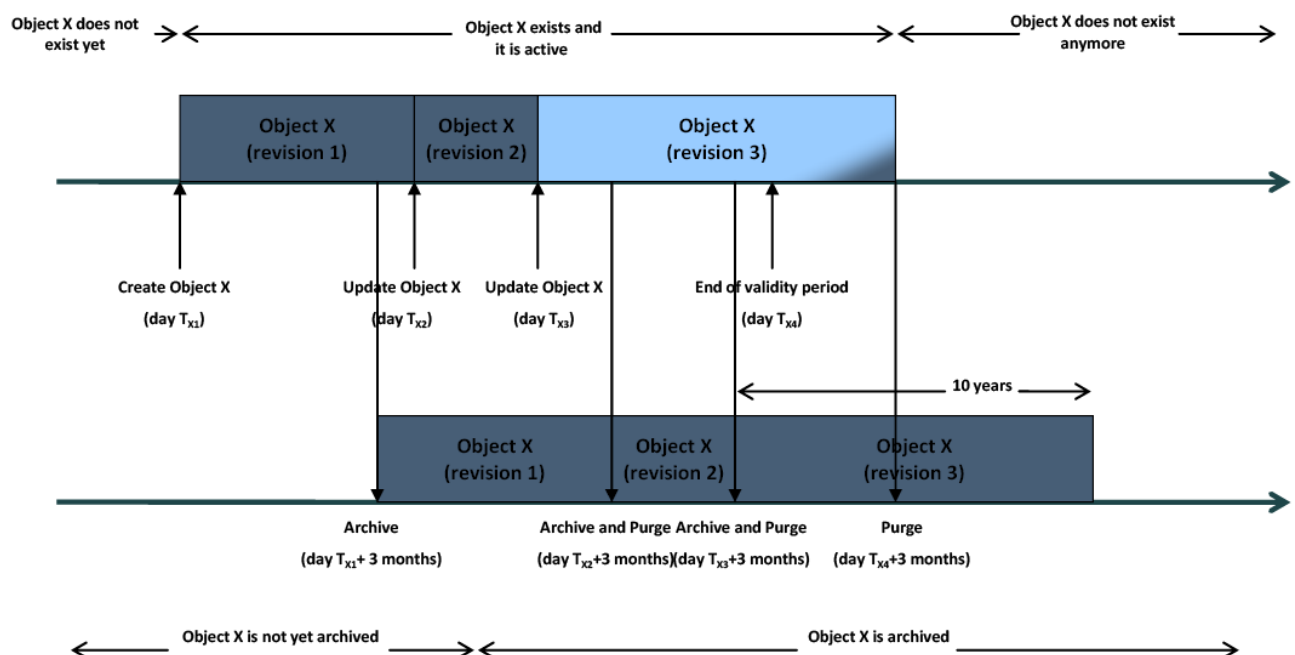
- I the CRDM common component does not purge this second revision, as it still refers to a period of time that expired on  $T_{x3}$ , i.e. since less than three calendar months ;
- I the CRDM common component does not archive the third revision of the common reference data object X, as it was created on  $T_{x3}$ , i.e. since less than three calendar months ;

- the CRDM common component purges the first revision of the common reference data object X, as it refers to a period of time that expired exactly since three calendar months.

Finally, on business day  $T_{X3} +$  three calendar months, the archiving process copies the third and final revision of the common reference data object X into the archiving data base. On the same day, just after the archiving process has been successfully performed, the CRDM common component purges the common reference data object X, by physically deleting the last two revisions of the object X that are still present in the production data base.

From this moment on, all revisions of the common reference data object X are available only in the archiving data base, where the Archiving common component keeps them for a period of ten years.

**EXAMPLE 36 - ARCHIVING AND PURGING AFTER THE END OF VALIDITY PERIOD OF A REFERENCE DATA OBJECT**



In this example, a duly authorised user creates intra-day, on business day  $T_{X1}$ , a reference data object X. This results in the creation of the first revision of the reference data object X.

On business day  $T_{X1} +$  three calendar months, the archiving process copies the first revision of the reference data object X into the archiving data base. CRDM does not purge the archived revision, as it is still the valid (and only) revision of the reference data object X in the production data base.

During business day  $T_{X2}$ , a duly authorised user updates the reference data object X changing one (or many) of its attribute(s). This results in the creation of a new revision (2) for X.

Then, during business day  $T_{X3}$  (with  $T_{X3} < T_{X2} +$  three calendar months), a duly authorised user updates again the reference data object X. This results in the creation of a new revision (3) for the same object.

On business day  $T_{X2} +$  three calendar months, the archiving process copies the second revision of the reference data object X into the archiving data base. In this case:

- CRDM does not purge this second revision, as it still refers to a period of time that expired on  $T_{X3}$ , i.e. since less than three calendar months ;

- | CRDM does not archive the third revision of the reference data object X, as it was created on  $T_{X3}$ , i.e. since less than three calendar months ;
- | CRDM purges the first revision of the reference data object X, as it refers to a period of time that expired exactly since three calendar months.

On business day  $T_{X3} +$  three calendar months, CRDM archives the third revision of the reference data object X and it purges its second revision, as it refers to a period of time that expired exactly since three calendar months.

Finally, on business day  $T_{X4} + RP$ , i.e. three calendar months after the end of the validity period of the reference data object X, CRDM purges the reference data object X, by physically deleting the last revision that is still present in the production data base.

From this moment on, the reference data object X is available only in the archiving component, where it is kept for a period of ten years.

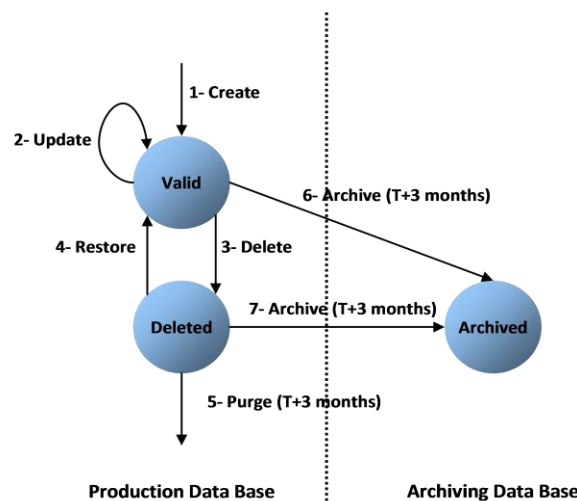
#### 1.4.3.5 Lifecycle of common reference data objects

This section puts together all the concepts described so far and provides a general description of the lifecycle of common reference data objects.

##### Lifecycle of common reference data objects with unlimited validity period

The following diagram illustrates the lifecycle of a common reference data object with unlimited validity period both in the production data base and in the archiving data base:

**DIAGRAM 23 - LIFECYCLE OF COMMON REFERENCE DATA OBJECTS WITH UNLIMITED VALIDITY PERIOD**



When a duly authorised user submits to the CRDM common component a reference data maintenance instruction to create a common reference data object with unlimited validity period, the CRDM common component processes it and, in case of successful processing, it creates the relevant object. This object is valid and it exists in the production data base only (transition 1).

From this moment on, a duly authorised user may submit to the CRDM common component one or many reference data maintenance instructions to update the common reference data object. Regardless of the result of the CRDM common component processing, i.e. whether the reference data maintenance



instruction is successfully or unsuccessfully processed, the common reference data object remains valid (transition 2).

When a duly authorised user submits to the CRDM common component a reference data maintenance instruction to delete a common reference data object, the CRDM common component processes it and, in case of successful processing, it deletes the relevant object. This object is logically deleted (transition 3), even if it is still physically present in the production data base.

From this moment on and within a period of three calendar months, if a duly authorised user submits to the CRDM common component a reference data maintenance instruction to restore a previously deleted common reference data object, the CRDM common component processes it and, in case of successful processing, it restores the relevant object. As a result, the object becomes valid again (transition 4).

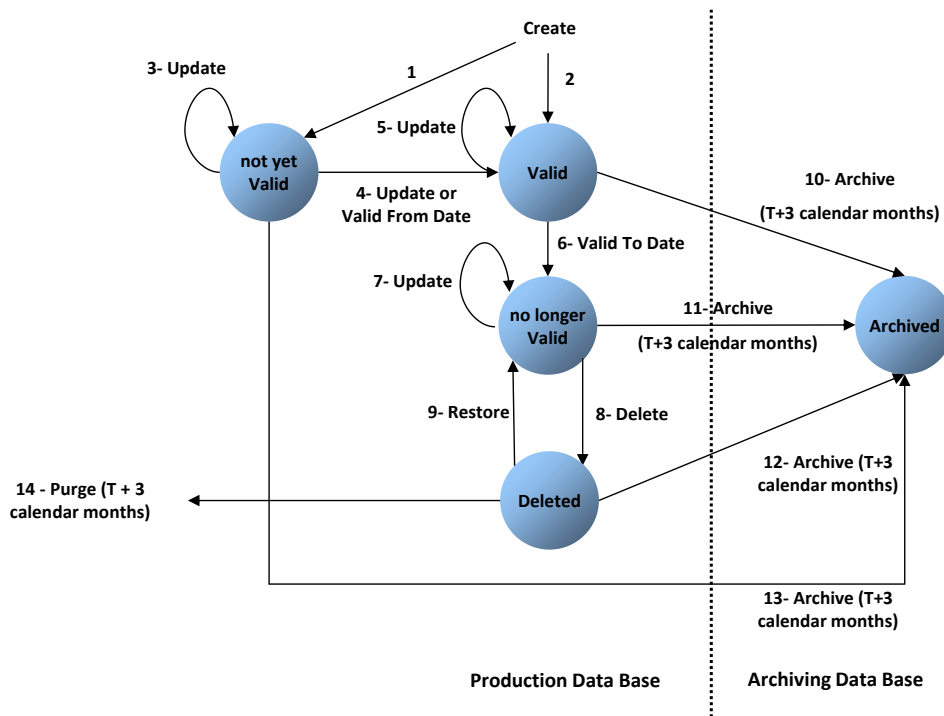
Three calendar months after a common reference data object has been deleted, the CRDM common component physically deletes it from the production data base. This results in the object being purged by the production data base (transition 5), i.e. it exists only in the archiving data base.

Three calendar months after a common reference data object has been either created, updated or deleted, the CRDM common component copies the revision of the common reference data object resulting from this reference data maintenance instruction from the production data base to the archiving data base. As a result the common reference data object is both in the production data base and archived in the archiving data base, in case it was created or updated, or only in the archiving data base, in case it was deleted (transitions 6 and 7).

#### Lifecycle of common reference data objects with limited validity period

The following diagram illustrates the lifecycle of a common reference data object with limited validity period both in the production data base and in the archiving data base

#### **DIAGRAM 24 - LIFECYCLE OF COMMON REFERENCE DATA OBJECTS WITH LIMITED VALIDITY PERIOD**



When a duly authorised user submits to the CRDM common component a reference data maintenance instruction to create a common reference data object with limited validity period, the CRDM common component processes it and, in case of successful processing, it creates the relevant object. This object is either valid or not yet valid, depending on the starting date of its validity period, and it exists in the production data base only (transitions 1 and 2).

From this moment on, a duly authorised user may submit to the CRDM one or many reference data maintenance instructions to update the common reference data object. If the object is valid, then it remains valid, regardless of the result of the CRDM common component processing, i.e. whether the reference data maintenance instruction is successfully or unsuccessfully processed (transition 5). If the object is not yet valid, two sub-cases are possible:

- l if the reference data maintenance instruction also updates the starting date of the validity period to the current business date and it is successfully processed, then the common reference data object becomes valid (transition 4).
- l in all other cases, whether the reference data maintenance instruction is successfully or unsuccessfully processed, the common reference data object remains not yet valid (transition 3).

A common reference data object becomes valid from the starting business date of the validity period (transition 4).

A common reference data object is valid until the end of day of the final date of the validity period (transition 6). As far as TIPS is concerned, this implies that the object is valid until TIPS receives from the RTGS system the message notifying the first business day greater than the final date of the validity period.

When a duly authorised user submits to the CRDM common component a reference data maintenance instruction to delete a common reference data object, the Common Reference Data Management service

processes it and, in case of successful processing, it deletes the relevant object. This object is logically deleted (transition 8), even if it is still physically present in the production data base.

From this moment on and within a period of three calendar months, if a duly authorised user submits to the CRDM common component a reference data maintenance instruction to restore a previously deleted common reference data object, the CRDM common component processes it and, in case of successful processing, it restores the relevant object. As a result, the object becomes no longer valid again (transition 9).

Three calendar months after a common reference data object has been deleted, the CRDM common component physically deletes it from the production data base. This results in the object being purged by the production data base (transition 14), i.e. it exists only in the archiving data base.

Three calendar months after a common reference data object has been either created, updated or deleted, CRDM copies the revision of the common reference data object resulting from this reference data maintenance instruction from the production data base to the archiving data base. As a result the object is both in the production data base (as a not yet valid, valid, no longer valid or deleted object) and archived in the archiving data base, in case it was created or updated, or only in the archiving data base, in case it was deleted (transitions 10, 11, 12 and 13).

#### Lifecycle of reference data objects dependent on other reference data objects

Some reference data objects depend on other reference data objects (e.g. a securities account cannot exist before the CSD participant it belongs to, a payment bank cannot exist before its central bank, a liquidity transfer order cannot exist before the cash account it is referring to). In these cases, some status transitions of the dependent reference data objects are possible only if the reference data object they depend on is in a specific status, and vice versa. More precisely:

- | a dependent reference data object can be created / become valid only after all the reference data objects it depends on have been created / become valid;
- | a reference data object which other reference data objects depend on can become no longer valid / be deleted / be archived only after all the reference data objects depending on it have become no longer valid / been deleted / been archived.
- | The dependency relationship between two reference data objects stems directly from the hierarchical party model (see section 1.2.2.1.9 Common reference data objects and the hierarchical party model ).

For example, a securities account cannot be created before the party it belongs to has been created; in addition, the opening date of this securities account cannot be before the opening date of the party it belongs to.

Similarly, a cash account cannot be deleted before all the liquidity transfer orders debiting this account have been deleted.

The following table shows the list of dependencies related to parties, securities, securities accounts and cash accounts:

**TABLE 104 - DEPENDENCIES BETWEEN REFERENCE DATA OBJECTS**

| OBJECT                           | DEPENDENT OBJECTS  |
|----------------------------------|--|
| Party                            | Securities Account, Cash Account, External RTGS Account, Security CSD Link, CSD Account Link, Party Service Link, Banking Group, Billing Group, other Parties at a lower hierarchical level.   |
| Security <sup>89</sup>           | Close Link, Securities CSD Link, Auto-collateralisation Eligibility Link, Eligible Counterpart CSD Link.   |
| Securities Account <sup>90</sup> | CSD Account Link, CMB <sup>91</sup>  |
| Cash Account                     | Liquidity Transfer Order, Liquidity Transfer Order Link Set, Credit Memorandum Balance, Authorised Account User, Account Monitoring Group, Liquidity Transfer Group, Settlement Bank Account Group, Limit, Standing Order for Reservation, Direct Debit Mandate, AS Procedure. |

The following table presents a list of relationships between objects that do not trigger any priority checks upon deletion or closure of the dependent object. In other words, if an instance of the referenced object is deleted, the existence of a related instance in the referencing object does not impede this deletion. For instance, a Credit Memorandum Balance can be deleted even if there are Limits referencing it.

**TABLE 105 - RELATIONSHIPS BETWEEN REFERENCE DATA OBJECTS THAT DO NOT TRIGGER DELETION PRIORITY CHECKS**

| Referenced object         | Referencing object                      |
|---------------------------|---|
| Credit Memorandum Balance | Limit                                   |
| Market-Specific Attribute | Restriction Type Rule                   |
| Party                     | Auto-Collateralisation Eligibility Link |
| Party                     | CoSD Rule                               |
| Party                     | CoSD Rule Set                           |
| Party                     | Eligible Counterpart CSD                |
| Party                     | Message Subscription Rule               |
| Party                     | Message Subscription Rule Set           |
| Party                     | Report Configuration                    |

89 The dependencies for Securities are only enforced throughout an initial period following its maturity date, set to an agreed value by the T2S Operator. Following this standard period, Securities can be deleted even if they are referenced in active links, which will be purged along with the Security after three calendar months.

90 Securities Accounts can be deleted even if they are referenced in active CMB Securities Account links, which will be purged along with the Securities Account after three calendar months.

91 A CMB is dependent on a Securities Account if this Securities Account is defined as Regular or Receiving Account in the CMB.

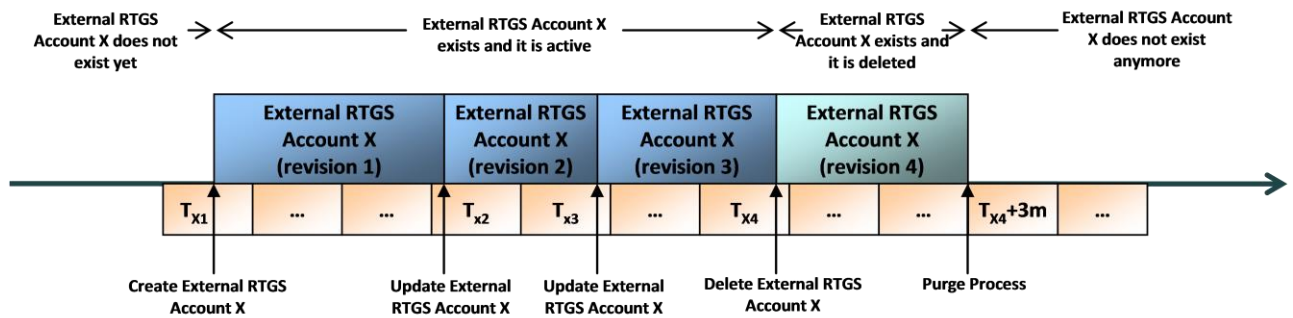
| Referenced object               | Referencing object                      |
|---------------------------------|---|
| Party                           | Restriction Type Rule                   |
| Party (Party Technical Address) | Routing                                 |
| Party                           | Secured Group                           |
| Party                           | Securities Valuation                    |
| Party (Party Technical Address) | Technical Address Network Service Link  |
| Party                           | User                                    |
| Securities Account              | CoSD Rule                               |
| Securities Account              | CMB Securities Account Link             |
| Securities Account              | Message Subscription Rule               |
| Securities Account              | Restriction Type Rule                   |
| Securities Account              | Secured Group                           |
| Securities Account              | Security CSD Link                       |
| Security                        | Auto-Collateralisation Eligibility Link |
| Security                        | CoSD Rule                               |
| Security                        | Message Subscription Rule               |
| Security                        | Restriction Type Rule                   |
| Security                        | Secured Group                           |
| Cash Account                    | Message Subscription Rule               |
| Cash Account                    | Restriction Type Rule                   |
| Cash Account                    | Secured Group                           |
| User                            | Message Subscription Rule               |

The rest of this section provides some examples illustrating the typical lifecycle of some reference data objects with limited and unlimited validity period in CRDM.

**EXAMPLE 37 - LIFECYCLE OF A REFERENCE DATA OBJECT WITH UNLIMITED VALIDITY PERIOD**

The following diagram illustrates an example of lifecycle for a reference data object with unlimited validity period, i.e. an external RTGS account

**DIAGRAM 25 - LIFECYCLE OF AN EXTERNAL RTGS ACCOUNT**



In this example, a duly authorised user creates intra-day, on business day TX1, an external RTGS account X. This results, under the assumption of successful processing, in the creation of the first revision of the external RTGS account X.

**TABLE 106 - EXTERNAL RTGS ACCOUNT**

| TECHNICAL IDENTIFIER | REVISION | RTGS EXTERNAL ACCOUNT REFERENCE | RTGS ACCOUNT STATUS | RTGS SYSTEM NAME |
|----------------------|----------|---------------------------------|---------------------|------------------|
| 20101968             | 1        | NL123456789                     | Open                | TARGET2          |

The approval status of X is active and this implies that T2S can immediately use this external RTGS account for processing, i.e. it can be used by any relevant process in T2S (e.g. business validation, settlement, etc.), it can be displayed and updated, it can be included in reports and so forth.

During business day TX2, a duly authorised user updates the external RTGS account X. This results in the creation of a new revision (2) for X.

**TABLE 107 - EXTERNAL RTGS ACCOUNT**

| TECHNICAL IDENTIFIER | REVISION | RTGS EXTERNAL ACCOUNT REFERENCE | RTGS ACCOUNT STATUS | RTGS SYSTEM NAME | APPROVAL STATUS |
|----------------------|----------|---------------------------------|---------------------|------------------|-----------------|
| 20101968             | 1        | NL123456789                     | Open                | TARGET2          | Active          |
| 20101968             | 2        | NL123456779                     | Open                | TARGET2          | Active          |

Its approval status is still active, but some of its attributes are now different, as the user updated both the RTGS External Account Reference attribute and the RTGS Account Status attribute, and T2S immediately starts using the new values of these attributes for processing. The old revision of the external RTGS account X is still stored in CRDM and its status is still active. However, it can just be displayed, but CRDM and T2S are no longer using this revision for processing.

At business day TX3, a duly authorised user updates again the external RTGS account X. This results again in the creation of a new revision (3) for X, again with approval status set to active and with some other new values that T2S immediately starts using for processing.

**TABLE 108 - EXTERNAL RTGS ACCOUNT**

| TECHNICAL IDENTIFIER | REVISION | RTGS EXTERNAL ACCOUNT REFERENCE | RTGS ACCOUNT STATUS | RTGS SYSTEM NAME | APPROVAL STATUS |
|----------------------|----------|---------------------------------|---------------------|------------------|-----------------|
| 20101968             | 1        | NL123456789                     | Open                | TARGET2          | Active          |
| 20101968             | 2        | NL123456779                     | Open                | TARGET2          | Active          |
| 20101968             | 3        | NL123456779                     | Closed              | TARGET2          | Active          |

The old revisions of the external RTGS account X are still stored in CRDM and they can be displayed. However, T2S is no longer using them for processing.

During business day  $T_{x4}$ , a duly authorised user deletes the external RTGS account X. This results in the creation of a new revision (4) for the same object.

**TABLE 109 - EXTERNAL RTGS ACCOUNT**

| TECHNICAL IDENTIFIER | REVISION | RTGS EXTERNAL ACCOUNT REFERENCE | RTGS ACCOUNT STATUS | RTGS SYSTEM NAME | APPROVAL STATUS |
|----------------------|----------|---------------------------------|---------------------|------------------|-----------------|
| 20101968             | 1        | NL123456789                     | Closed              | TARGET2          | Active          |
| 20101968             | 2        | NL123456779                     | Open                | TARGET2          | Active          |
| 20101968             | 3        | NL123456779                     | Closed              | TARGET2          | Active          |
| 20101968             | 4        | NL123456779                     | Closed              | TARGET2          | Deleted         |

Its approval status is deleted. Consequently, CRDM and T2S stops immediately using it for processing, i.e. the external RTGS account X is not used anymore by CRDM or T2S processes, it cannot be updated, it is not included in reports and queries referring to a time period following the moment of its deletion and so forth.

On business day  $T_{x4}$ +three calendar months, the purge process physically deletes the external RTGS account X from the production data base. From this moment on, reference data related to this external RTGS account can only be retrieved from the archiving data base.

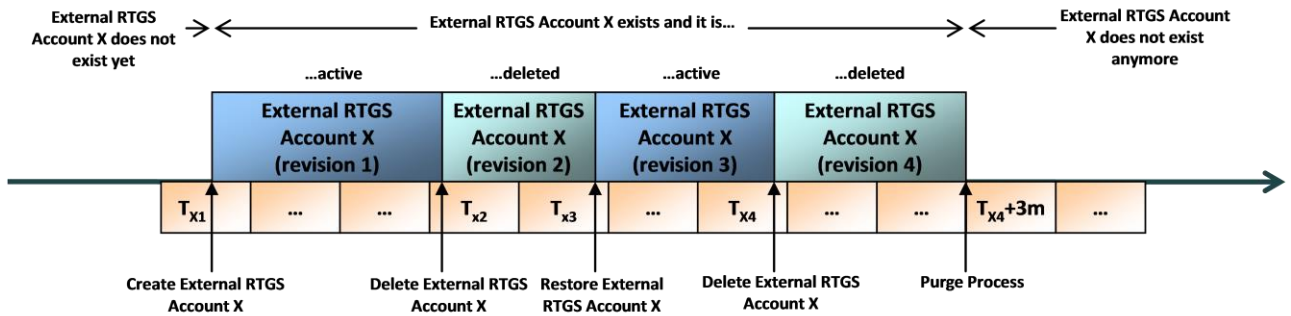
**EXAMPLE 38 - RESTORING A REFERENCE DATA OBJECT**

The deletion of a reference data object is not necessarily the last reference data maintenance request that can be applied to the reference data object. In fact, in case of a reference data object deleted by mistake, a duly authorised user can still display this object and may decide to restore it, i.e. to reset its status to active.

The following diagram illustrates an example of lifecycle for an external RTGS account undergoing a restore operation.



**DIAGRAM 26 - LIFECYCLE OF A RESTORED EXTERNAL RTGS ACCOUNT**



In this example, a duly authorised user creates intra-day, on business day  $T_{x1}$ , an external RTGS account X. On business day  $T_{x2}$ , X is deleted by mistake. For this reason, on business day  $T_{x3}$ , a duly authorised user restores it, so that T2S can use again the external RTGS account X for processing. Finally, during business day  $T_{x4}$ , a duly authorised user eventually deletes the external RTGS account X. All these actions result in the creation of the following revisions for the external RTGS account X:

**TABLE 110 - EXTERNAL RTGS ACCOUNT**

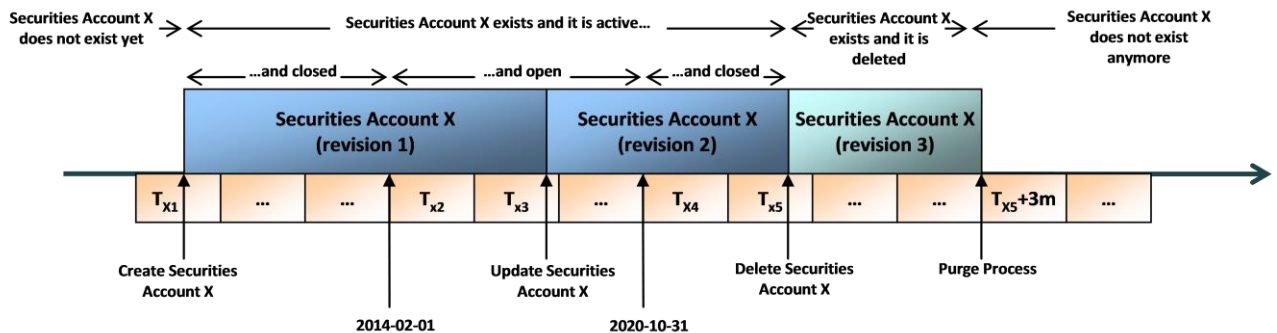
| TECHNICAL IDENTIFIER | REVISION | RTGS EXTERNAL ACCOUNT REFERENCE | RTGS ACCOUNT STATUS | RTGS SYSTEM NAME | APPROVAL STATUS |
|----------------------|----------|---------------------------------|---------------------|------------------|-----------------|
| 20101968             | 1        | NL123456789                     | Closed              | TARGET2          | Active          |
| 20101968             | 2        | NL123456789                     | Closed              | TARGET2          | Deleted         |
| 20101968             | 3        | NL123456789                     | Closed              | TARGET2          | Active          |
| 20101968             | 4        | NL123456789                     | Closed              | TARGET2          | Deleted         |

As already described in the previous example, on business day  $T_{x4}$ +three calendar months, the purge process physically deletes the external RTGS account X from the production data base.

**EXAMPLE 39 - LIFECYCLE OF A REFERENCE DATA OBJECT WITH A LIMITED VALIDITY PERIOD**

The following diagram illustrates an example of lifecycle for a reference data object with a limited validity period, i.e. a securities account.

**DIAGRAM 27 - LIFECYCLE OF A SECURITIES ACCOUNT**





In this example, a duly authorised user creates intra-day, on business day  $T_{x1}$ , a securities account X. This results, under the assumption of successful processing, in the creation of the first revision of the securities account X.

**TABLE 111 - SECURITIES ACCOUNT**

| TECHNICAL IDENTIFIER | REVISION | OPENING DATE | CLOSING DATE | SECURITIES ACCOUNT TYPE | APPROVAL STATUS |
|----------------------|----------|--------------|--------------|-------------------------|-----------------|
| 37914062             | 1        | 2014-02-01   | -            | CSD participant account | Active          |

The approval status of X is active, however this does not imply that T2S can immediately and fully use this securities account for processing. More precisely, this securities account can be displayed or even maintained, but no Settlement Instructions can settle on this securities account as its opening date is still in the future.

As of  $T_{x2}$  (i.e. as of 1st of February 2014), the opening date, the securities account starts being open and from this business day on T2S can settle Settlement Instructions on this securities account. It is worth mentioning that the securities account switched from closed to open simply owing to the business date change occurred during the End-of-Day period and that T2S does not perform any automatic operation on the securities account during this period. This is valid for all reference data objects having a validity period.

During business day  $T_{x3}$ , a duly authorised user updates the securities account X setting its closing date. This results in the creation of a new revision (2) for X.

**TABLE 112 - SECURITIES ACCOUNT**

| TECHNICAL IDENTIFIER | REVISION | OPENING DATE | CLOSING DATE | SECURITIES ACCOUNT TYPE | APPROVAL STATUS |
|----------------------|----------|--------------|--------------|-------------------------|-----------------|
| 37914062             | 1        | 2014-02-01   | -            | CSD participant account | Active          |
| 37914062             | 2        | 2014-02-01   | 2020-10-31   | CSD participant account | Active          |

T2S immediately starts using the newly set closing date of the securities account for processing. For example, it starts rejecting Settlement Instructions with Intended Settlement Date after the closing date. The old revision of the securities account X is still stored in CRDM and its status is still active. However, it can just be displayed, but CRDM and T2S are no longer using this revision for processing.

As of  $T_{x4}$  plus one (i.e. as of 1st of November 2020), the day after the closing date, the securities account is closed and from this business day on T2S cannot settle Settlement Instruction on this securities account anymore. As already mentioned for the opening date, the securities account switched from open to closed simply owing to the business date change occurred during the End-of-Day period, during which CRDM did not perform any automatic operation on the securities account.

During business day  $T_{x5}$ , a duly authorised user deletes the securities account X. This results in the creation of a new revision (3) for the same object.

**TABLE 113 - SECURITIES ACCOUNT**

| TECHNICAL IDENTIFIER | REVISION | OPENING DATE | CLOSING DATE | SECURITIES ACCOUNT TYPE | APPROVAL STATUS |
|----------------------|----------|--------------|--------------|-------------------------|-----------------|
| 37914062             | 1        | 2014-02-01   | -            | CSD participant account | Active          |
| 37914062             | 2        | 2014-02-01   | 2020-10-31   | CSD participant account | Active          |
| 37914062             | 3        | 2014-02-01   | 2020-10-31   | CSD participant account | Deleted         |

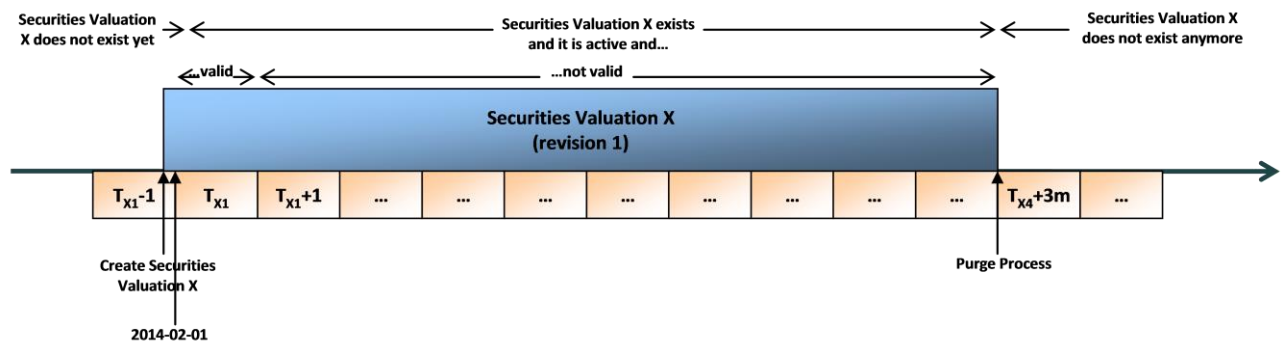
Its approval status is deleted. Consequently, CRDM and T2S stop immediately using it for processing, i.e. the securities account X is not used anymore by CRDM or T2S processes, it cannot be updated, it is no longer included in reports and so forth.

On business day  $T_{X5}$ +three calendar months, the purge process physically deletes the securities account X from the production data base. From this moment on, reference data related to this securities account can only be retrieved from the archiving data base.

**EXAMPLE 40 - LIFECYCLE OF A REFERENCE DATA OBJECT WITH A ONE-DAY VALIDITY PERIOD**

The following diagram illustrates an example of lifecycle for a reference data object with a validity period lasting one business day only, i.e. a securities valuation.

**DIAGRAM 28 - LIFECYCLE OF A SECURITIES VALUATION**



In this example, on business day  $T_{X1-1}$  a collateral management system sends to T2S prices applicable for business day  $T_{X1}$ . This results under the assumption of successful processing in the creation of many securities valuation objects. The diagram refers to one of these securities valuation, X.

**TABLE 114 - SECURITIES VALUATION**

| TECHNICAL IDENTIFIER | REVISION | SECURITIES VALUATION DATE | PRICE | CURRENCY | APPROVAL STATUS |
|----------------------|----------|---------------------------|-------|----------|-----------------|
| 13021972             | 1        | 2014-02-01                | 1.21  | EUR      | Active          |

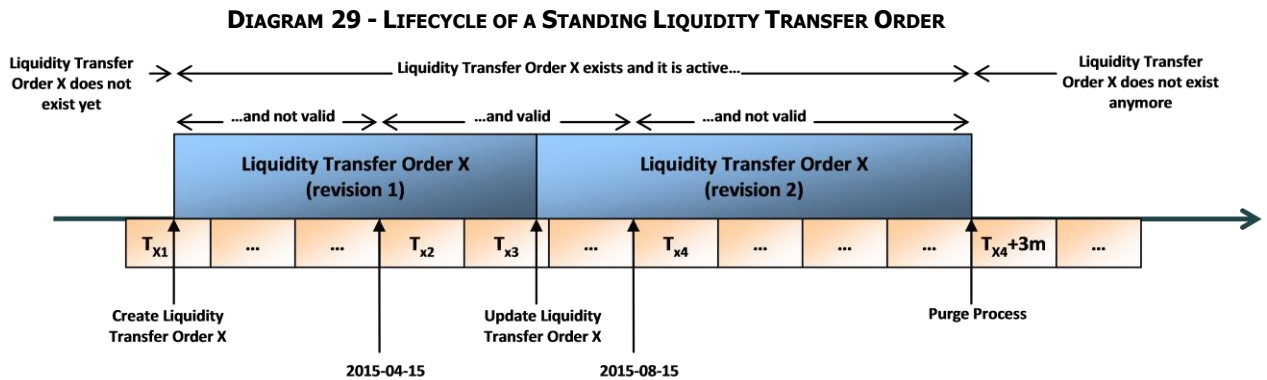
The approval status of X is active and this implies that T2S can use this securities valuation for processing on the following business day, i.e. on  $T_{X1}$  (1st of February 2014).

From business day  $T_{X1}+1$ , T2S does not take into account the securities valuation X, as it is not valid anymore, even though still active.

On business day  $T_{x1}$ +three calendar months, the purge process physically deletes the securities valuation X from the production data base. From this moment on, reference data related to this securities valuation can only be retrieved from the archiving data base.

**EXAMPLE 41 - LIFECYCLE OF A REFERENCE DATA OBJECT WITH A LIMITED VALIDITY PERIOD NOT REQUIRING MANUAL DELETION**

The following diagram illustrates an example of lifecycle for a reference data object with a limited validity period and that does not require a manual deletion, i.e. a standing liquidity transfer order in T2S.



In this example, a duly authorised user creates intra-day, on business day  $T_{x1}$ , a liquidity transfer order X. This results, under the assumption of successful processing, in the creation of the first revision of the liquidity transfer order X.

**TABLE 115 - STANDING LIQUIDITY TRANSFER ORDER**

| TECHNICAL IDENTIFIER | REVISION | LTO REFERENCE | AMOUNT | VALID FROM DATE | VALID TO DATE | APPROVAL STATUS |
|----------------------|----------|---------------|--------|-----------------|---------------|-----------------|
| 89918092             | 1        | REF001        | 1.21   | 2015-04-15      | -             | Active          |

The approval status of X is active; however this does not imply that T2S can immediately and fully use this liquidity transfer order for processing. More precisely, this liquidity transfer order can be displayed or even maintained, but T2S does not trigger the execution of any liquidity transfer, as the valid from date of the liquidity transfer order is still in the future.

As of  $T_{x2}$  (i.e. as of the 15th of April 2015), the valid from date, the liquidity transfer order starts being valid and from this business day on T2S triggers a liquidity transfer for it, so that it can be executed and settled. It is worth mentioning that the liquidity transfer order switched from not valid to valid simply owing to the business date change occurred during the End-of-Day period and that T2S does not perform any automatic operation on the liquidity transfer order during this period.

During business day  $T_{x3}$ , a duly authorised user updates the liquidity transfer order X setting its valid to date. This results in the creation of a new revision (2) for X.

**TABLE 116 - STANDING LIQUIDITY TRANSFER ORDER**

| TECHNICAL IDENTIFIER | REVISION | LTO REFERENCE | AMOUNT | VALID FROM DATE | VALID TO DATE | APPROVAL STATUS |
|----------------------|----------|---------------|--------|-----------------|---------------|-----------------|
| 89918092             | 1        | REF001        | 1.21   | 2015-04-15      | -             | Active          |
| 89918092             | 2        | REF001        | 1.21   | 2015-04-15      | 2015-08-15    | Active          |

T2S immediately starts using the newly set valid to date of the liquidity transfer order for processing. For example, it does not include anymore this liquidity transfer order in the result of the query on liquidity transfer orders that are valid after the 15th of August 2015. The old revision of the liquidity transfer order X is still stored in T2S and its status is still active. However, it can just be displayed, but T2S is no longer using this revision for processing.

As of  $T_{x4}$  (i.e. as of August 16th 2015, since the valid to date of August 15th is included in the validity period), the liquidity transfer order is not valid anymore and from this business day on T2S does not trigger a liquidity transfer for it anymore. As already mentioned for the valid from date, the liquidity transfer order switched from valid to not valid simply owing to the business date change occurred during the End-of-Day period, during which T2S did not perform any automatic operation on the liquidity transfer order.

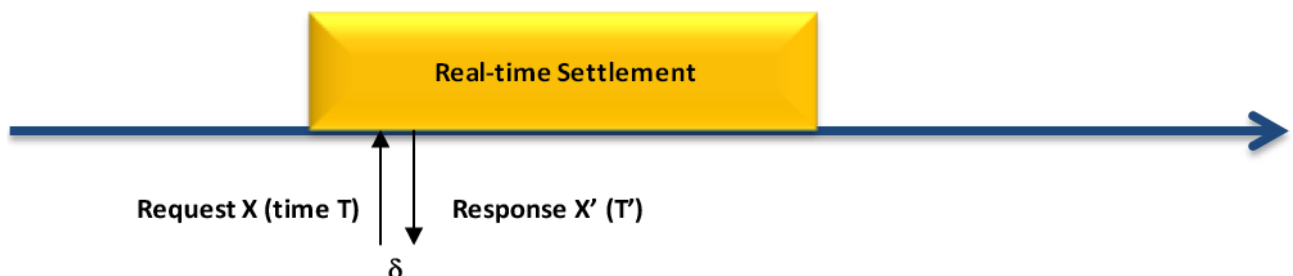
#### 1.4.3.6 Reference data maintenance instructions processing

This section describes how CRDM processes reference data maintenance requests during the normal operation and during T2S night-time settlement, as the processing during these two phases takes place in slightly different ways, both in terms of response time and of response messages generated by CRDM. For a detailed description of the dialogue between CRDM and CRDM Actors during the processing of reference data maintenance instructions, please refer to section 2 Dialogue between CRDM and CRDM Actors.

##### Real-time processing

During the T2S real-time period, CRDM processes each reference data maintenance request immediately.

**DIAGRAM 30 - REAL-TIME PROCESSING OF REFERENCE DATA MAINTENANCE INSTRUCTIONS**



This diagram shows how, during the T2S real-time settlement period, CRDM immediately processes every reference data maintenance request. Consequently, if  $T$  is the point in time in which CRDM receives a given reference data maintenance request  $X$ , the point in time  $T'$  in which CRDM provides the related static maintenance response  $X'$  is given by:

$$T' = T + \delta$$

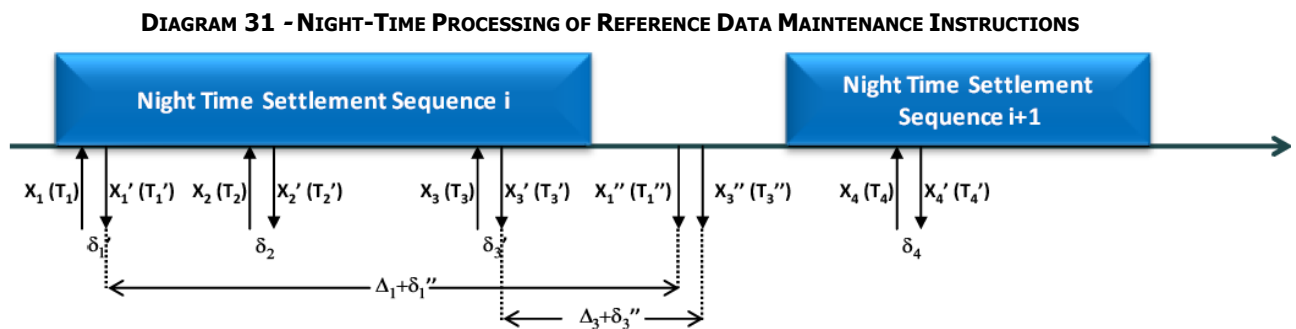
where  $\delta$  is the CRDM processing time for the reference data maintenance request X. This is valid both for successful and unsuccessful static data maintenance requests.

In the specific case of updates of Securities concerning the Minimum Settlement Unit, the Settlement Unit Multiple, the Deviating Settlement Units, the Settlement Type or the Final Maturity/Expiry Date, or update of Securities Accounts concerning the Negative Position flag, the reference data maintenance request is queued and then resumed and completed during the End-of-Day phase, by using the same queuing mechanism described below for reference data maintenance requests that may have an impact on the settlement process and that are submitted while a night-time settlement sequence is running.

### Night-time processing

The main peculiarity of the T2S night-time processing, when compared to the real-time processing, consists in the fact that T2S preserves the same reference data image for the entire duration of each settlement sequence within each cycle. This means that T2S does not make active any new revision of any reference data object that may have an impact on the settlement process. On the contrary, if a reference data maintenance instructions does not imply any possible impact on the settlement process, i.e. if the relevant changes concern attributes of reference data objects that T2S does not use for settlement or if the reference data maintenance instruction is not valid, then CRDM processes and completes this reference data maintenance instruction immediately.

The following diagram shows some examples of reference data maintenance requests submitted while a night-time sequence is running, which cover all the possible scenarios.



At time  $T_1$  a duly authorised user sends a valid reference data maintenance request  $X_1$  to block a cash account, i.e. to restrict it from settlement. This request may have an impact on the settlement process, because some pending Settlement Instructions may reference this cash account. Consequently, CRDM provides immediately a provisional reference data maintenance response (i.e. with status queued) at time

$$T_1' = T_1 + \delta_1'$$

where  $\delta_1'$  is the processing time for CRDM to create the relevant blocking intraday restriction with approval status set to queued. The processing of this reference data maintenance instruction resumes after the end of the current night-time settlement sequence.

At time  $T_2$  a duly authorised user sends a valid reference data maintenance instruction  $X_2$  to create a new securities account. This request cannot have an impact on the settlement process, because it refers

to the creation of the new securities account which, by definition, cannot be already referenced in any pending Settlement Instruction. Consequently, CRDM provides immediately a positive response at time

$$T_2' = T_2 + \delta_2$$

where  $\delta_2$  is the processing time for the creation of the new securities account.

At time  $T_3$  a duly authorised user sends a valid reference data maintenance request  $X_3$  to update a limit. Also this request, like request  $X_1$ , may have an impact on the settlement process of the pending Settlement Instructions referencing the cash account on which the limit is defined. Consequently, CRDM provides immediately a provisional reference data maintenance response (i.e. with status queued) at time

$$T_3' = T_3 + \delta_3'$$

where  $\delta_3'$  is the processing time for CRDM to update the relevant limit with approval status set to queued. The processing of this reference data maintenance instruction resumes after the end of the current night-time settlement sequence.

After the end of the current T2S night-time settlement sequence and before the beginning of the following one, CRDM resumes the processing of all the reference data maintenance instructions that were queued during the previous night-time settlement sequence. This results in the processing resumption and completion of the requests  $X_1$  (to block a Cash Account) and  $X_3$  (to update a limit). CRDM sends the related final reference data maintenance responses (i.e. with status completed) at time

$$T_1'' = T_1 + \delta_1' + \Delta_1 + \delta_1''$$

where  $\delta_1' + \delta_1''$  is the overall processing time for the request  $X_1$  and  $\Delta_1$  is the time between the first and the second processing of request  $X_1$ , and at time

$$T_3'' = T_3 + \delta_3' + D_3 + \delta_3''$$

where  $\delta_3' + \delta_3''$  is the overall processing time for the request  $X_3$  and  $D_3$  is the time between the first and the second processing of request  $X_3$ .

When the following night-time settlement sequence  $i+1$  begins, CRDM starts again processing reference data maintenance instructions differentiating between those having a potential impact on the settlement process, which CRDM queues and resumes after the end of the night-time settlement sequence, and those that do not have impact on the T2S settlement process, which CRDM completes immediately.

At time  $T_4$  a duly authorised user sends an invalid reference data maintenance instruction  $X_4$  to update a party that does not exist in CRDM. This request cannot even be processed, as it does not fulfil all the applicable business rules, so it cannot have an impact on the settlement process by definition. Consequently, CRDM provides immediately a negative reference data maintenance response at time

$$T_4' = T_4 + \delta_4'$$

where  $\delta_4'$  is the processing time for the rejection of the reference data maintenance instruction.

To summarise all the examples just described, CRDM provides an immediate reference data maintenance response also during a night-time settlement sequence. In addition, when this reference data maintenance response is only provisional, as the request is queued owing to its possible impact on the ongoing T2S night-time settlement process, then CRDM provides an additional, final reference data

maintenance response during the period between the current night-time settlement sequence and the next one.

The following tables provide a synopsis of all the possible scenarios that may occur in the processing of reference data maintenance instructions during the night-time settlement phase and a list of reference data objects that can be maintained immediately when a night-time sequence is running.

**TABLE 117 - NIGHT-TIME PROCESSING OF REFERENCE DATA MAINTENANCE INSTRUCTIONS**

| CONSISTENCY CHECK | T2S NIGHT-TIME SEQUENCE RUNNING | POSSIBLE IMPACT ON T2S SETTLEMENT | RESULT   |
|-------------------|---------------------------------|-----------------------------------|--|
| Negative          | Any                             | Any                               | CRDM provides immediately a negative reference data maintenance response (status rejected).  |
| Positive          | Yes                             | No                                | CRDM provides immediately a positive reference data maintenance response (status completed).   |
| Positive          | Yes                             | Yes                               | CRDM provides immediately a provisional reference data maintenance response (status queued) and provides the final maintenance response after the end of the current T2S sequence and before the beginning of the next one (status completed or rejected). |
| Positive          | No                              | Any                               | CRDM provides immediately a positive reference data maintenance response (status completed).   |

**TABLE 118 - REFERENCE DATA OBJECTS THAT CAN BE MAINTAINED WHILE A NIGHT-TIME SEQUENCE IS RUNNING**

| AREA       | OBJECT  |
|------------|---|
| Party      | Party <sup>92</sup><br>Eligible Counterpart CSD<br>Party-Service Link<br>Ancillary System Procedure<br>Ancillary System Bilateral Agreement<br>Banking Group<br>Billing Group |
| Securities | Securities <sup>93</sup>  |

92 Including the updates of MSA Party Attribute values, with the exception of the setup, update and removal of intraday restrictions.

93 Including the updates of MSA Securities Attribute values, with the exception of the setup, update and removal of intraday restrictions, deletion of Securities and Deviating Settlement Unit and updates of the following attributes: minimum settlement unit, settlement unit multiple, deviating settlement unit and settlement type. Updates to Minimum Settlement Unit, Settlement Unit Multiple, Deviating Settlement Unit and Settlement



| AREA                    | OBJECT  |
|-------------------------|---|
|                         | Securities Valuation<br>Close Link<br>Security CSD Link<br>Auto-collateralization eligibility link  |
| Securities penalty data | Securities subject to cash penalties<br>Security penalty rate<br>Cash discount penalty rate<br>Daily price<br>SME Growth Market<br>Euro Foreign Exchange Reference Rate   |
| Securities Account      | Securities Account <sup>94</sup><br>CSD Account Link<br>CMB Securities Account Link   |
| Cash Account            | Cash Account <sup>95</sup><br>Authorised Account User<br>Credit Memorandum Balance<br>Liquidity Transfer Order<br>Liquidity Transfer Order Link Set<br>External RTGS Account <sup>96</sup><br>Limit <sup>97</sup><br>Standing Order for Reservation<br>Direct Debit Mandate<br>Account Monitoring Group<br>Liquidity Transfer Group |

Type that apply to a security created before the current settlement date or eligible for auto-collateralization since the start of the day are further queued until the next End-of-Day phase, as are updates of the maturity/expiry date and any other update of the settlement unit multiple resulting in an increase of the number of decimal positions of its value.

94 Including the updates of MSA Securities Account Attribute values, with the exception of the setup, update and removal of intraday restrictions and updates of the positive/negative flag. Updates to the "Negative Position" attribute applied to a securities account, outside the End of Day period, are further queued until the next End of Day phase.

95 With the exception of the setup, update and removal of intraday restrictions and updates of the floor or ceiling notification amount.

96 With the exception of the setup, update and removal of intraday restrictions.

97 With the exception of the creation and update of the limit amount.



| AREA  | OBJECT   |
|---|--|
|   | Settlement Bank Account Group  |
| Access Rights management                      | User<br>Role<br>Privilege<br>Secured Group<br>Certificate DN<br>User-Certificate DN Link                       |
| Message subscription                          | Message subscription rule<br>Message subscription rule set   |
| Report configuration                          | Report Configuration   |
| Attribute Domain management                   | Attribute Domain<br>Attribute Reference  |
| Routing configuration                         | DN-BIC Routing   |
| Business Day Management configuration         | Event Type<br>Closing Day  |
| Market-Specific configuration                 | Market-Specific Attribute  |
| Restriction type management                   | Restriction type<br>Restriction type rule  |
| Conditional securities delivery configuration | CoSD rule<br>CoSD rule set   |
| Billing configuration                         | Invoice configuration<br>VAT<br>Tariff   |
| Configuration parameters                      | Country<br>Currency<br>System Entity<br>Tolerance amount<br>T2S BIC Directory<br>Minimum Reserve Configuration |

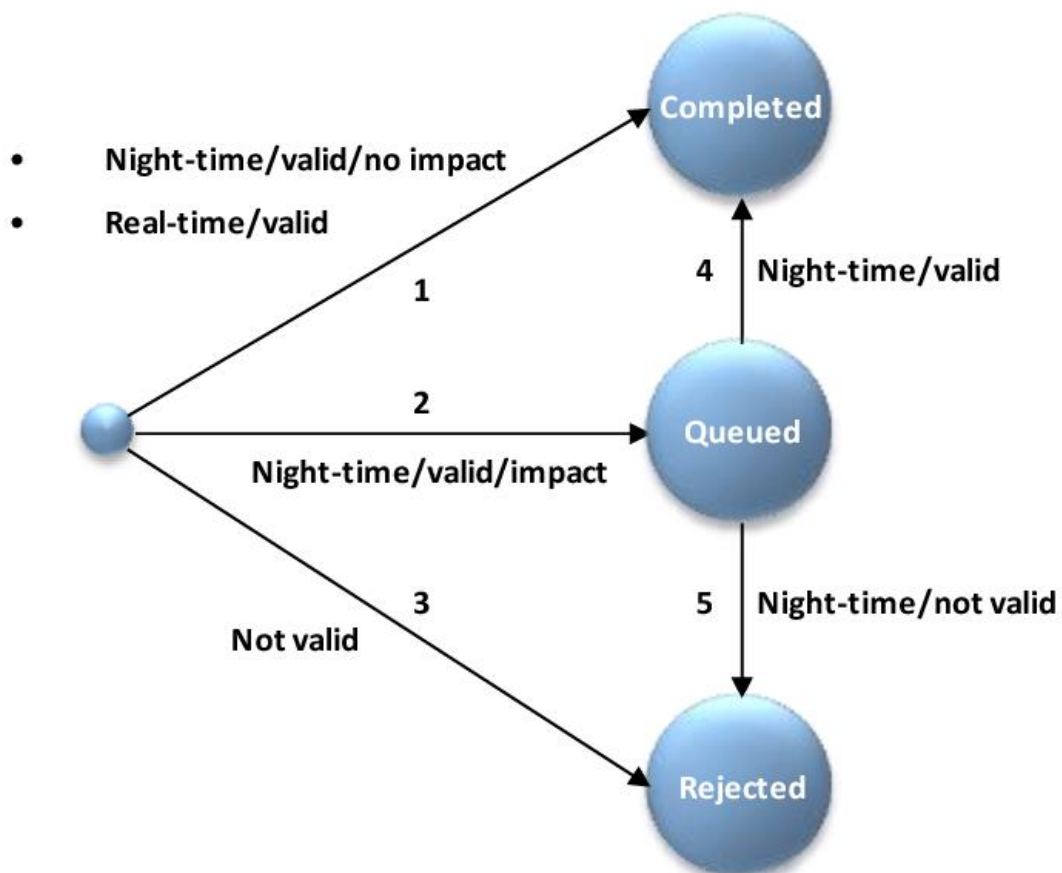
It is worth mentioning that the message subscription service allows CRDM Actors to setup a configuration which prevents CRDM from sending provisional (queued) reference data maintenance responses.

Furthermore, in case of need, the CRDM Actor may revoke via the CRDM GUI any previously queued reference data maintenance request, without having to wait for CRDM to resume and complete it.

#### 1.4.3.7 Reference data status management

The following diagram shows the possible values that CRDM can report when providing a reference data maintenance response to the relevant CRDM Actors, with all the possible status transitions.

**DIAGRAM 32 - REFERENCE DATA STATUS MANAGEMENT**



The following table defines all the possible statuses shown in the diagram and the possible status transitions leading to enter each of these statuses.

**TABLE 119 - REFERENCE DATA MAINTENANCE INSTRUCTION PROCESSING STATUS**

| STATUS VALUE | DEFINITION   |
|--------------|--|
| Queued       | The reference data maintenance instruction is queued. This status can be sent to the CRDM Actor only if a valid reference data maintenance instruction is received by CRDM during a T2S night-time settlement sequence and it is related to a reference data change possibly impacting the settlement process (status transition 2).   |
| Rejected     | An invalid reference data maintenance instruction has been rejected due to one (or many) business validation error(s). This status can be received by the CRDM Actor either immediately (status transition 3) or while CRDM is processing a reference data maintenance instruction that has been queued during the previous T2S night-time settlement sequence (status transition 5).  |
| Completed    | The reference data maintenance instruction has been successfully completed. This status can be received by the CRDM Actor either immediately, in case the reference data maintenance instruction is processed during the real-time settlement or if it is processed during the night-time settlement and it does not have an impact on the settlement process (status transition 1), or while CRDM is processing a reference data maintenance instruction that has been queued during the previous T2S night-time settlement sequence (status transition 4). |

#### 1.4.3.8 Common reference data propagation

CRDM allows users to configure reference data to be used in the Local Reference Data Management of other TARGET services (e.g. TIPS, CLM and RTGS).

Data set up in CRDM is propagated to other services, common components or back-office applications on a regular basis, typically once a day, at a preset time before the change of business date. If needed, in contingency situations participants can request the Service Operator for an ad-hoc propagation to be run at different times of day for a specific service, common component or back-office application. There is no technical limit on the number of times a data propagation can run during a given business date.

No daily data propagation flow exists from CRDM to T2S, since most objects are taken into account by T2S as soon as the change is made in CRDM. However, certain types of changes are taken into account on a deferred basis by certain T2S processes. For more information, see section 1.4.3.3 Validity of common reference data objects .

No data propagation flow exists from TIPS, T2S, ECONS2, CLM and RTGS to CRDM. Since CRDM contains data belonging to different services, common components or back-office applications, specific segregation principles are put in place to make sure that relevant data is made available in each service, common component or back-office application depending on the individual needs. In this respect certain objects (e.g. Country, Currency) are fully shared – they are made available to every service, common component or back-office application without distinction. Other objects are service-specific, and are made available in full to a single service (examples include Standing Order for Reservation for RTGS). Finally, certain objects are shared among multiple Services, but the data is segregated and made available in a given service based on the values of specific attributes that link each instance to a specific

service, either directly or indirectly. Examples of this type of objects include Party (which can be linked to Services by setting up Party Service Links) and Cash Account (which has specific instances for each Service based on the Cash Account Type attribute).

A special case is represented by the Eurosystem Collateral Management System (ECMS) which does not have specifically segregated data in CRDM, but relies on some CRDM data for internal validation, as well as using CRDM for storing Distinguished Names of ECMS users. For additional details, see section 1.5.4.

The following table lists the possible CRDM reference data objects and their relevance for each service, as well as the data segregation principles defining which instances will be propagated to which Service. As T2S

**TABLE 120 – CRDM DATA SEGREGATION PER SERVICE**

| AREA       | OBJECT                               | CLM | RTGS | T2S | TIPS | ECONS2 | SEGREGATION PRINCIPLES   |
|------------|--------------------------------------|-----|------|-----|------|--------|--|
| Party      | Party                                | X   | X    | X   | X    | X      | All data is available in T2S.<br><br>Parties with a Party Service Link to ECONS2, CLM, RTGS or TIPS are available in that Service. |
|            | Eligible Counterpart CSD link        |     |      | X   |      |        | All data is available in T2S.  |
|            | Party Service Link                   |     |      |     |      |        | Only relevant for CRDM; defines the availability of Party data for a given Service/component.                                      |
|            | Banking Group                        | X   |      |     |      |        | All data is available in CLM.  |
|            | Billing Group                        |     |      |     |      |        | Only relevant for Billing.   |
|            | Ancillary System Bilateral Agreement |     | X    |     |      |        | All data is available in RTGS.   |
|            | Ancillary System Procedure           |     | X    |     |      |        | All data is available in RTGS.   |
| Securities | Security                             |     |      | X   |      |        | All data is available in RTGS.   |
|            | Close Link                           |     |      | X   |      |        | All data is available in RTGS.   |
|            | Securities Valuation                 |     |      | X   |      |        | All data is available in RTGS.   |
|            | Securities CSD Link                  |     |      | X   |      |        | All data is available in RTGS.   |

| AREA                  | OBJECT                                  | CLM | RTGS | T2S | TIPS | ECONS2 | SEGREGATION PRINCIPLES   |
|-----------------------|---|-----|------|-----|------|--------|--|
|                       | Auto-Collateralisation Eligibility Link |     |      | X   |      |        | All data is available in RTGS.   |
| Security Penalty Data | Securities Subject to Cash Penalties    |     |      | X   |      |        | All data is available in RTGS.   |
|                       | Security Penalty Rate                   |     |      | X   |      |        | All data is available in RTGS.   |
|                       | Cash Discount Penalty Rate              |     |      | X   |      |        | All data is available in RTGS.   |
|                       | Daily Price                             |     |      | X   |      |        | All data is available in RTGS.   |
|                       | SME Growth Market                       |     |      | X   |      |        | All data is available in RTGS.   |
|                       | Euro Foreign Exchange Reference Rate    |     |      | X   |      |        | All data is available in RTGS.   |
| Cash Account          | Cash Account                            | X   | X    | X   | X    | X      | Data is available in different services/components depending on the Cash Account Type attribute; each possible value of this attribute identifies a type of Cash Account used by a single Service/component. |
|                       | Authorised Account User                 | X   | X    |     | X    | X      | Data is available in different services/components depending on the Cash Account Type attribute of the Cash Accounts it refers to.   |
| External              | External RTGS Account                   |     |      | X   |      |        | All data is available in RTGS.   |
|                       | Account Monitoring Group                | X   | X    |     |      |        | Data is available in different services/components depending on the Cash Account Type attribute of the Cash Accounts it refers to.   |
|                       | Liquidity Transfer Order                | X   | X    | X   |      |        | Data is available in different services/components depending on the Cash Account Type attribute of the Cash Account it refers to.  |

| AREA                           | OBJECT                                  | CLM | RTGS | T2S | TIPS | ECONS2 | SEGREGATION PRINCIPLES   |
|--------------------------------|---|-----|------|-----|------|--------|--|
| Li                             | Liquidity<br>Transfer Order<br>Link Set |     |      | X   |      |        | All data is available in RTGS.   |
| Credit                         | Credit<br>Memorandum<br>Balance         |     |      | X   |      |        | All data is available in RTGS.   |
|                                | Liquidity<br>Transfer Group             | X   | X    |     |      |        | Data is available in different services/components depending on the Cash Account Type attribute of the Cash Accounts it refers to.                 |
|                                | Settlement<br>Bank Account<br>Group     |     | X    |     |      | X      | All data is available in RTGS and ECONS2.  |
|                                | Limit                                   |     | X    | X   | X    |        | Data is available in different services/components depending on the Cash Account Type attribute of the Cash Account it refers to.                  |
|                                | Direct Debit<br>Mandate                 | X   | X    |     |      |        | Data is available in different services/components depending on the Cash Account Type attribute of the Cash Account it refers to.                  |
|                                | Standing Order<br>for Reservation       | X   | X    |     |      |        | Data is available in different services/components depending on the Cash Account Type attribute of the Cash Accounts it refers to.                 |
| Access<br>Rights<br>Management | User                                    | X   | X    | X   |      | X      | All data is available in CRDM.<br>Data related to Parties with a Party Service Link to ECONS2, CLM or RTGS is available in that Service/component. |
|                                | Role                                    | X   | X    | X   | X    | X      | All data is available in T2S.<br>Data containing Privileges related to ECONS2, CLM, RTGS or TIPS is available in that Service/component.           |
|                                | Privilege                               |     |      | X   |      |        | All data is available in T2S. It is not available in other Services, but it is used by CRDM to determine the                                       |

| AREA                               | OBJECT                        | CLM | RTGS | T2S | TIPS | ECONS2 | SEGREGATION PRINCIPLES  |
|------------------------------------|-------------------------------|-----|------|-----|------|--------|---|
|                                    |                               |     |      |     |      |        | availability of other access rights data in those Services/components.<br><br>Each Privilege includes a link to a single Service/component which defines the Service/component that contains the user function activated by the Privilege.        |
|                                    | Secured group                 |     |      | X   |      |        | All data is available in RTGS.  |
|                                    | Certificate DN                | X   | X    | X   | X    | X      | All data is available in T2S.<br><br>Data linked to Users flagged as main users for TIPS is available in TIPS.<br><br>Data linked to Users under Parties with a Party Service Link to ECONS2, CLM or RTGS is available in that Service/component. |
|                                    | User-Certificate DN Link      | X   | X    | X   | X    | X      | All data is available in T2S.<br><br>Data linked to Users flagged as main users for TIPS is available in TIPS.<br><br>Data linked to Users under Parties with a Party Service Link to ECONS2, CLM or RTGS is available in that Service/component. |
|                                    | Role User                     | X   | X    | X   | X    | X      | Data is available in different services/components depending on the Service the Privileges contained in the Role refer to.  |
|                                    | Role Party                    | X   | X    | X   | X    | X      | Data is available in different services/components depending on the Service/component the Privileges contained in the Role refer to.  |
|                                    | Grantee Privilege             | X   | X    | X   | X    | X      | Data is available in different services/components depending on the Service the Privilege refers to.  |
| Message Subscription Configuration | Message Subscription Rule Set | X   | X    | X   | X    |        | Data containing Message Subscription Rules that reference data from T2S, CLM, RTGS or TIPS is available in those Services/components.   |

| AREA                                  | OBJECT                                 | CLM | RTGS | T2S | TIPS | ECONS2 | SEGREGATION PRINCIPLES   |
|---------------------------------------|--|-----|------|-----|------|--------|--|
|                                       | Message Subscription Rule              | X   | X    | X   | X    |        | Data is available in different services/components depending on the underlying reference data objects the Rule refers to.  |
| Network Configuration                 | Network Service                        | X   | X    | X   | X    | X      | Data is available in different Services/components based on an attribute that defines a direct reference to a single Service/component.  |
|                                       | Technical Address Network Service Link | X   | X    | X   | X    | X      | Data is available in different Services/components depending on the Service/component the related Network Service refers to.   |
|                                       | DN BIC Routing                         | X   | X    |     | X    |        | Data is available in different Services/components depending on the Cash Account Type attribute of the Cash Account the related Authorised Account User BIC refers to.                       |
|                                       | Routing                                | X   | X    | X   | X    | X      | Data is available in different Services/components depending on the Service identifier in the Network Service linked to the Party Technical Address referenced in the Routing configuration. |
| Report Configuration                  | Report Configuration                   | X   | X    | X   | X    |        | Data is available in different Services/components depending on the specific type of report being subscribed.  |
| Business Day Management Configuration | Event Type                             |     |      | X   |      |        | T2S data is available in T2S Scheduling.<br><br>Apart from this, only relevant for CRDM and Business Day Management.   |
|                                       | Operating Day Type                     |     |      | X   |      |        | T2S data is available in T2S Scheduling.   |



| AREA                          | OBJECT                        | CLM | RTGS | T2S | TIPS | ECONS2 | SEGREGATION PRINCIPLES  |
|-------------------------------|-------------------------------|-----|------|-----|------|--------|---|
|                               |                               |     |      |     |      |        | Apart from this, only relevant for CRDM and Business Day Management.  |
|                               | Closing Day                   |     |      | X   |      |        | T2S data is available in T2S Scheduling.<br>Apart from this, only relevant for CRDM and Business Day Management.                        |
| Market-Specific Configuration | Market-Specific Attribute     |     |      | X   |      |        | All data is available in RTGS.  |
| Restriction Type Management   | Restriction Type              | X   | X    | X   | X    |        | Data is available in different Services/components based on an attribute that defines a direct reference to a single Service/component. |
|                               | Restriction Type Rule         |     |      | X   |      |        | All data is available in RTGS.  |
| CoSD Management               | CoSD Rule Set                 |     |      | X   |      |        | All data is available in RTGS.  |
|                               | CoSD Rule                     |     |      | X   |      |        | All data is available in RTGS.  |
| Billing Configuration         | Service Item                  |     |      |     |      |        | Only relevant for CRDM and Billing.   |
|                               | Billing Service Configuration |     |      |     |      |        | Only relevant for CRDM and Billing.   |
|                               | Tariff                        |     |      |     |      |        | Only relevant for CRDM and Billing.   |
|                               | Invoice Configuration         |     |      |     |      |        | Only relevant for CRDM and Billing.   |
|                               | VAT                           |     |      |     |      |        | Only relevant for CRDM and Billing.   |
| Configuration Parameters      | Country                       | X   | X    | X   | X    | X      | All data is available in all Services/components.   |
|                               | Currency                      | X   | X    | X   | X    | X      | All data is available in all Services/components.   |
|                               | Currency Service Link         | X   | X    | X   | X    | X      | Data is available in different Services/components depending on   |

| AREA | OBJECT                        | CLM | RTGS | T2S | TIPS | ECONS2 | SEGREGATION PRINCIPLES                            |
|------|-------------------------------|-----|------|-----|------|--------|---|
|      |                               |     |      |     |      |        | the Service/component the link refers to.         |
|      | System Entity                 | X   | X    | X   | X    | X      | All data is available in all Services/components. |
|      | BIC Directory                 | X   | X    | X   | X    | X      | All data is available in all Services/components. |
|      | Service                       |     |      |     |      |        | Only relevant for CRDM.                           |
|      | Minimum Reserve Configuration | X   |      |     |      |        | Only relevant for CLM.                            |
|      | Partial Settlement Threshold  |     |      | X   |      |        | All data is available in RTGS.                    |

## 1.4.4 TIPS Directory

### 1.4.4.1 Purpose

To support the routing of instant payment in TIPS, the needed routing information is provided in a structured TIPS Directory.

It includes the list of all BICs of TIPS Participants and Reachable Parties that are addressable within TIPS.

### 1.4.4.2 Structure

TIPS Directory is generated as a fixed length record flat file encapsulated in a XML envelope.

The structure of the records of the TIPS Directory is as follows:

**TABLE 121 – TIPS DIRECTORY STRUCTURE**

| O/M | FIELD No. | FIELD NAME       | FORMAT    | DESCRIPTION   |
|-----|-----------|------------------|-----------|---|
| M   | 1         | User BIC         | CHAR(11)  | BIC configured as Authorised Account User in TIPS. This BIC can be authorised for payments on one and only one TIPS Account, TIPS AS Technical Account or CMB in TIPS and it is the BIC that shall be used to address Instant Payments in TIPS. |
| M   | 2         | Institution Name | CHAR(105) | It is the name stored in the CRDM BIC Directory together with the User BIC.   |

| O/M | FIELD No. | FIELD NAME         | FORMAT         | DESCRIPTION  |
|-----|-----------|--------------------|----------------|--|
| M   | 3         | Party BIC          | CHAR(11)       | BIC that identifies a TIPS Participant or a Reachable Party in TIPS. This BIC is for information purpose only and it allows grouping all User BICs configured by a given TIPS Participant or Reachable Party. It cannot be used to address Instant Payments in TIPS. |
| M   | 4         | Account Owner BIC  | CHAR(11)       | BIC of the TIPS Participant (or TIPS Ancillary System) owning the TIPS Account (or TIPS AS Technical Account) for which the User BIC has been authorised, also through a CMB.  |
| M   | 5         | Type of Change     | CHAR(1)        | Exhaustive list of possible values:<br>A – Added<br>M – Modified<br>D – Deleted<br>U – Unchanged   |
| M   | 6         | Valid From         | DATE(YYYYMMDD) | Date from which the entry is valid.  |
| M   | 7         | Valid To           | DATE(YYYYMMDD) | Date up to which the entry is valid.<br>Value "99991231" is used whenever the ending of validity has not been specified.   |
| M   | 8         | Participation Type | CHAR(2)        | Exhaustive list of possible values for Party BIC:<br>01 – TIPS Participant<br>02 – Reachable Party   |
| M   | 9         | Maximum IP_Amount  | DEC (18,5)     | Maximum Amount accepted by the corresponding TIPS Participant or Reachable Party into an incoming Instant Payment transaction. The default value is the maximum amount defined by the SCT Inst scheme rulebook.  |

Each version of the TIPS Directory is identified by the name of its file (see section 1.4.4.4).

The following table shows the usage of the "Type of Change" field:

**TABLE 122 – TYPE OF CHANGE USAGE**

| CHANGE   | VERSION N-1 | VERSION N | VERSION N+1 |
|--|-------------|-----------|-------------|
| A new record is issued in the version N of the TIPS Directory (the "Valid From" date must be greater than the validity date of the version N-1). | not present | A         | U           |

| CHANGE   | VERSION N-1 | VERSION N | VERSION N+1 |
|--|-------------|-----------|-------------|
| A field (different from the BIC) is changed in the version N.  | U           | M         | U           |
| A BIC is no more reachable in TIPS (the "Valid To" date + 1 must be strictly lower than the validity date of the version N+1). | U           | D         | not present |

#### 1.4.4.3 Generation

CRDM generates both a full version and a delta version of the TIPS Directory every business day at 17:00 CET. The full version includes all BICs of TIPS Participants and Reachable Parties that are addressable within TIPS, whereas the delta version only includes changes with respect to the previous version of the TIPS Directory (i.e. record with "Type of Change" equal to "A", "D" or "M"). In case there are no changes between two versions of the TIPS Directory, the delta version consists of an empty file.

Immediately after the generation is completed, CRDM forwards both the full version and the delta version to TIPS for push distribution (see section 1.4.4.4). TIPS Actors who created a Report Configuration either full and delta version will receive a TIPS directory including only the records related to the currency of the Central Bank to which the TIPS Participant and Reachable Parties belongs to.

#### 1.4.4.4 Distribution

TIPS Actors may receive the TIPS Directory in two ways:

- **push mode:** each day, after having received the end-of-day message from TARGET2, TIPS sends the full version or the delta version of the TIPS Directory to all TIPS Actors who created for this an appropriate Report Configuration.
- **pull mode:** at any time during the service hours of CRDM, a TIPS Actor may download either the full version or the delta version of the TIPS Directory from a CRDM web-page.

The name of the flat file that contains the TIPS Directory is as follows: TIPSXXXTTTTYYYYMMDD where:

- TTTT is the type, i.e. FULL for the full version and DLTA for the delta version;
- XXX is the currency related to the records included in the directory;
- YYYYMMDD specifies the year, month and day as of which the TIPS Directory is valid.

The file name as described refers to the XSD attribute "fileId" of the element "File".

Other logical file names (e.g. A2A Store and Forward, U2A Download prompt) follow software implementation logic and should not be used as reference by customers' applications.

### 1.4.4.5 XML Envelope

To adhere to ISO20022 compliance, TIPS Directory content is embedded into a XML Envelope.

The following is the XML schema used to embed the file into a message:

```
<?xml version="1.0" ?>
<xs:schema xmlns="urn:TIPS:TIPSDirectory"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="urn:TIPS:TIPSDirectory"
elementFormDefault="qualified">
<xs:simpleType name="RestrictedFileType">
<xs:restriction base="xs:string">
<xs:pattern value="(.{176,176}\n)+"/>
</xs:restriction>
</xs:simpleType>
<xs:element name="File" type="File"/>
<xs:complexType name="File">
<xs:simpleContent>
<xs:extension base="RestrictedFileType">
<xs:attribute name="fileId" type="xs:string" default="" />
</xs:extension>
</xs:simpleContent>
</xs:complexType>
</xs:schema>
```

This XML Schema Definition can be used by recipient actor to validate the content of the directory, if deemed necessary.

The produced XML file should look as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<File fileId = "TIPSEURFULL20200101" xmlns="urn:TIPS:TIPSDirectory">Record1
Record2
...
Recordn
</File>
```

## 1.4.5 RTGS Directory

### 1.4.5.1 Purpose

To support the routing of payments in RTGS, the routing information is provided in a structured RTGS Directory.

It includes the list of all published BICs for RTGS Participants and parties that are addressable within RTGS, i.e. BICs that are linked to a published RTGS DCA or RTGS CB Account through an Authorised Account User.

Each Authorised Account User either specifies the relevant participation type (see section 1.3.3.3 for details) or is defined as an “exclusion” rule, leading to that BIC(s) not being included in the RTGS Directory. For Multi-Addressee and Addressable BIC participation, wildcard characters may also be used by specifying at least the first 4 characters of the set of BICs followed by a wildcard. In that case all active and valid BICs in the CRDM BIC Directory corresponding to the wildcard rule (minus the ones that correspond to exclusion rules) will be included in the RTGS Directory.

#### 1.4.5.2 Structure

RTGS Directory is generated as a fixed length record flat file encapsulated in a XML envelope.

The structure of the records of the RTGS Directory is as follows:

**TABLE 123 – RTGS DIRECTORY STRUCTURE**

| O/M <sup>98</sup> | FIELD No. | FIELD NAME            | FORMAT    | DESCRIPTION  |
|-------------------|-----------|-----------------------|-----------|--|
| M                 | 1         | BIC                   | CHAR(11)  | BIC that uniquely identifies a RTGS Participant. This BIC is for information purpose only and cannot be used to address payments.  |
| M                 | 2         | Addressee BIC         | CHAR(11)  | BIC to be used in the message business header to address payments. It is equal to the Account BIC except for Multi-Addressee BICs. |
| M                 | 3         | Account BIC           | CHAR(11)  | BIC identifying the RTGS DCA or CB Account.  |
| M                 | 4         | Institution Name      | CHAR(105) | It is the name stored in the CRDM BIC Directory together with the Addressee BIC.   |
| O                 | 5         | City Heading          | CHAR(35)  | It is the name of the city where the RTGS Participant is established as stored in the CRDM BIC Directory.                          |
| O                 | 6         | National Sorting Code | CHAR(15)  | It is the National Sorting Code of the RTGS Participant as stored in the CRDM BIC Directory.                                       |

<sup>98</sup> Indicates if the field is optional or mandatory.

| O/M <sup>98</sup> | FIELD No. | FIELD NAME         | FORMAT         | DESCRIPTION   |
|-------------------|-----------|--------------------|----------------|---|
| O                 | 7         | Main BIC Flag      | CHAR(1)        | <p>Specifies if the BIC could be used to address the payments if the sender has no other information where to send to.</p> <p>If "Participation Type" is equal to "01 – Direct". it is filled according to the "Default RTGS Account" setting defined for the related RTGS Dedicated Cash Account. For other Participation Types it is always set to "False".</p> <p>Exhaustive list of possible values:</p> <p>T – True</p> <p>F – False</p> |
| M                 | 8         | Type of Change     | CHAR(1)        | <p>Exhaustive list of possible values:</p> <p>A – Added</p> <p>M – Modified</p> <p>D – Deleted</p> <p>U – Unchanged</p>   |
| M                 | 9         | Valid From         | DATE(YYYYMMDD) | Date from which the entry is valid.   |
| M                 | 10        | Valid To           | DATE(YYYYMMDD) | <p>Date up to which the entry is valid.</p> <p>Value "99991231" is used whenever the ending of validity has not been specified.</p>   |
| M                 | 11        | Participation Type | CHAR(2)        | <p>Exhaustive list of possible values for the entry:</p> <p>01 – Direct</p> <p>02 – Indirect</p> <p>03 – Multi addressee – Credit Institutions</p> <p>04 – Multi addressee – Branch of Direct Participant</p> <p>05 – Addressable BIC - Correspondent</p> <p>06 – Addressable BIC – Branch of Direct Participant</p>  |

| O/M <sup>98</sup> | FIELD No. | FIELD NAME | FORMAT | DESCRIPTION   |
|-------------------|-----------|------------|--------|---|
|                   |           |            |        | 07 – Addressable BIC – Branch of Indirect Participant<br>08 – Addressable BIC – Branch of correspondent |

Each version of the RTGS Directory is identified by the name of its file (see section 1.4.5.4).

The following table shows the usage of the “Type of Change” field:

**TABLE 124 – TYPE OF CHANGE USAGE**

| CHANGE   | VERSION N-1 | VERSION N | VERSION N+1 |
|--|-------------|-----------|-------------|
| A new record is issued in the version N of the RTGS Directory (the “Valid From” date must be greater than the validity date of the version N-1). | not present | A         | U           |
| A field (different from the BIC) is changed in the version N.  | U           | M         | U           |
| A BIC is no more reachable in RTGS (the “Valid To” date + 1 must be strictly lower than the validity date of the version N+1).                   | U           | D         | not present |

### 1.4.5.3 Generation

CRDM generates both a full version and a delta version of the RTGS Directory for each active settlement currency every business day at 17:00 CET. The full version includes all BICs of RTGS Participants that are addressable within RTGS, whereas the delta version only includes changes with respect to the previous version of the RTGS Directory (i.e. record with “Type of Change” equal to “A”, “D” or “M”). In case there are no changes between two versions of the RTGS Directory, the delta version consists of an empty file.

Immediately after the generation is completed, CRDM distributes both the full version and the delta version(see section 1.4.5.4).

RTGS Participants who created a Report Configuration either full and delta version will receive a RTGS directory including only the records related to the currency of the Central Bank to which the RTGS Participant belongs to.

### 1.4.5.4 Distribution

RTGS Participants may receive the RTGS Directory in two ways:



- | **push mode:** each day, when the end-of-day is reached, CRDM sends the full version or the delta version of the RTGS Directory to all RTGS Participants who created for this an appropriate Report Configuration.
- | **pull mode:** at any time during the service hours of CRDM, a RTGS Participant may download either the full version or the delta version of the RTGS Directory from a CRDM web-page.

The name of the flat file that contains the RTGS Directory is as follows: RTGSXXXTTTTYYYYMMDD where:

- TTTT is the type, i.e. FULL for the full version and DLTA for the delta version;
- XXX is the currency related to the records included in the directory;
- YYYYMMDD specifies the year, month and day as of which the RTGS Directory is valid.

The file name as described refers to the XSD attribute "fileId" of the element "File".

Other logical file names (e.g. A2A Store and Forward, U2A Download prompt) follow software implementation logic and should not be used as reference by customers' applications.

#### 1.4.5.5 XML Envelope

To adhere to ISO20022 compliance, RTGS Directory content is embedded into a XML Envelope.

The following is the XML schema used to embed the file into a message:

```
<?xml version="1.0" ?>
<xs:schema xmlns="urn:CRDM:RTGSDirectory"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="urn:CRDM:RTGSDirectory"
elementFormDefault="qualified">
<xs:simpleType name="RestrictedFileType">
<xs:restriction base="xs:string">
<xs:pattern value="(.{208,208}\n)+" />
</xs:restriction>
</xs:simpleType>
<xs:element name="File" type="File"/>
<xs:complexType name="File">
<xs:simpleContent>
<xs:extension base="RestrictedFileType">
<xs:attribute name="fileId" type="xs:string" default="" />
</xs:extension>
</xs:simpleContent>
</xs:complexType>
</xs:schema>
```

This XML Schema Definition can be used by recipient actor to validate the content of the directory, if deemed necessary.

For a full RTGS Directory related to Euro currency and produced on 2022-01-01, the produced XML file should look as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<File fileId = "RTGSEURFULL20220101" xmlns="urn:CRDM:RTGSDirectory">Record1
Record2
...
Recordn
</File>
```

#### 1.4.5.6 Example

This section provides an example based on a data configuration setup to describe how the main fields of the RTGS Directory are populated. This example focuses on the three BIC fields and the Participation Type.

Assuming a CRDM data configuration based on the following:

- | A Party identified with BIC ABCDFRPPXXX owns three Cash Accounts identified with the related Account BICs stored in the Authorised Account User object as
  - Account 1, identified with Account BIC ABCDFRPPXXX;
  - Account 2, identified with Account BIC ABCDFRPPXX2;
  - Account 3, identified with Account BIC ABCDFRPPXX3;
- | BIC ABCDFRPPXX1 is defined as a multi-addressee (Credit institution) on Account 2;
- | BIC ABCDJPTKXX2 is defined as an addressable BIC (Correspondent) on Account 2;
- | BIC EFGHFRPPXXX is defined as an indirect participant on Account 2.

The resulting RTGS directory will contain the following values.

**TABLE 125 – RTGS DIRECTORY EXAMPLE**

| BIC         | ADDRESSEE BIC | ACCOUNT BIC | PARTICIPATION TYPE |
|-------------|---------------|-------------|--------------------|
| ABCDFRPPXXX | ABCDFRPPXXX   | ABCDFRPPXXX | 01 - direct        |
| ABCDFRPPXX2 | ABCDFRPPXX2   | ABCDFRPPXX2 | 01 - direct        |
| ABCDFRPPXX3 | ABCDFRPPXX3   | ABCDFRPPXX3 | 01 - direct        |
| EFGHFRPPXXX | ABCDFRPPXX2   | ABCDFRPPXX2 | 02 – Indirect      |

| BIC         | ADDRESSEE BIC | ACCOUNT BIC | PARTICIPATION TYPE                        |
|-------------|---------------|-------------|---|
| ABCDFRPPXX1 | ABCDFRPPXX1   | ABCDFRPPXX2 | 03 – Multi-addressee (Credit institution) |
| ABCDJPTKXX2 | ABCDFRPPXX2   | ABCDFRPPXX2 | 05 – addressable BIC (Correspondent)      |

## 1.4.6 CLM Repository

### 1.4.6.1 Purpose

To provide Central Banks with CLM accounting repository information, a structured CLM Repository is made available.

It includes the list of all published CLM accounts, of any account type.

### 1.4.6.2 Structure

CLM Repository is generated as a fixed length record flat file encapsulated in a XML envelope.

The structure of the records of the CLM Repository is as follows:

**TABLE 126 - CLM REPOSITORY STRUCTURE**

| O/M <sup>99</sup> | FIELD No. | FIELD NAME       | FORMAT         | DESCRIPTION  |
|-------------------|-----------|------------------|----------------|--|
| M                 | 1         | BIC              | CHAR(11)       | BIC that identifies a CLM account holder.  |
| O                 | 2         | ACCOUNT BIC      | CHAR(11)       | BIC configured as Authorised Account User in CRDM for the reported CLM account.  |
| M                 | 3         | Institution Name | CHAR(105)      | It is the name stored in the CRDM BIC Directory together with the BIC.   |
| M                 | 4         | Account Number   | CHAR(34)       | CLM account number.  |
| M                 | 5         | Responsible CB   | CHAR(2)        | Country code of the responsible Central Bank.  |
| M                 | 6         | Type of Change   | CHAR(1)        | Exhaustive list of possible values:<br>A – Added<br>M – Modified<br>D – Deleted<br>U – Unchanged                         |
| M                 | 7         | Valid From       | DATE(YYYYMMDD) | Date from which the entry is valid.  |
| M                 | 8         | Valid To         | DATE(YYYYMMDD) | Date up to which the entry is valid.<br>Value "99991231" is used whenever the ending of validity has not been specified. |

Each version of the CLM Repository is identified by the name of its file (see section 1.4.5.4).

The following table shows the usage of the "Type of Change" field:

<sup>99</sup> Indicates if the field is optional or mandatory.

**TABLE 127 – TYPE OF CHANGE USAGE**

| CHANGE   | VERSION N-1 | VERSION N | VERSION N+1 |
|--|-------------|-----------|-------------|
| A new record is issued in the version N of the CLM Repository (the "Valid From" date must be greater than the validity date of the version N-1). | not present | A         | U           |
| A field (different from the CLM account number) is changed in the version N.   | U           | M         | U           |
| A CLM account is closed (the "Valid To" date + 1 must be strictly lower than the validity date of the version N+1).                              | U           | D         | not present |

### 1.4.6.3 Generation

CRDM generates both a full version and a delta version of the CLM Repository every business day at 17:00 CET. The full version includes all CLM accounts that are marked as published within CLM, whereas the delta version only includes changes with respect to the previous version of the CLM Repository (i.e. record with "Type of Change" equal to "A", "D" or "M"). In case there are no changes between two versions of the CLM Repository, the delta version consists of an empty file.

Immediately after the generation is completed, CRDM distributes both the full version and the delta version (see section 1.4.6.4).

### 1.4.6.4 Distribution

Central Banks may receive the CLM Repository in two ways:

- | **push mode:** each day, when the end-of-day is reached, CRDM sends the full version or the delta version of the CLM Repository to all the Central Banks who created for this an appropriate Report Configuration.
- | **pull mode:** at any time during the service hours of CRDM, a Central Bank may download either the full version or the delta version of the CLM Repository from a CRDM web-page.

The name of the flat file that contains the CLM Repository is as follows: CLMREPOTTTTTYYYYMMDD where:

- TTTT is the type, i.e. FULL for the full version and DLTA for the delta version;
- YYYYYMMDD specifies the year, month and day as of which the CLM Repository is valid.

The file name as described refers to the XSD attribute "fileId" of the element "File". Other logical file names (e.g. A2A Store and Forward, U2A Download prompt) follow software implementation logic and should not be used as reference by customers' applications.

### 1.4.6.5 XML Envelope

To adhere to ISO20022 compliance, CLM Repository content is embedded into a XML Envelope.

The following is the XML schema used to embed the file into a message:

```
<?xml version="1.0" ?>
<xs:schema xmlns="urn:CRDM:CLMRepository"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="urn:CRDM:CLMRepository"
elementFormDefault="qualified">
<xs:simpleType name="RestrictedFileType">
<xs:restriction base="xs:string">
<xs:pattern value="(.{180,180}\n)+" />
</xs:restriction>
</xs:simpleType>
<xs:element name="File" type="File"/>
<xs:complexType name="File">
<xs:simpleContent>
<xs:extension base="RestrictedFileType">
<xs:attribute name="fileId" type="xs:string" default="" />
</xs:extension>
</xs:simpleContent>
</xs:complexType>
</xs:schema>
```

This XML Schema Definition can be used by recipient actor to validate the content of the directory, if deemed necessary.

For a full CLM Repository Directory produced on 2022-01-01, the produced XML file should look as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<File fileId = "CLMREPOFULL20220101" xmlns=" urn:CRDM:CLMRepository">Record1
Record2
...
Recordn
</File>
```

## 1.5 Interactions with other services

This section describes the interactions in place between CRDM and other Eurosystem Market Infrastructure Services.

### 1.5.1 TARGET2-Securities

The Common Reference Data Management common component is built as an enhancement of the T2S Static Data Management (SDMG) domain. The reference data objects and management functionalities

featured in CRDM are based on the result of a gap analysis between the functionalities available in T2S SDMG and the requirements of TIPS, RTGS and CLM. CRDM functionalities relate to T2S SDMG in one of three possible ways:

- SDMG functions which highlighted no gap with the new requirements are reused in full in CRDM;
- SDMG functions which highlighted specific gaps with the new requirements were modified in order to extend their scope and satisfy the requirements in CRDM;
- New functions which did not exist in SDMG were developed specifically for CRDM.

While the user interfaces are different, CRDM and SDMG share the same logical environments, database and back-end software, meaning that steps have been taken to ensure that the coexistence of data relating to both components does not interfere with the ongoing T2S settlement business. Based on the TARGET services requirements, the reference data model was set up in order to ensure that certain types of data are shared and relevant for both components. In this respect, three different object categories can be identified:

- Fully shared objects where the same instances are relevant and used by all Services (e.g. Parties, Users). These objects can be viewed, created and maintained from both the CRDM and the T2S interface. The same instance will be valid and taken into account in both components, regardless of the channel from which it is created/maintained. For example, a Payment Bank Party created through the CRDM interface is used and taken into account by T2S processes as if it has been created through the T2S interface.
- Categorised shared objects which are used in both components but each instance has a specific link to a single component (e.g. Cash Accounts, Limits). These objects can be created and maintained from both the CRDM and the T2S interface, however instances related to one component cannot be viewed or created/maintained from the other component's interface and are not taken into account by the other component's application processes.
- Service-specific objects which only have meaning for T2S or one or more of the new Services (e.g. Authorised Account User and DN-BIC Routing for TIPS and T2; Securities and CSD Account Links for T2S). Among these objects, those relevant for TIPS and/or T2 can only be viewed and maintained from the CRDM interface and have no bearing on the T2S application processes.

## 1.5.2 TARGET2

CRDM utilises BIC data for internal validations and addressing checks. The BIC Directory stores information needed to identify the legal entity linked to each BIC. This information is used, for example, to validate BICs used as Party identifiers or Authorised Account Users. CRDM executes a monthly loading of the SWIFT BIC directory on the basis of information provided by SWIFT through TARGET2 and forwarded to CRDM.

The CRDM Operator, in any case, has the ability to perform CRDM-specific updates on individual BICs. For example, this would allow to insert BICs that are not published in the SWIFT BIC Directory in order to use them in TIPS payments, if required.

The above interaction remains applicable until the go-live of TARGET services.

### 1.5.3 TARGET Instant Payment Settlement and T2

CRDM allows users to configure and query reference data to be used in TIPS and T2 (both CLM and RTGS components).

In order to ensure a timely and consistent propagation of common reference data to the relevant services, CRDM implements a publish-subscribe feature allowing each service to receive all the common reference data (and their changes) they require for their processing.

In a nutshell:

- CRDM publishes all changes (in push mode) of common reference data (e.g. creations of new objects, updates of already existing objects);
- Other subscriber services get those changes (in pull mode) and apply them to their Local Reference Data Management component, according to their needs.

Other detailed information can be found in the CRDM documentation.

All reference data setup and maintenance operations for TIPS, CLM and RTGS – other than the immediate changes in the local reference data management – are performed in CRDM and reference data are then propagated from CRDM to the relevant receiver asynchronously on a daily basis. The dialogue envisages two types of interactions:

1. **Daily propagation:** this is the main interaction between CRDM and TIPS/T2. Every CRDM opening day, an ad hoc event triggers the propagation of all reference data from CRDM to TIPS, CLM and RTGS. The event takes place at 17:00 CET for TIPS and at 18:00 CET for CLM and RTGS, so as to ensure a smooth and complete reference data propagation before TIPS receives the notification that a new business day is starting, and similarly for CLM/RTGS before the new business day starts. The set of reference data that TIPS, CLM and RTGS receive on business day T includes all the active data on the mentioned business date.
2. **Contingency propagation:** in case of contingency the CRDM Operator may trigger an ad hoc Daily propagation from CRDM to TIPS, CLM or RTGS. The contingency propagation is a daily propagation triggered intraday if an immediate change of a set of data (not manageable directly in TIPS, CLM or RTGS) must be performed. In this case, the following steps happen:
  - a. All the data eligible for the daily propagation and valid at the moment of the contingency propagation are propagated;
  - b. The daily propagation is performed as scheduled and includes all the active data on the relevant business date.

No data propagation flow exists from TIPS, CLM or RTGS to CRDM; data modified in TIPS, CLM and RTGS does not influence the existing data in CRDM.



## 1.5.4 Eurosystem Collateral Management System

CRDM stores information which is also used by ECMS as reference for internal validations; specifically, information regarding CLM and T2S Cash Accounts as well as the BIC Directory. This data is propagated to ECMS on a daily basis following the Daily Propagation process described in section 1.5.3. Moreover, ECMS relies on CRDM for the storage of Distinguished Names linked to ECMS users in order to enable them to access ECMS through ESMIG. This information is propagated on a regular basis from ECMS to CRDM.

## 1.5.5 ECONS2

CRDM stores data on Contingency Accounts and their links to CLM Cash Accounts used by ECONS2, as well as storing information on access rights and routing configurations for ECONS2 users, as well as the BIC Directory. This data is propagated to ECONS2 on a daily basis following the Daily Propagation process described in section 1.5.3.

# 1.6 Operations and support

## 1.6.1 Data configuration

The CRDM Operator is responsible for defining and maintaining a number of rules and parameters as reference data objects for the configuration of the CRDM business application. The rules and parameters the CRDM Operator may configure are the following:

- I System Entity: a system entity in CRDM corresponds to a partition of data equating to the scope of a Central Bank or of the CRDM Operator. For example, the system entity of a Central Bank includes all the data related to its payment banks. The CRDM Operator is responsible for the creation and maintenance of system entities for all the Central Banks and CSDs. The creation of a system entity is a necessary preliminary step for the creation of a Central Bank or CSD as a party in CRDM (and, consequently, for the creation of payment banks, ancillary systems, CSD Participants and External CSDs).
- I Party reference data for CSDs and Central Banks: the CRDM Operator is responsible for creating and maintaining CSDs and Central Banks as parties in CRDM. Subsequently, users from these parties may create their own CSD participants, external CSDs, ancillary systems and payment banks. For more details, see section 1.3.2.
- I Access rights configuration for CSDs and Central Banks: after having created the system entity and the related party, the CRDM Operator may set up the CSDs' and Central Banks' privileges to access CRDM, ECONS2, CLM, RTGS, ECMS and TIPS. Subsequently, CSDs and Central Banks are able to set up their own participants' access rights and to manage the access rights of their users independently, without resorting to the CRDM Operator. For details on access rights management, see section 1.2.2 and 1.3.6.

- | General restriction types: the CRDM Operator defines a set of general restriction types which each CSD or Central Bank or participant may use (in addition to the ones they define internally for the Services that foresee it) in order to block/unblock the participants or accounts/CMBs. See section 1.3.10 for details on restriction types. Moreover, in the event of anomalies or errors in the configuration, only the T2S Operator may change the positive/negative parameter flag of a Restriction Type.
- | General system parameters: the CRDM Operator may define a set of system parameters that are applicable to all participants, e.g. the list of available report types and the list of privileges. These may also be configured in the form of attribute domains, which provide a list of valid values for an attribute. The Operator may define a set of general attribute domains that are applicable to all participants.
- | Billing reference data: the CRDM Operator defines all the reference data for the configuration of billing in the different Services, specifically the data for all the categories of billable items and applicable fees for each range of billable units.
- | Country: the country codes for all countries (for uses such as defining the country of origin of a payment bank or the country of issuance of a security) are stored and maintained by the CRDM Operator.
- | Currency: the CRDM Operator is responsible for setting up and maintaining currency reference data and for specifying the settlement currencies for T2S, CLM, RTGS and TIPS.
- | BIC Directory: the BIC Directory stores information needed to identify the legal entity linked to each BIC. This information is used to validate BICs used as party identifiers. The CRDM Operator is responsible for the regular loading process of the SWIFT BIC Directory and for its possible updates concerning specific BICs, on the basis of information provided by SWIFT in the interim period between two loads.
- | Network Service: the CRDM Operator maintains all the data related to the available network services, including the data for technical identification of each service and the type of data expected to interact with each service (e.g. BIC or Distinguished Name).
- | Minimum Reserve Configuration: the CRDM Operator maintains the dates and interest rates for each reserve management period, which are then propagated to CLM.
- | Securities reference data: the T2S Operator can maintain the ISIN code of any given Security, either intraday or as of a future date, in order to correct possible input errors made by the responsible CSD while creating the same Security.

## 1.6.2 Business and operations monitoring

The Business and operations monitoring integrates information coming from different sources in order to monitor the business and operational status of the Common Reference Data Management, to detect possible problems in real-time or to proactively recognise a possible deterioration of performance and to provide up-to-date information for crisis management scenarios.

Business and operations monitoring gives the CRDM Operator the possibility to perform a real-time supervision of the Common Reference Data Management in terms of:

- | Performance;
- | Transactions transit and response times;
- | Ongoing fulfilment of SLA commitments and expectations;
- | Volumes and values exchanged;
- | Actors activity on the system;
- | Hardware and software problems.

The goal is to allow an early detection of possible anomalies through the continuous comparison of reported data with standard patterns. Besides that, the data can be used to improve the component's behaviour or its usage through a better understanding of the relevant dynamics.

The Business and operations monitoring application process extracts, merges and organizes the data in forms of tables, grids and graphs to ensure both the depth of the underlying information and its prompt usability.

In order to exclude any even remote impact on the component's performances, the Business and operations monitoring application makes use of a different set of data which are replicated from the original ones.

The CRDM Operator is also provided with a tool for the detection in real-time of functional or operational problems, called Technical Monitoring. It allows for the detection of hardware and software problems via real-time monitoring of the technical components involved in the processing, including the network connections.

Business and operations monitoring interfaces are available in U2A mode only.

### **1.6.3 TARGET Services calendar management**

The CRDM Operator defines the closing days of each TARGET Service as reference data objects, thus defining the opening and closing days calendar for each TARGET Service.

Closing days may be currency-specific. A currency-specific closing day defines a day in which the system is still open, but it is not possible to settle cash in that currency. Currency-specific closing days are defined by the CRDM Operator following the opening and closing days of the relevant CBs.

### **1.6.4 Archiving management**

The archiving management application copies inbound and outbound signed messages to be legally archived from the operational data base and stores them in their original format in a centralised archive for audit and regulatory purposes. Archiving management is scheduled on daily basis and it archives data for a period of ten years.

In addition, archiving management provides the Operator the possibility to extract previously archived data either for its own purpose or on behalf of a CB or other type of CRDM Actor.

The following CRDM messages are subject to legal archiving:

- AccountOpeningRequest (acmt.007)
- AccountRequestAcknowledgment (acmt.010)
- AccountRequestRejection (acmt.011)
- AccountExcludedMandateMaintenanceRequest (acmt.015)
- AccountClosingRequest (acmt.019)
- ModifyStandingOrder (camt.024)
- Receipt (camt.025)
- ModifyReservation (camt.048)
- DeleteStandingOrder (camt.071)
- PartyCreationRequest (reda.014)
- PartyStatusAdvice (reda.016)
- PartyModificationRequest (reda.022)
- PartyDeletionRequest (reda.031)
- ModifyLimit (camt.011)
- DeleteLimit (camt.012)

### 1.6.5 Data Migration management overview

Data migration means the initial loading of data from CSDs and CBs into the CRDM database. Data can be migrated into CRDM in three different ways: via XML messages, via the Graphical User Interface and via the CRDM Data Migration Tool. For the latter, CRDM allows CSDs and CBs to provide the data via structured files to the Operator, which is in charge of inserting the structured files in the Data Migration Tool. Once the Data Migration Tool has converted the structured files into XML messages, the latter are submitted to CRDM normal processing (i.e. including business validation, etc.). Finally, the Operator receives from the Data Migration Tool the structured file enriched with the conversion and business validation result and provides it to the participant.

## 1.7 Limitations of the system

### 1.7.1 Rule-based configurations

The CRDM application allows CRDM Actors to configure in a flexible way the following reference data features:

- | Message subscription (See section 1.2.3 Message subscription)
- | Restriction types (See section "Restriction Types" in the T2S UDFS)
- | Conditional securities delivery rules (See section "Conditional Securities Delivery Configuration) in the T2S UDFS)

Each CRDM Actor can have many active rule sets at any given point in time. Each rule set can include many rules. Each rule can include many groups of parameters.

All the limitations listed in this section apply exclusively to configurations set up for T2S.

The maximum overall number of groups of parameters for the active rule sets is:

- | 5000 for restriction types configurations;
- | 1500 for message subscription configurations;
- | 1000 for conditional securities delivery configurations.

Each rule can include many parameters. Within each rule, each parameter can be linked to many distinct values. The maximum overall number of distinct values for the active rule sets is:

- | 100 for restriction types configurations;
- | 100 for message subscription configurations;
- | 50 for conditional securities delivery configurations.

Only the parameters for restriction types configuration can also include market specific attributes. In this case, the maximum number of market-specific attributes, applicable for restriction types configurations, is 10 for all the restriction types of any given CSD and a maximum of five per restriction type rule. These two limits cover all types of market-specific attributes (i.e. party market-specific attributes, securities market-specific attributes and securities account market-specific attributes). So, for example, if a CSD selects three party market-specific attributes to configure its restriction types, then the same CSD can select no more than 7 (i.e. 10-3) security or securities account market-specific attributes to configure its restriction types. Similarly, if a CSD selects two party market-specific attributes to configure one specific restriction type rule, then the same CSD can select no more than three security or securities account market-specific attributes to configure the same restriction type rule.

## 2 Dialogue between CRDM and CRDM Actors

### 2.1 Introduction

This chapter contains two main subsections describing interactions between a generic CRDM Actor and CRDM in the form of universal use cases. Section 2.2 describes the interactions for the maintenance and query of common reference data using the A2A channel. Section 2.3 describes the interaction for the configuration of common reference data using the Data Migration Tool.

### 2.2 A2A Common reference data maintenance and query process

This section covers the standard situation of a CSD, Central Bank, CSD Participant, External CSD, Ancillary System or Payment Bank interacting with CRDM through the A2A channel. The two subsections present a standard use case for A2A reference data maintenance and A2A data query respectively.

#### 2.2.1 Reference data maintenance process

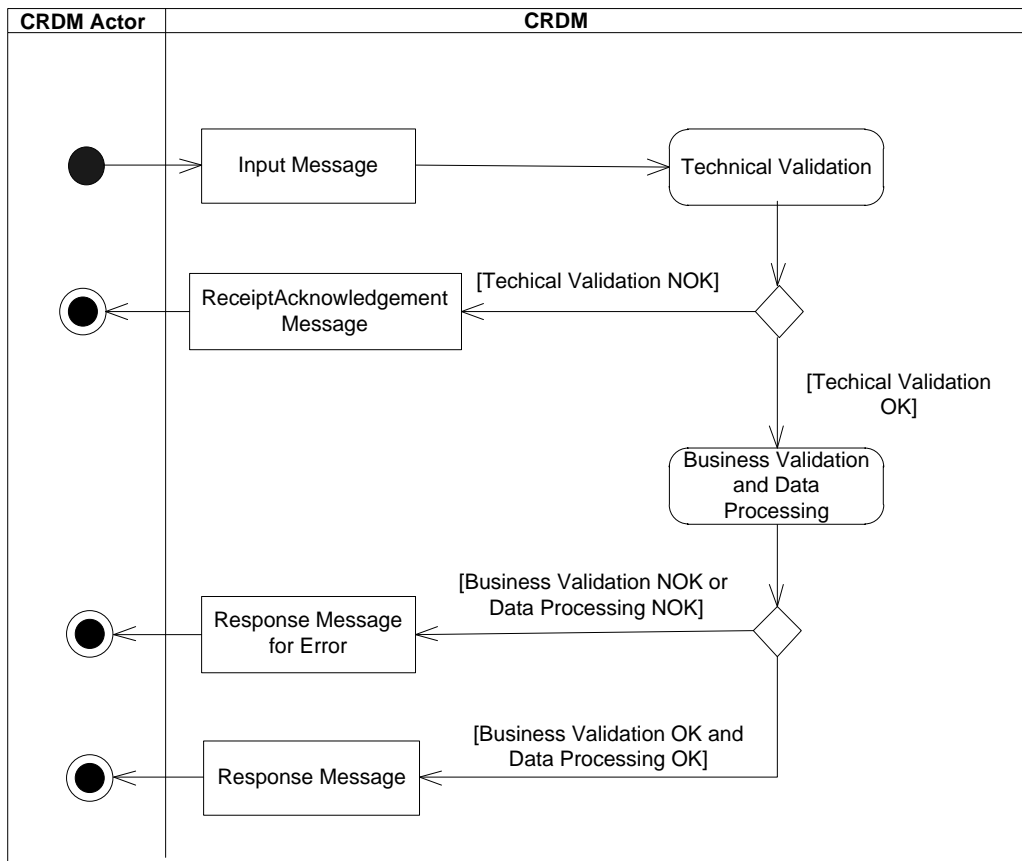
The common reference data maintenance process can be described as a common message flow that applies to every business scenario which allows to create, modify or delete a common reference data object.

Upon the sending of a request instructed with an input message, a related response message or a technical validation error message is returned.

##### 2.2.1.1 Reference data maintenance processing steps

The following diagram details all the processing steps:

**DIAGRAM 2 - COMMON REFERENCE DATA MAINTENANCE PROCESS**



### Technical Validation

The input message is technically validated. This may result in:

- **[Technical Validation NOK]** A ReceiptAcknowledgement (admi.007) message is sent by CRDM to the sender of the originating input message. No further steps are required and the process ends;
- **[Technical Validation OK]** Next process step is executed.

### Business Validation and Data Processing

The input message is validated by CRDM against the access rights of the CRDM Actor and against different business rules. After a successful business validation the execution of the requested maintenance activity is performed. This may result in:

- **[Business Validation OK and Data Processing OK]** A Response Message is sent back to the requesting CRDM Actor informing on the processing result of the requested maintenance activity;
- **[Business Validation NOK or and Data Processing NOK]** A Query Response message for Operational Error is sent back to the requesting CRDM Actor indicating the rejection of the requested maintenance activity, informing him of the outcome and the reasons for rejection.

The messages used in the interaction change depending on the business scenario to be covered. In the following table, for every concerned common reference data object and related business scenario, the input and response messages are defined.

**TABLE 128 – COMMON REFERENCE DATA MAINTENANCE MESSAGES**

| BUSINESS SCENARIO                      | INPUT MESSAGE                                      | RESPONSE MESSAGE                          | RESPONSE MESSAGE IN CASE OF ERROR         |
|--|--|---|---|
| Create/Update Liquidity Transfer Order | ModifyStandingOrder (camt.024)                     | Receipt(camt.025)                         | Receipt(camt.025)                         |
| Delete Liquidity Transfer Order        | DeleteStandingOrder (camt.071)                     | Receipt(camt.025)                         | Receipt(camt.025)                         |
| Update Standing Order for Limit/Limit  | ModifyLimit(camt.011)                              | Receipt(camt.025)                         | Receipt(camt.025)                         |
| Delete Standing Order for Limit/Limit  | DeleteLimit(camt.012)                              | Receipt(camt.025)                         | Receipt(camt.025)                         |
| Update Standing Order for Reservation  | ModifyReservation(camt.048)                        | Receipt(camt.025)                         | Receipt(camt.025)                         |
| Create Cash Account                    | AccountOpeningRequest(acmt.007)                    | AccountRequestAcknowledgement(acmt.010)   | AccountRequestRejection(acmt.011)         |
| Delete Cash Account                    | AccountClosingRequest (acmt.019)                   | AccountRequestAcknowledgement(acmt.010)   | AccountRequestRejection(acmt.011)         |
| Update Cash Account                    | AccountExcludedMandateMaintenanceRequest(acmt.015) | AccountRequestAcknowledgement(acmt.010)   | AccountRequestRejection(acmt.011)         |
| Create Party                           | PartyCreationRequest(reda.014)                     | PartyStatusAdvice(reda.016)               | PartyStatusAdvice(reda.016)               |
| Update Party                           | PartyModificationRequest(reda.022)                 | PartyStatusAdvice(reda.016)               | PartyStatusAdvice(reda.016)               |
| Delete Party                           | PartyDeletionRequest(reda.031)                     | PartyStatusAdvice(reda.016)               | PartyStatusAdvice(reda.016)               |
| Create Security                        | SecurityCreationRequest(reda.006)                  | SecurityCreationStatusAdvice(reda.008)    | SecurityCreationStatusAdvice(reda.008)    |
| Update Security                        | SecurityMaintenanceRequest(reda.007)               | SecurityMaintenanceStatusAdvice(reda.029) | SecurityMaintenanceStatusAdvice(reda.029) |



| BUSINESS SCENARIO                                   | INPUT MESSAGE                                   | RESPONSE MESSAGE                             | RESPONSE MESSAGE IN CASE OF ERROR            |
|---|---|--|--|
| Delete Security                                     | SecurityDeletionRequest(reda.013)               | SecurityDeletionStatusAdvice(reda.030)       | SecurityDeletionStatusAdvice(reda.030)       |
| Create Securities Account                           | SecuritiesAccountCreationRequest(reda.018)      | SecuritiesAccountStatusAdvice(reda.020)      | SecuritiesAccountStatusAdvice(reda.020)      |
| Update Securities Account                           | SecuritiesAccountModificationRequest(reda.023)  | SecuritiesAccountStatusAdvice(reda.020)      | SecuritiesAccountStatusAdvice(reda.020)      |
| Create Securities Valuation                         | CollateralValueCreationRequest(reda.024)        | CollateralDataStatusAdvice(reda.028)         | CollateralDataStatusAdvice(reda.028)         |
| Create Eligible Security for Auto-Collateralisation | EligibleSecuritiesCreationRequest(reda.025)     | CollateralDataStatusAdvice(reda.028)         | CollateralDataStatusAdvice(reda.028)         |
| Create Eligible Couterpart CSD                      | EligibleCounterpartCSDCreationRequest(reda.026) | EligibleCounterpartCSDStatusAdvice(reda.044) | EligibleCounterpartCSDStatusAdvice(reda.044) |
| Create Close Link                                   | CloseLinkCreationRequest(reda.027)              | CollateralDataStatusAdvice(reda.028)         | CollateralDataStatusAdvice(reda.028)         |
| Delete Securities Account                           | SecuritiesAccountDeletionRequest(reda.032)      | SecuritiesAccountStatusAdvice(reda.020)      | SecuritiesAccountStatusAdvice(reda.020)      |
| Create Security CSD Link                            | SecurityCSDLinkCreationRequest(reda.045)        | SecurityCSDLinkStatusAdvice(reda.047)        | SecurityCSDLinkStatusAdvice(reda.047)        |
| Update Security CSD Link                            | SecurityCSDLinkMaintenanceRequest(reda.046)     | SecurityCSDLinkStatusAdvice(reda.047)        | SecurityCSDLinkStatusAdvice(reda.047)        |
| Create Account Link                                 | AccountLinkCreationRequest(reda.049)            | AccountLinkStatusAdvice(reda.051)            | AccountLinkStatusAdvice(reda.051)            |
| Update Account Link                                 | AccountLinkMaintenanceRequest(reda.050)         | AccountLinkStatusAdvice(reda.051)            | AccountLinkStatusAdvice(reda.051)            |
| Delete Eligible Security for Auto-Collateralisation | EligibleSecuritiesDeletionRequest(reda.075)     | CollateralDataStatusAdvice(reda.028)         | CollateralDataStatusAdvice(reda.028)         |
| Delete Close Link                                   | CloseLinkDeletionRequest(reda.077)              | CollateralDataStatusAdvice(reda.028)         | CollateralDataStatusAdvice(reda.028)         |

## 2.2.2 Common reference data query

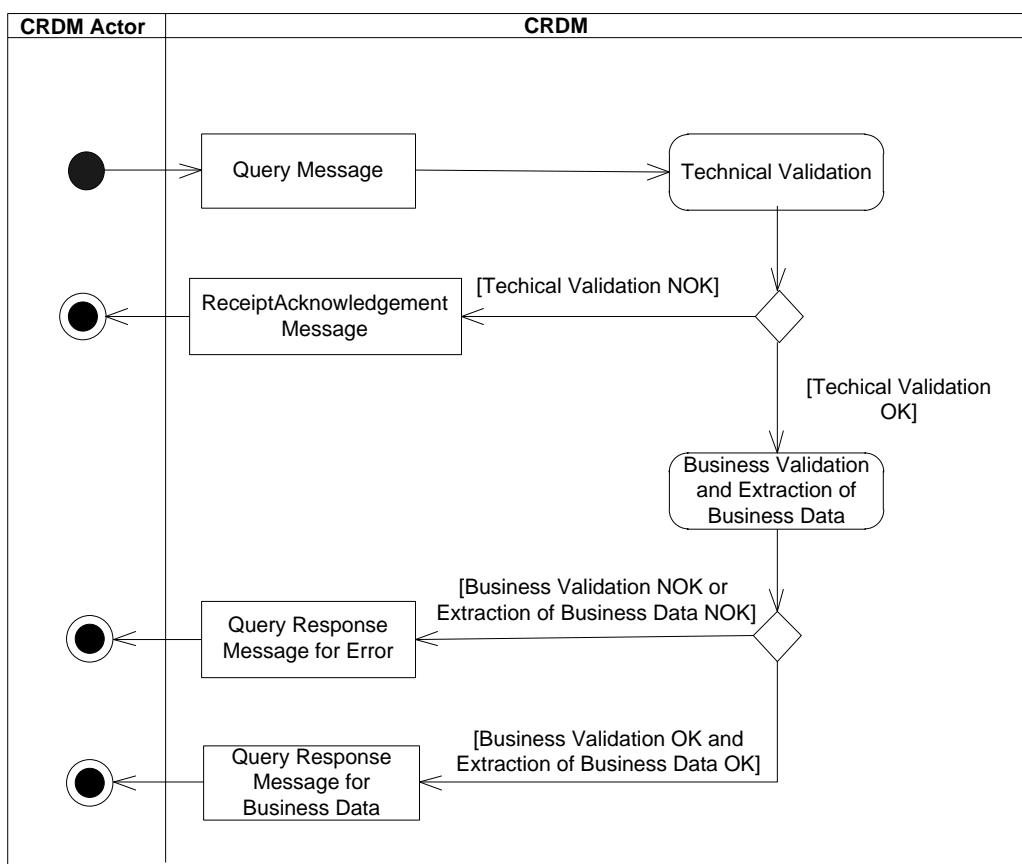
This use case covers the standard situation of CRDM Actor sending a query in A2A and it is applicable to every business scenario.

Upon the sending of a query instructed with an input message, a related query response message or a technical validation error message is returned.

### 2.2.2.1 Reference data query processing steps

The following diagram details all the processing steps for reference data query:

**DIAGRAM 3 – COMMON REFERENCE DATA QUERY PROCESS**



### Technical Validation

The query message is technically validated. This may result in:

- **[Technical Validation NOK]** A ReceiptAcknowledgement (admi.007) message is sent by CRDM to the sender of the originating query. No further steps are required and the process ends;
- **[Technical Validation OK]** Next process step is executed.

### Business Validation and Extraction of the business Data

The query message is validated by CRDM against the access rights of the CRDM Actor and against different business rules. After a successful business validation the extraction of the requested business data is triggered. Depending on the query message, the necessary business data are extracted from the respective data stores. This may result in:

- **[Business Validation OK and Extraction of the Business Data OK]** A Query Response Message for Business Data including requested business data is sent back to the requesting CRDM Actor, i.e. either the found data sets or a notification that the extraction returned a zero result;

- **[Business Validation NOK or Extraction of the Business Data NOK]** A Query Response message for Error is sent back to the requesting CRDM Actor indicating the error(s) which occurred.

The messages used in the interaction depend on the query to be performed.

In the following table, for every concerned common reference data object, the query and query response messages are defined.

**TABLE 129 – COMMON REFERENCE DATA QUERY MESSAGES**

| CRDM OBJECT                    | QUERY REQUEST MESSAGE                | QUERY RESPONSE MESSAGE FOR ERROR      | QUERY RESPONSE MESSAGE FOR BUSINESS DATA        |
|--------------------------------|--------------------------------------|---------------------------------------|---|
| Liquidity Transfer order       | GetStandingOrder(camt.069)           | ReturnStandingOrder(camt.070)         | ReturnStandingOrder(camt.070)                   |
| Cash Account                   | AccountQueryList(acmt.025)           | AccountQueryReport(acmt.026)          | AccountQueryReport(acmt.026)                    |
| Settlement Bank Account Group  | AccountQueryList(acmt.025)           | AccountQueryReport(acmt.026)          | AccountQueryReport(acmt.026) <b>{T2 CR0097}</b> |
| Standing Order for Limit/Limit | GetLimit(camt.009)                   | ReturnLimit(camt.010)                 | ReturnLimit(camt.010)                           |
| Cash Account Audit Trail       | CashAccountAuditTrailQuery(reda.039) | CashAccountAuditTrailReport(reda.040) | CashAccountAuditTrailReport(reda.040)           |
| Party                          | PartyQuery(reda.015)                 | PartyReport(reda.017)                 | PartyReport(reda.017)                           |
| Party Audit Trail              | PartyAuditTrailQuery(reda.042)       | PartyAuditTrailReport (reda.043)      | PartyAuditTrailReport (reda.043)                |
| Calendar                       | CalendarQuery(reda.064)              | CalendarReport(reda.065)              | CalendarReport(reda.065)                        |

| CRDM OBJECT                    | QUERY REQUEST MESSAGE                      | QUERY RESPONSE MESSAGE FOR ERROR            | QUERY RESPONSE MESSAGE FOR BUSINESS DATA    |
|--------------------------------|--|---|---|
| Direct Debit Mandate           | DirectDebitMandateQuery(camt.099)          | DirectDebitMandateReport(camt.100)          | DirectDebitMandateReport(camt.100)          |
| Security                       | SecurityQuery(reda.010)                    | SecurityReport(reda.012)                    | SecurityReport(reda.012)                    |
| Securities Account             | SecuritiesAccountQuery(reda.019)           | SecuritiesAccountReport(reda.021)           | SecuritiesAccountReport(reda.021)           |
| Security Audit Trail           | SecuritiesAuditTrailQuery(reda.033)        | SecuritiesAuditTrailReport(reda.034)        | SecuritiesAuditTrailReport(reda.034)        |
| Securities Account Audit Trail | SecuritiesAccountAuditTrailQuery(reda.036) | SecuritiesAccountAuditTrailReport(reda.037) | SecuritiesAccountAuditTrailReport(reda.037) |

## 2.3 Data Migration Tool File Upload

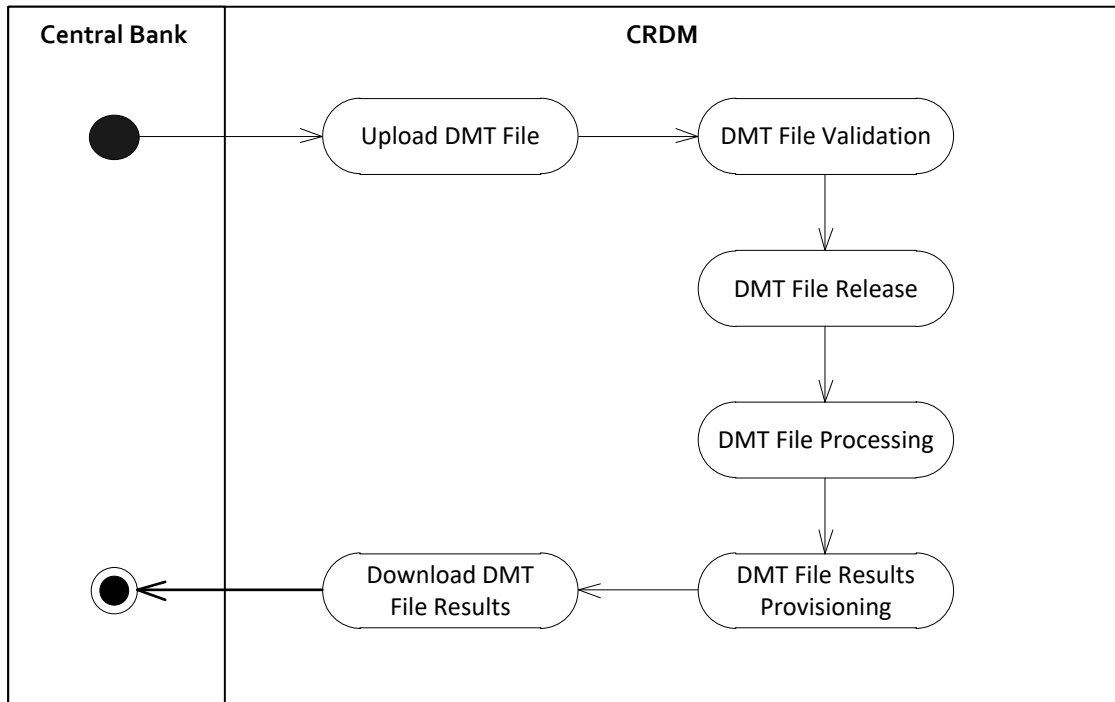
This use case covers the standard situation of a Central Bank loading reference data into CRDM common component. The Upload use case is available via U2A through a dedicated section.

The file content and identifier of the user uploading the file will be propagated to the related back-end functions; the user must have the appropriate access right configuration.

### 2.3.1 Data Migration Tool File Upload processing steps

The following diagram details all the processing steps of the Data Migration Tool File Upload use case:

**DIAGRAM 4 – DMT FILE UPLOAD PROCESS**



### **Upload DMT File**

The Central Bank uploads the required DMT file containing the reference data to be created in CRDM. The file can be generated in Excel or Comma Separated Value format and follow the specifications described in chapter 3.

### **DMT File Validation**

CRDM performs a technical validation on the uploaded file to ensure that the technical constraints have been respected.

### **DMT File Release**

The Operator release the file for the back end module processing as agreed with the Actor. This step triggers the back end module function required by the file as described in the record type label.

### **DMT File Processing**

The DMT triggers the related back end module function passing information record by record. Every call to the back end module function generates a result processing.

### **DMT File Results Provisioning**

After the processing of each record, the processing result is included in the DMT File Results, that is the successful processing or the business errors received from the back end module.

When the processing is complete the DMT file result is consolidated and the file is published for the Central Bank to download.

### **Download DMT File Results**

The Central Bank downloads the result file reporting the number of migrated records and the detailed list of errors for rejected records.

The following table maps the reference data maintenance operations available in the DMT with the related reference data objects and the file specifications contained in Chapter 4 Data Migration Tool Files.

**TABLE 130 – DMT FILES SPECIFICATIONS**

| REFERENCE DATA OBJECT                       | OPERATION | FILE SPECIFICATIONS SECTION |
|---|-----------|-----------------------------|
| Authorised Account User                     | Create    | 4.5.3.36                    |
| Cash Account                                | Create    | 4.5.3.34                    |
| Cash Account Restrictions (T2S)             | Create    | 4.5.3.32                    |
| Certificate DN                              | Create    | 4.5.3.29                    |
| CMB Securities Account Link                 | Create    | 4.5.3.11                    |
| Conditional Securities Delivery Rule        | Create    | 4.5.3.25                    |
| Conditional Securities Delivery Rule Set    | Create    | 4.5.3.24                    |
| CSD Account Link                            | Create    | 4.5.3.9                     |
| DN-BIC Routing                              | Create    | 4.5.3.38                    |
| Eligible Counterpart CSD                    | Create    | 4.5.3.28                    |
| Euro Foreign Exchange Reference Rate        | Create    | 4.5.3.33                    |
| Limit                                       | Create    | 4.5.3.35                    |
| Message Subscription Rule                   | Create    | 4.5.3.214.5.3.20            |
| Message Subscription Rule Set (T2 and TIPS) | Create    | 4.5.3.19                    |
| Message Subscription Rule Set (T2S)         | Create    | 4.5.3.20                    |
| Party (T2 and TIPS)                         | Create    | 4.5.3.1                     |
| Party (T2S)                                 | Create    | 4.5.3.2                     |
| Party Market-Specific Attributes            | Create    | 4.5.3.4                     |
| Party-Service Link                          | Create    | 4.5.3.37                    |
| Privilege (Object)                          | Grant     | 4.5.3.17                    |
| Privilege (Object – Secured Group)          | Grant     | 4.5.3.18                    |
| Privilege (System)                          | Grant     | 4.5.3.16                    |
| Report Configuration (T2 and TIPS)          | Create    | 4.5.3.26                    |

| REFERENCE DATA OBJECT                  | OPERATION | FILE SPECIFICATIONS SECTION |
|--|-----------|-----------------------------|
| Report Configuration (T2S)             | Create    | 4.5.3.27                    |
| Restriction Type                       | Create    | 4.5.3.22                    |
| Restriction Type Rule                  | Create    | 4.5.3.23                    |
| Role                                   | Create    | 4.5.3.13                    |
| Role                                   | Grant     | 4.5.3.15                    |
| Secured Group                          | Create    | 4.5.3.14                    |
| Securities                             | Create    | 4.5.3.6                     |
| Securities Account                     | Create    | 4.5.3.5                     |
| Securities Account Restrictions        | Create    | 4.5.3.31                    |
| Securities CSD Link                    | Create    | 4.5.3.10                    |
| Securities Market-Specific Attributes  | Create    | 4.5.3.7                     |
| Security Restrictions                  | Create    | 4.5.3.8                     |
| Technical Address Network Service Link | Create    | 4.5.3.3                     |
| User                                   | Create    | 4.5.3.12                    |
| User Certificate DN Link               | Create    | 4.5.3.30                    |

## 2.4 Maintain Reference Data Object for T2S

### 2.4.1 Introduction

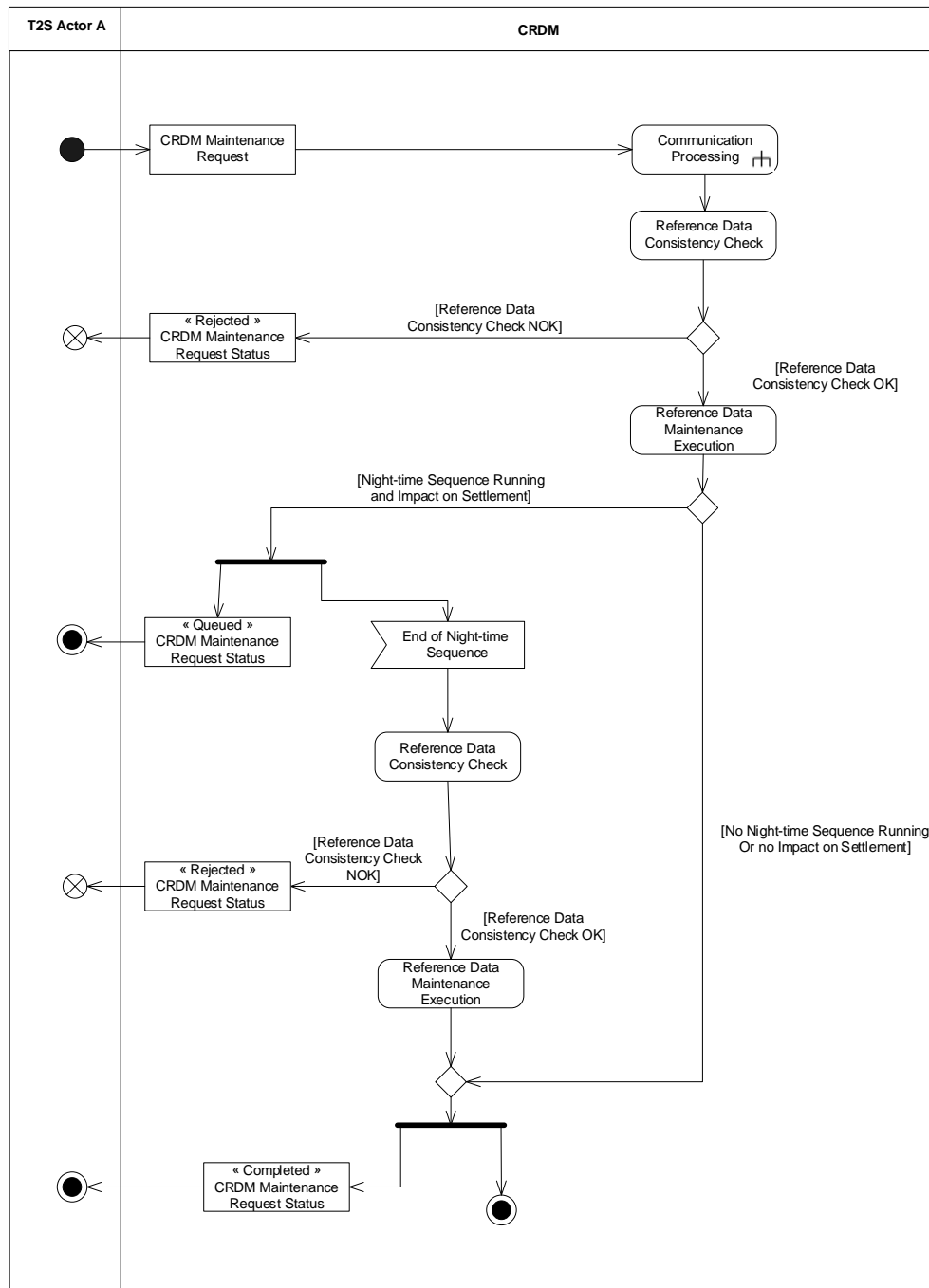
This generic use case is carried out in the CRDM component and covers all the situations where a CRDM Actor wants to perform a Reference Data Maintenance processes on any Reference Data object with possible impact on the T2S settlement process, including:

- | Create operations;
- | Update operations;
- | Delete operations.

All the CRDM Actors' users granted with the appropriate privileges (see section Access rights) are potentially involved in this use case.

### 2.4.2 Activity Diagram

The following diagram details all the processing steps of the Maintain Reference Data Use Case:



For the mapping between the generic message names used on the activity diagram and the actual names of the inbound and outbound messages, refer to the table in section 2.2 A2A Common reference data maintenance and query process.

#### 2.4.2.1 Reference Data Consistency check

The reference data consistency check validates the incoming message from a business point of view and it can result in:

- [Reference Data Consistency Check NOK]** The request is not carried out and the user receives a "Rejected" *CRDM Maintenance Request Status* message informing him of the outcome and the reasons for rejection.



- | **[Reference Data Consistency Check OK]** If the check is successful, Reference Data Maintenance Execution is performed.

#### 2.4.2.2 Reference Data Maintenance Execution

Reference Data Maintenance Execution checks whether a T2S night-time settlement sequence is currently running. This check can result in:

- | **[T2S Night-time Sequence Running and Impact on Settlement]** If there is a night-time settlement sequence running, and the requested **CRDM** maintenance process has an impact on the ongoing settlement process, the request is queued and re-submitted to the consistency check at the end of the sequence. In this case, the user still receives a *"Queued"* **CRDM Maintenance Request Status** message informing him of this situation.
- | **[T2S Night-time Sequence Not Running or No Impact on Settlement]** In which case the request is executed and the user is notified via a *"Completed"* **CRDM Maintenance Request Status** message. If required, T2S performs also a revalidation of instructions affected by this change (see section Revalidation process) and/or a forced auto-collateralisation reimbursement (see section Central bank collateralisation limit management process).

Reference Data Maintenance Execution does not perform this check when processing previously queued Reference Data Maintenance requests, between the end of the previous night-time settlement sequence and the following one (See section Night-time settlement (NTS)). In this case there can not be an impact on the settlement process and CRDM can process all the Reference Data Maintenance requests previously queued.

## 2.5 Restrict Reference Data Object

### 2.5.1 Introduction

This generic use case is carried out in the CRDM component and covers all the situations where a CRDM Actor wants to perform a Reference Data Restriction process on a specific Reference Data object:

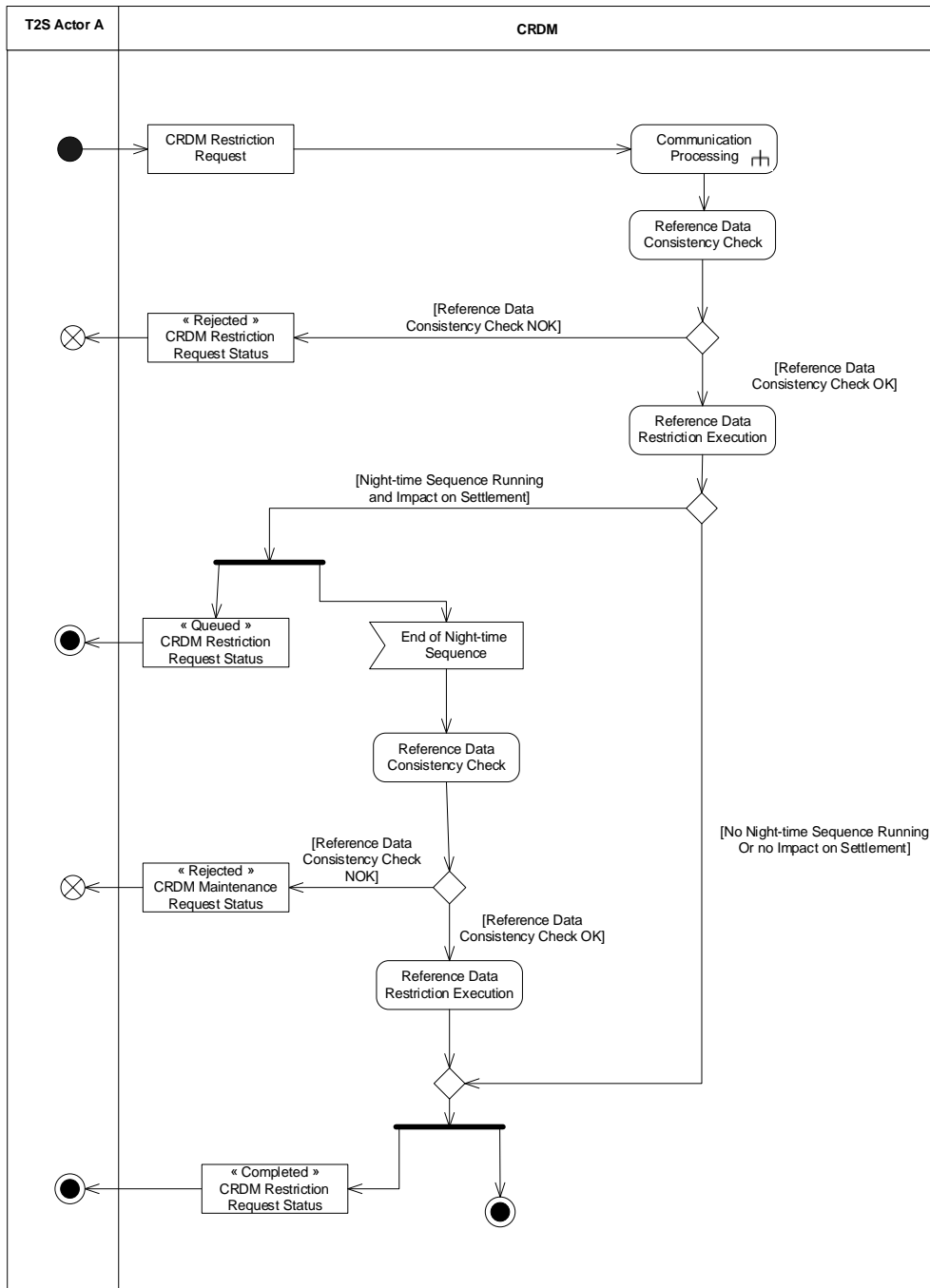
- | Party restriction;
- | Securities restriction;
- | Securities Account restriction;
- | Cash Account restriction;
- | Earmarking at Securities Account level.

All the CRDM Actors' users granted with the appropriate privileges (See section Access rights) are potentially involved in this use case.

For more details on how Restrictions are configured in Reference Data, see section Restriction types.

## 2.5.2 Activity Diagram

The following diagram details all the processing steps of the Restrict Reference Data Use Case:



This table allows mapping between the generic message names used on the activity diagram and the actual names of the inbound and outbound messages.

| CRDM OBJECT        | CRDM RESTRICTION REQUEST                 |                 | CRDM RESTRICTION OR MAINTENANCE REQUEST STATUS/ "REJECTED" |                 | CRDM RESTRICTION REQUEST STATUS/ "QUEUED"  |                 | CRDM RESTRICTION REQUEST STATUS/ "COMPLETED"  |                 |
|--------------------|--|-----------------|--|-----------------|--|-----------------|---|-----------------|
|                    | ISO MESSAGE                              | ISO CODE        | ISO MESSAGE/ MESSAGE USAGE                                 | ISO CODE        | ISO MESSAGE/M ESSAGE USAGE                 | ISO CODE        | ISO MESSAGE/ MESSAGE USAGE                    | ISO CODE        |
| Cash Account       | AccountExcludedMandateMaintenanceRequest | acmt.015.001.02 | AccountRequestRejection                                    | acmt.011.001.02 | AccountRequestAcknowledgement / "Queued"   | acmt.010.001.02 | AccountRequestAcknowledgement / "Completed"   | acmt.010.001.02 |
| Party              | PartyModificationRequest                 | reda.022.001.01 | PartyStatusAdvice / "Rejected"                             | reda.016.001.01 | PartyStatusAdvice / "Queued"               | reda.016.001.01 | PartyStatusAdvice / "Completed"               | reda.016.001.01 |
| Securities         | SecurityMaintenanceRequest               | reda.007.001.01 | SecurityMaintenanceStatusAdvice / "Rejected"               | reda.029.001.01 | SecurityMaintenanceStatusAdvice / "Queued" | reda.029.001.01 | SecurityMaintenanceStatusAdvice / "Completed" | reda.029.001.01 |
| Securities Account | SecuritiesAccountModificationRequest     | reda.023.001.01 | SecuritiesAccountStatusAdvice / "Rejected"                 | reda.020.001.01 | SecuritiesAccountStatusAdvice / "Queued"   | reda.020.001.01 | SecuritiesAccountStatusAdvice / "Completed"   | reda.020.001.01 |

### 2.5.2.1 Reference Data Consistency check

The reference data consistency check validates the incoming message from a business point of view and it can result in:

- [Reference Data Consistency Check NOK]** The request is not carried out and the user receives a "Rejected" CRDM Restriction Request Status message informing him of the outcome and the reasons for rejection.
- [Reference Data Consistency Check OK]** If the check is successful, Reference Data Maintenance Execution is performed.

### 2.5.2.2 Reference Data Restriction Execution

Reference Data Maintenance Execution checks whether a T2S night-time settlement sequence is currently running. This check can result in:

- [T2S Night-time Sequence Running and Impact on Settlement]** If there is a T2S night-time settlement sequence running, and the requested CRDM Restriction process has an impact on the ongoing settlement process, the request is queued and re-submitted to the consistency check at

the end of the sequence. In this case, the user still receives a "Queued" CRDM *Restriction Request Status* message informing him of this situation.

- [T2S Night-time Sequence Not Running or No Impact on Settlement]**, in which case the request is executed and the user is notified via a "Completed" CRDM *Restriction Request Status message*. If required, T2S performs also a revalidation of instructions affected by this change.

## 2.6 Bulk Load Securities Valuations

### 2.6.1 Introduction

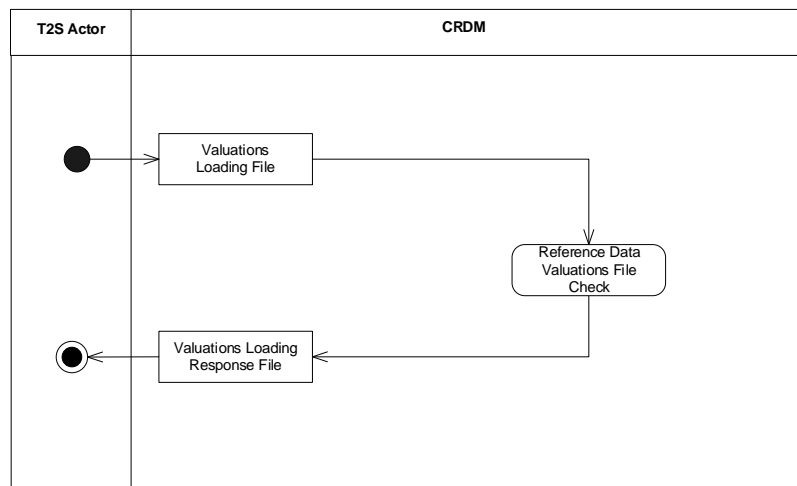
This use case is carried out in the CRDM component and covers the standard situation of a Central Bank or Payment Bank T2S Actor loading its Securities Valuations. Securities Valuations are normally loaded by means of a flat file which follows a specific format.

The U2A/A2A channel for loading Securities Valuations can be used by Central Banks and Payment Banks in contingency situations as an alternative method.

In order for the valuations to be loaded for the next business day, the file must be provided before 19:00.

### 2.6.2 Activity Diagram

The following diagram details all the processing steps of the Bulk Load Securities Valuations Use Case:



#### 2.6.2.1 Reference Data Valuations File Check

This step validates each row of the file from a business point of view against the existing Reference Data. The result, regardless of the outcome is that CRDM sends a Response File to the T2S Actor. For each processed row contained in the file, two outcomes are possible:

- The insertion triggers an error, in which case the Securities Valuation is not loaded and a row is provided in the Response File with the error description.
- The insertion does not trigger an error, in which case the Securities Valuation is loaded successfully.

The Response File sent to the T2S Actor will therefore contain a generic response and a variable number of rows, one for each insertion which triggered an error and was consequently not processed. The checks applied to the rows in the input file are the same as the ones in place for the standard U2A/A2A channel.

## 2.7 Bulk Load Securities Subject to Cash Penalties

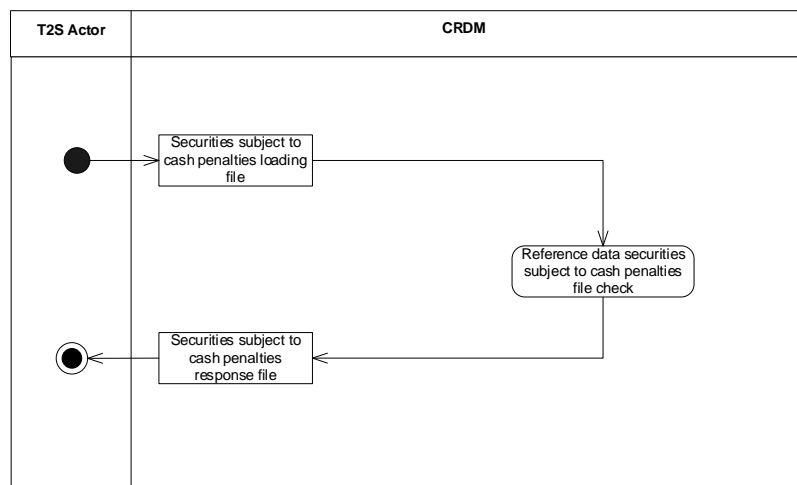
### 2.7.1 Introduction

This use case is carried out in the CRDM component and covers the standard situation of a CSD Actor loading its list of Securities Subject to Cash Penalties. Securities Valuations can be loaded by means of a flat file which follows a specific format.

The U2A channel for loading Securities Subject to Cash Penalties can be used by CSDs as an alternative method.

### 2.7.2 Activity Diagram

The following diagram details all the processing steps of the Bulk Load Securities Subject to Cash Penalties Use Case:



#### 2.7.2.1 Reference Data Securities Subject to Cash Penalties File Check

This step validates each row of the file from a business point of view against the existing Reference Data. The result, regardless of the outcome is that CRDM sends a Response File to the CRDM Actor. For each processed row contained in the file, two outcomes are possible:

- | The insertion triggers an error, in which case the Security Subject to Cash Penalties is not loaded and a row is provided in the Response File with the error description.
- | The insertion does not trigger an error, in which case the Security Subject to Cash Penalties is loaded successfully.

The Response File sent to the CRDM Actor will therefore contain a generic response and a variable number of rows, one for each insertion which triggered an error and was consequently not processed.

The checks applied to the rows in the input file are the same as the ones in place for the standard U2A channel.

## 2.8 Bulk Load Daily Prices for Penalties

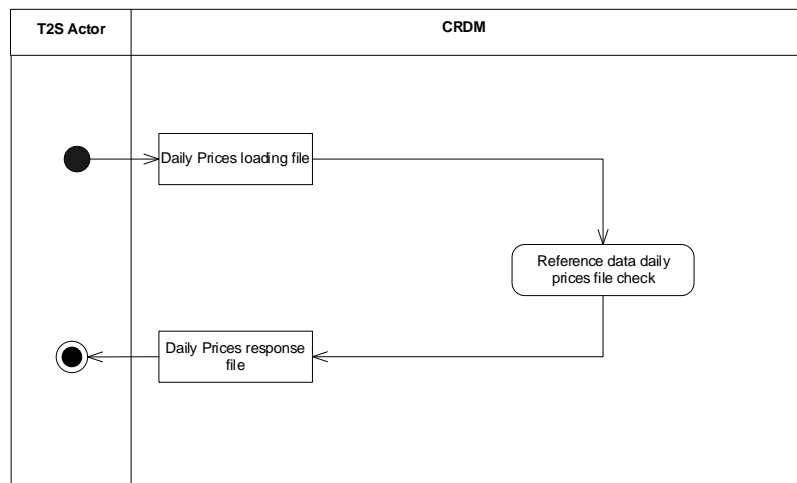
### 2.8.1 Introduction

This use case is carried out in the CRDM component and covers the standard situation of a CSD Actor loading its list of Daily Prices for Penalties. Daily Prices can be loaded by means of a flat file which follows a specific format.

The U2A channel for loading Daily Prices can be used by CSDs as an alternative method.

### 2.8.2 Activity Diagram

The following diagram details all the processing steps of the Bulk Load Daily Prices for Penalties Use Case:



#### 2.8.2.1 Reference Data Daily Prices File Check

This step validates each row of the file from a business point of view against the existing Reference Data. The result, regardless of the outcome is that CRDM sends a Response File to the CRDM Actor. For each processed row contained in the file, two outcomes are possible:

- l The insertion triggers an error, in which case the Daily Price is not loaded and a row is provided in the Response File with the error description.
- l The insertion does not trigger an error, in which case the Daily Price is loaded successfully.

The Response File sent to the CRDM Actor will therefore contain a generic response and a variable number of rows, one for each insertion which triggered an error and was consequently not processed.

The checks applied to the rows in the input file are the same as the ones in place for the standard U2A channel.

## 3 Catalogue of Messages

### 3.1 List of messages

Note: the annotations in the MyStandards repository represent the links between the xml fields and the respective data model attributes.

Regarding the use of namespace prefixes, CRDM does not encourage but accepts and processes valid inbound messages and inbound files composed of one or several messages containing those.

However, when sending outbound messages, CRDM does not re-use nor add namespace prefixes.

#### 3.1.1 Cash Management (camt)

##### 3.1.1.1 ModifyStandingOrder (camt.024)

###### 3.1.1.1.1 Overview and scope of the message

This chapter illustrates the ModifyStandingOrder message.

The ModifyStandingOrder message is sent by an actor authorised to create or modify Liquidity transfer Order.

The ModifyStandingOrder message has the following usages:

- *RTGS Modify standing order;*
- *AS settlement procedure D RTGS Modify standing order;*
- *CLM Modify standing order.*

These usages are described below, in the chapter “The message in business context”.

In response to the ModifyStandingOrder, a Receipt(camt.025) containing a positive technical response to the sender of the message or detailed information in case of an error, is returned

###### 3.1.1.1.2 Schema

###### Outline of the schema

The ModifyStandingOrder message is composed of the following message building blocks:

###### MessageHeader

This block is mandatory and contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

###### StandingOrderIdentification

This block is mandatory and provides with all the key information to identify an existing Liquidity transfer Order to be amended or a new Liquidity transfer Order to be created.

## NewStandingOrderValueSet

This block is mandatory and provide with the pieces of information related to the Liquidity transfer Order to be modified or created.

It includes the amount to be transferred, the required account references to perform the transfer, the intended validity period and the execution type in terms of event identification.

### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.024.001.06>

### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES  |
|--|---|
| ModifyStandingOrder<br>Document/ModifyStgOrdr                                    | DCU4001<br>DCC4001  |
| Liquidity transfer Order Identification<br>Document/ModifyStgOrdr/StgOrdrId/Id   | DCU4003<br>DCU4030<br>DCC4075<br>DCC4300                                  |
| Account Identification<br>Document/ModifyStgOrdr/StgOrdrId/Acct/Id/Othr/Id       | DCC4070<br>DCU4003  |
| Amount<br>Document/ModifyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy                  | DCC4092<br>DCU4091<br>DCU4092<br>DCC4093<br>DCU4093                       |
| Creditor<br>Document/ModifyStgOrdr/NewStgOrdrValSet/Cdtr/FinInstnId/BICFI        | DCC4205<br>DCU4072<br>DCU4205   |
| Creditor Account<br>Document/ModifyStgOrdr/NewStgOrdrValSet/CdtrAcct/Id/Othr/Id  | DCC4080<br>DCC4200<br>DCU4200<br>DCC4079<br>DCC4185<br>DCU4185<br>DCC4085 |
| Debtor<br>Document/ModifyStgOrdr/NewStgOrdrValSet/Dbtr/FinInstnId/BICFI          | DCC4205<br>DCU4073<br>DCU4205   |
| Debtor Account<br>Document/ModifyStgOrdr/NewStgOrdrValSet/DbtrAcct/Id/Othr/Id    | DCC4185<br>DCU4185<br>DCC4085   |
| ActiveCurrencyCode<br>Document/ModifyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy/@Ccy | DCC4800<br>DCU4800  |
| Execution Type<br>Document/ModifyStgOrdr/NewStgOrdrValSet/ExctnTp/Evt/Prtry      | DCC4090<br>DCU4090  |



| MESSAGE ITEM  | BUSINESS RULES  |
|---|---|
|   | DCC4081<br>DCC4200<br>DCU4081<br>DCU4200<br>DCC4210<br>DCU4210  |
| Time<br>Document/ModfyStgOrdr/NewStgOrdrValSet/ExctnTp/Tm                 | DCC4090   |
| Validity Period<br>Document/ModfyStgOrdr/NewStgOrdrValSet/VldtyPrd        | DCC4120<br>DCU4140<br>DCU4141<br>DCU4130<br>DCC4200<br>DCU4200<br>DCU4201 {T2<br><b>CR0138</b> }<br>DCC4121<br>DCU4010<br>DCU4030 |
| ZeroSweepIndicator<br>Document/ModfyStgOrdr/NewStgOrdrValSet/ZeroSweepInd | DCC4092<br>DCU4091<br>DCU4092   |

### 3.1.1.1.3 The message in business context

*Usage Case: RTGS Modify standing order*

This usage case describes the update of a Liquidity transfer Order in CRDM for RTGS service.

*Specific message requirements*

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Standing Order Identification<br>Document/ModfyStgOrdr/StgOrdrId/Id            | Identification   |
| Account Identification<br>Document/ModfyStgOrdr/StgOrdrId/Acct/Id/Othr/Id      | Account<br>Identification  |
| Type<br>Document/ModfyStgOrdr/StgOrdrId/Acct/Tp/Prtry                          | Possible values<br>are:<br>CREA - To Create<br>a Standing Order<br>UPDA - To Modifiy<br>a Standing Order |
| Amount<br>Document/ModfyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy                 | Amount   |
| Creditor Account<br>Document/ModfyStgOrdr/NewStgOrdrValSet/CdtrAcct/Id/Othr/Id | Creditor Account   |
| Type<br>Document/ModfyStgOrdr/NewStgOrdrValSet/CdtrAcct/Tp/Prtry               | Creditor Account<br>Type. Only "CASH"<br>allowed for RTGS  |

| MESSAGE ITEM  | UTILISATION     |
|---|-----------------|
| Execution Type<br>Document/ModifyStgOrdr/NewStgOrdrValSet/ExctnTp/Evt/Prtry | Execution Type  |
| Validity Period<br>Document/ModifyStgOrdr/NewStgOrdrValSet/VldtyPrd         | Validity Period |

**Usage case example:** *RTGSModifyStandingOrder\_example.xml*

In this example it is requested to update the Liquidity transfer Order with id “STOID00001” for the account identified with “ACC001”.

*Usage Case: AS settlement procedure D RTGS Modify standing order*

This usage case describes the update of a Liquidity transfer Order in CRDM for RTGS.service for AS *settlement procedure D*.

*Specific message requirements*

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| Liquidity transfer Order Identification<br>Document/ModifyStgOrdr/StgOrdrId/Id  | Identification  |
| Account Identification<br>Document/ModifyStgOrdr/StgOrdrId/Acct/Id/Othr/Id      | Account<br>Identification   |
| Type<br>Document/ModifyStgOrdr/StgOrdrId/Acct/Tp/Prtry                          | Possible values are:<br>UPDA - To Modify<br>a Liquidity transfer<br>Order |
| Amount<br>Document/ModifyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy                 | Amount  |
| Creditor<br>Document/ModifyStgOrdr/NewStgOrdrValSet/Cdtr/FinInstnId/BICFI       | Creditor BIC  |
| Creditor Account<br>Document/ModifyStgOrdr/NewStgOrdrValSet/CdtrAcct/Id/Othr/Id | Creditor Technical<br>Account   |
| Type<br>Document/ModifyStgOrdr/NewStgOrdrValSet/CdtrAcct/Tp/Prtry               | Creditor Account<br>Type. Only “CASH”<br>allowed for RTGS                 |
| Debtor<br>Document/ModifyStgOrdr/NewStgOrdrValSet/Dbtr/FinInstnId/BICFI         | Debtor BIC  |
| Debtor Account<br>Document/ModifyStgOrdr/NewStgOrdrValSet/DbtrAcct/Id/Othr/Id   | Debtor DCA<br>Account   |
| Execution Type<br>Document/ModifyStgOrdr/NewStgOrdrValSet/ExctnTp/Tm            | Only schema<br>validation<br>performed                                    |
| Validity Period<br>Document/ModifyStgOrdr/NewStgOrdrValSet/VldtyPrd             | Validity Period   |

**Usage case example:** *ASDRTGSModifyStandingOrder\_example.xml*

In this example it is requested to update the Liquidity transfer Order with id “STOID00001D” for the account identified with “ACC001” and technical account BIC identified with “ASASDEFFAAA”.

*Usage Case: CLM Modify standing order*

This usage case describes the update of a Liquidity transfer Order in CRDM for CLM service.

*Specific message requirements*

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| Liquidity transfer Order Identification<br>Document/ModifyStgOrdr/StgOrdrId/Id  | Identification   |
| Account Identification<br>Document/ModifyStgOrdr/StgOrdrId/Acct/Id/Othr/Id      | Account<br>Identification  |
| Type<br>Document/ModifyStgOrdr/StgOrdrId/Acct/Tp/Prtry                          | Possible values are:<br>CREA - To Create a Liquidity transfer Order<br>UPDA - To Modify a Liquidity transfer Order |
| Amount<br>Document/ModifyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy                 | Amount   |
| Creditor Account<br>Document/ModifyStgOrdr/NewStgOrdrValSet/CdtrAcct/Id/Othr/Id | Creditor Account   |
| Type<br>Document/ModifyStgOrdr/NewStgOrdrValSet/CdtrAcct/Tp/Prtry               | Creditor Account Type. Only “CASH” allowed for CLM   |
| Execution Type<br>Document/ModifyStgOrdr/NewStgOrdrValSet/ExctnTp/Evt/Prtry     | Execution Type   |
| Validity Period<br>Document/ModifyStgOrdr/NewStgOrdrValSet/VldtyPrd             | Validity Period  |

**Usage case example:** *CLMModifyStandingOrder\_example.xml*

In this example it is requested to update the Liquidity transfer Order with id “STOID00002” for the account identified with “ACC001”.

**Usage case example:** [camt.024.001.06\\_T2S\\_DefinitionTime-basedStandingOrderT2SDedicatedCashAccountRTGSAccount\\_Example.xml](#)

In this example a Maintenance of Liquidity Transfer Order is used to define a time based standing order from a T2S Dedicated Cash Account to an RTGS account. The following parameters are defined:

- | T2S dedicated cash account: "T2SDEDICATEDCASHACCOUNT"
- | Amount to be credited or debited through the liquidity transfer order: "300000.00"
- | Event time: 14:20:00.00
- | Credited RTGS account: "RTGSACCOUNT"

| Valid From Date: 2014-06-13

**Usage case example:**

camt.024.001.06\_T2S\_DefinitionPredefinedOrderT2SDedicatedCashAccountRTGSAccount\_Example.xml

In this example a Maintenance of Liquidity Transfer Order is used to define a predefined order from T2S Dedicated Cash Account to an RTGS account, based on business event "Beginning of daytime.

**Usage case example:**

camt.024.001.06\_T2S\_ModificationOfAEventBasedStandingOrderT2SDedicatedCashAccountRTGSAccount\_Example.xml

In this example a Maintenance of Liquidity Transfer Order is used to modify a standing order from T2S Dedicated Cash Account to an RTGS account, based on business event "Start of cycle 1 / preparation of sequence 1".

### 3.1.1.2 GetStandingOrder (camt.069)

#### 3.1.1.2.1 Overview and scope of the message

This chapter illustrates the GetStandingOrder message.

The GetStandingOrder message is sent by an authorised actor to retrieve Liquidity transfer Order information.

This message is sent to CRDM to make the following types of queries:

- StandingOrderDetails;
- Liquidity Transfer Order Detail Query;
- Liquidity Transfer Order of a Liquidity Transfer Order Link Set Query;
- Liquidity Transfer Order Link Set Query;
- Liquidity Transfer Order List Query.

These query types are described in the section "The message in business context".

In response to the GetStandingOrder, a ReturnStandingOrder(camt.070) containing the retrieved Liquidity transfer Order information, or detailed information in case of an error (e.g. no rows retrieved), is returned.

#### 3.1.1.2.2 Schema

##### **Outline of the schema**

The GetStandingOrder message is composed of the following message building blocks:

##### **MessageHeader**

This block is mandatory and contains the message Identification (“NONREF” value can be used, since it is already contained in the business application header)It is also used to specify which kind of query must be performed. Only Liquidity transfer Order Details query is allowed.

### StandingOrderQueryDefinition

This block is mandatory and provides with all the search criteria that must be used to filter Liquidity transfer Order records in CRDM. Possible criteria are account and BIC.

### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.069.001.03>

### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES   |
|--|--|
| Request Type<br>Document/GetStgOrder/MsgHdr/ReqTp/Prtry/Id   | IIMP200<br>IIMP011<br>IIMP012<br>IIMP013<br>IIMP014<br>IIMP015<br>IIMP027<br>IIMP028<br>IIMP029<br>IIMP152 |
| KeyAttributesIndicator<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/KeyAttrbtsInd   | IIMP011<br>IIMP012<br>IIMP014<br>IIMP027<br>IIMP028<br>IIMP029   |
| StandingOrderIdentification<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/StgOrderId | IIMP012<br>IIMP028   |
| Identification<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/Acct/Id/Othr/Id         | IIMP011<br>IIMP013   |
| Currency<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/Ccy                           | IIMP011<br>IIMP013   |
| Validity<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/VldtyPrd/                     | IIMP011<br>IIMP013   |
| BICFI<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/SysMmb/FinInstnId/BICFI          | IIMP011<br>IIMP013<br>IIMP015  |
| BICFI<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/RspnsblPty/FinInstnId/BICFI      | IIMP011<br>IIMP013<br>IIMP015  |
| LinkSetIdentification<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/LkSetId          | IIMP014  |

### 3.1.1.2.3 The message in business context

#### *Usage Case: Get Standing Order Details*

This usage case describes a query used to retrieve the Liquidity transfer Order details in CRDM.

*Specific message requirements and search criteria.*

| MESSAGE ITEM  | UTILISATION                 |
|---|-----------------------------|
| Request Type<br>Document/GetStgOrder/MsgHdr/ReqTp/Prtry/Id  | Request Type<br>SDTL        |
| Account Identification<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/Acct/Id/Othr/Id            | Account Identification      |
| Party BIC<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/SysMmb/FinInstnId/BICFI                 | Party BIC                   |
| Responsible Party BIC<br>Document/GetStgOrder/StgOrderQryDef/StgOrderCrit/NewCrit/SchCrit/RspnsblPty/FinInstnId/BICFI | Responsible Party BIC (NCB) |

#### **Usage case example:** *GetStandingOrderDetails\_example.xml*

In this example details of a Liquidity transfer Order for the account identified with “ACC001” and Owner “UNCRITMMXXX” are requested.

#### *Query Type: Liquidity Transfer Order Detail Query*

This query type enables the sender to request the details of a specific predefined or standing liquidity transfer orders, according to their access rights.

The following fields must be used to restrict the query further:

- | Liquidity Transfer Order Identifier (mandatory);
- | Only key fields returned (Boolean, mandatory, further details see response message).

#### Specific message requirements

To query CRDM for a Liquidity Transfer Order Detail, the field RequestType must be filled with the “LDEQ” code. All possible search criteria are listed.

| MESSAGE ITEM   | UTILISATION                                  |
|--|--|
| Proprietary<br>Document/GetStgOrdr/MsgHdr/ReqTp/Prtry  | Liquidity Transfer order detail query (LDEQ) |
| KeyAttributesIndicator<br>Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/KeyAttrbtsInd  | "true" or "false"                            |
| StandingOrderIdentification<br>Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/StgOrdrId | Liquidity Transfer Order Identifier          |

Query type example: camt.069.001.03 T2S LiquidityTransferOrderDetailQuery Example.xml

In this example a Liquidity Transfer Order Detail Query with key attribute indicator: false and Liquidity Transfer Order Identifier is sent to CRDM.

Query Type: Liquidity Transfer Order of a Liquidity Transfer Order Link Set Query

This query type enables the sender to request information on the details of a specific predefined or standing liquidity transfer orders, according to their access rights.

The following fields can be used to restrict the query further:

- | Unique technical identifier of the liquidity transfer order link set (optional);
- | Only key fields returned (Boolean, mandatory, further details see response message).

Specific message requirements

To query CRDM for Liquidity Transfer Order of a Liquidity Transfer Order Link Set Query, the field RequestType must be filled with the "SLSQ" code. All possible search criteria are listed.

| Message Item  | Utilisation  |
|---|--|
| Proprietary<br>Document/GetStgOrdr/MsgHdr/ReqTp/Prtry   | Liquidity Transfer Order of a liquidity transfer order link set query (SLSQ) |
| KeyAttributesIndicator<br>Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/KeyAttrbtsInd | "true" or "false"  |
| LinkSetIdentification<br>Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/LkSetId        | Unique technical identifier of the liquidity transfer order link set         |

Query type example:

camt.069.001.03 T2S LiquidityTransferOrderOfALiquidityTransferOrderLinkSetQuery Example.xml

In this example a Liquidity Transfer Order Link Set Query, with search criteria: key field indicator false and LinkSetIdentification is sent to CRDM.

Query Type: Liquidity Transfer Order Link Set Query

This query type enables the sender to request only information on liquidity transfer order link sets, they are allowed to access.

It is used for querying information about the set of sequenced liquidity transfer orders and their status. A liquidity transfer order link set encompasses standing liquidity transfer orders for a T2S Dedicated Cash Account in a certain order. This concept is used in order to support the T2S multiple liquidity provider model.

The following fields can be used to restrict the query further. If a field is not specified, CRDM returns all liquidity transfer order link set information consistent with the access rights:

- | T2S party (party BIC and Parent BIC) (optional);
- | T2S Dedicated Cash Account number (optional);
- | 'Valid from' date (optional);
- | 'Valid to' date (optional);
- | T2S settlement currency (optional).

Specific message requirements

To query CRDM for information about the Liquidity Transfer Order Link Set query, the field RequestType must be filled with the "LLSQ" code. All possible search criteria are listed.

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| Proprietary<br>Document/GetStgOrdr/MsgHdr/ReqTp/Prtry   | Liquidity Transfer<br>Order Link set query<br>(LLSQ) |
| Identification<br>Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/Acct/Id/Othr/Id | T2S dedicated cash<br>account                        |
| Currency<br>Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/Ccy                   | Currency   |
| FromDate<br>Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/VldtyPrd/FrToDt/FrDt  | Valid from   |



| MESSAGE ITEM  | UTILISATION             |
|---|-------------------------|
| ToDate<br>Document/GetStgOrdrr/StgOrdrrQryDef/StgOrdrrCrit/NewCrit/SchCrit/VldtyPrd/FrToDt/ToDt       | Valid to                |
| BICFI<br>Document/GetStgOrdrr/StgOrdrrQryDef/StgOrdrrCrit/NewCrit/SchCrit/SysMmb/FinInstnId/BICFI     | BIC of the party        |
| BICFI<br>Document/GetStgOrdrr/StgOrdrrQryDef/StgOrdrrCrit/NewCrit/SchCrit/RspnsblPty/FinInstnId/BICFI | Parent BIC of the Party |

Query type example: camt.069.001.03 T2S LiquidityTransferOrderLinkSetQuery Example.xml

In this example a Liquidity Transfer Order Link Set query with search criteria key field indicator false and LinkSetIdentification is sent to CRDM.

Query Type: Liquidity Transfer Order List Query

This message enables the sender to request listed information about predefined and standing liquidity transfer orders. Liquidity Transfer Orders encompass standing and predefined liquidity transfer orders which are stored as reference data. Requesting System users receive information only on liquidity transfer orders they are allowed to access.

The following fields can be used to restrict the query further. If a field is not specified, CRDM returns liquidity transfer order information consistent with the access rights:

- | Party BIC (CB, settlement bank, payment bank);
- | Parent BIC of the Party;
- | T2S Dedicated Cash Account number;
- | 'Valid from' date (optional);
- | 'Valid to' date (optional);
- | T2S settlement currency;
- | Only key fields returned (boolean, mandatory, further details find within response message).

Specific message requirements

To query CRDM for information about the Liquidity Transfer Order List, the field RequestType must be filled with the "LLIQ" code. All possible search criteria are listed.

| MESSAGE ITEM   | UTILISATION                                |
|--|--|
| Proprietary<br>Document/GetStgOrdrr/MsgHdr/ReqTp/Prtry | Liquidity Transfer Order list query (LLIQ) |
| Currency   | Currency                                   |

| MESSAGE ITEM  | UTILISATION             |
|---|-------------------------|
| Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/Ccy                         |                         |
| FromDate  | Valid from              |
| Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/VldtyPrd/FrToDt/FrDt        |                         |
| ToDate  | Valid to                |
| Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/VldtyPrd/FrToDt/ToDt        |                         |
| BICFI   | BIC of the Party        |
| Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/SysMmb/FinInstnId/BICFI     |                         |
| BICFI   | Parent BIC of the party |
| Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/RspnsblPty/FinInstnId/BICFI |                         |
| KeyAttributesIndicator  | "true" or "false"       |
| Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/KeyAttrbtsInd               |                         |

Query type example: camt.069.001.03 T2S LiquidityTransferOrderListQuery Example.xml

In this example a Liquidity Transfer Order List Query with search criteria T2S Dedicated Cash Account, KeyAttributesIndicator, Party and Parent BIC is sent to CRDM.

### 3.1.1.3 ReturnStandingOrder(camt.070)

#### 3.1.1.3.1 Overview and scope of the message

This chapter illustrates the ReturnStandingOrder message.

The ReturnStandingOrder message is sent by CRDM to an authorised actor to provide the requested Liquidity transfer Order information.

The ReturnStandingOrder message has the following usages:

- *RTGS Return standing order details;*
- *AS settlement procedure D RTGS Return standing order details;*
- *CLM Return standing order details;*
- Liquidity Transfer Order Detail Query Response;
- Liquidity Transfer Order of a Liquidity Transfer Order Link Set Query Response;
- Liquidity Transfer Order Link Set Query Response;
- Liquidity Transfer Order List Query Response.

-  
These usages are described below, in the chapter “The message in business context”.

The ReturnStandingOrder message is sent as a response to a previously sent GetStandingOrder(camt.069).

### 3.1.1.3.2 Schema

#### **Outline of the schema**

The ReturnStandingOrder message is composed of the following message building blocks:

#### **MessageHeader**

This block is mandatory and contains the message identification (“NONREF” value can be used, since it is already contained in the business application header) as well as the original business query message identification and the request type (only Standing Order Details Query Response is allowed).

#### **ReportOrError**

This block is mandatory and includes either the retrieved records or the error occurred during the query processing (e.g. no records retrieved).

#### **Report**

This block is mandatory and provides with all the pieces of information related to the retrieved Liquidity transfer Order:

- Liquidity transfer Order Identification;
- Account Identification;
- Account Owner;
- Amount;
- CreditDebit Indicator;
- Validity Period;
- Execution Type;
- Creditor;
- Credited Account;
- Credited Account Type;
- Debtor;
- Debited Account

#### **References/links**

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.070.001.04>

## Business rules applicable to the schema

Not applicable (outgoing message).

### 3.1.1.3.3 The message in business context

*Usage Case: RTGS Return standing order details*

In this usage case, data about a Liquidity transfer Order for RTGS is queried. Liquidity transfer Order details are returned.

*Specific message content*

ReturnStandingOrder (camt.070) contains the following set of information.

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| Request Type<br>Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id  | Request Type<br>SDTL  |
| Liquidity transfer Order Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Id               | Identification  |
| Account Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id                   | Account<br>Identification                                       |
| Account owner<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/AcctOwncr/FinInstnId/BICFI                 | Account owner   |
| Amount<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcy                         | Amount  |
| CreditDebit Indicator<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd               | CreditDebit<br>Indicator  |
| Validity Period<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd                      | Validity Period   |
| Responsible Party<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/RspnsblPty/FinInstnId/BICFI | Responsible<br>NCB  |
| Execution Type<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp                        | Execution<br>Type   |
| Creditor Account<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Id/Othr/Id          | Creditor<br>Account   |
| Type<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Tp/Prtry                        | Creditor<br>Account Type.<br>Only "CASH"<br>allowed for<br>RTGS |

**Usage case example:** *RTGSReturnStandingOrderDetails\_example.xml*

In this example reference data of the Liquidity transfer Order with ID "STOID00001" is returned.

*Usage Case: AS settlement procedure D RTGS Return standing order details*

In this usage case data about a Liquidity transfer Order for RTGS *AS settlement procedure D* is requested.

*Specific message content*

Return Liquidity transfer Order contains the following set of information:

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| Request Type<br>Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id  | Request Type<br>SDTL  |
| Liquidity transfer Order Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Id               | Identification  |
| Account Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id                   | Account<br>Identification                                       |
| Account Owner<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/AcctOwnr/FinInstnId/BICFI                  | Technical<br>Account BIC  |
| Amount<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcy                         | Amount  |
| CreditDebit Indicator<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd               | CreditDebit<br>Indicator  |
| Validity Period<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd                      | Validity Period   |
| Responsible Party<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/RspnsblPty/FinInstnId/BICFI | Responsible<br>NCB  |
| Execution Type<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp                        | Execution<br>Type   |
| Creditor<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Cdtr/FinInstnId/BICFI                | Creditor BIC  |
| Creditor Account<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Id/Othr/Id          | Account<br>number of the<br>Credited<br>Account                 |
| Type<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Tp/Prtry                        | Creditor<br>Account Type.<br>Only "CASH"<br>allowed for<br>RTGS |
| Debtor<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Dbtr/FinInstnId/BICFI                  | Debtor BIC  |
| Debtor Account<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/DbtrAcct/Id/Othr/Id            | Account<br>number of the<br>Debited<br>Account                  |

**Usage case example:** *ASD RTGSReturnStandingOrderDetails\_example.xml*

In this example reference data of the Liquidity transfer Order with ID "STOID00001D" is returned.

*Usage Case: CLM Return standing order details*

In this usage case data about a Liquidity transfer Order for CLM is requested.

*Specific message content*

Return Liquidity transfer Order contains the following set of information.

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Request Type<br>Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id  | Request Type<br>SDTL   |
| Liquidity transfer Order Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Id               | Identification   |
| Account Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id                   | Account<br>Identification                                      |
| Account owner<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/AcctOwnr/FinInstnId/BICFI                  | Account owner  |
| Amount<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcy                         | Amount   |
| CreditDebit Indicator<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd               | CreditDebit<br>Indicator                                       |
| Validity Period<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd                      | Validity Period  |
| Responsible Party<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/RspnsblPty/FinInstnId/BICFI | Responsible<br>Party<br>NCB                                    |
| Execution Type<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp                        | Execution<br>Type  |
| Creditor Account<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Id/Othr/Id          | Creditor<br>Account  |
| Type<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Tp/Prtry                        | Creditor<br>Account Type.<br>Only "CASH"<br>allowed for<br>CLM |

**Usage case example:** *CLMReturnStandingOrderDetails\_example.xml*

In this example reference data of the Liquidity transfer Order with ID "STOID00002" is returned.

For all the usage cases, the returned data in case of an error response is listed below:

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| Identification<br>Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id | Request type  |
| Code<br>Document/RtrStgOrdr/RptOrErr/OpriErr/Err/Prtry      | Specific error  |
| Description<br>Document/RtrStgOrdr/RptOrErr/OpriErr/Desc    | Textual description<br>in addition to the<br>reported error |

**Message usage: Liquidity Transfer Order Detail Query Response**

This message usage returns the Liquidity Transfer Order Details which matches the specified selection parameter and provides thus either the key fields of the respective liquidity transfer order or the key fields and some additional information of the respective liquidity transfer order.

In case the requesting System user does not choose the key field option, CRDM returns the following information:

- | Parent BIC (account operating CB of the T2S Dedicated Cash Account to which the respective liquidity transfer order is linked); (key-field)
- | Party BIC (account owning party of the T2S Dedicated Cash Account, to which the respective liquidity transfer order is linked); (key-field)
- | Party Short Name (key-field)
- | Currency;(key-field)
- | Liquidity Transfer Order Identifier; (key-field)
- | [Liquidity Transfer Order Reference]; (No key-field)
- | Debit cash account number (T2S Dedicated Cash Account number); (key-field)
- | Credit cash account number (External RTGS account number); (key-field)
- | Amount; (key-field)
- | All cash; (key-field)
- | Execution type; (key-field)
- | Execution type description; (key-field)
- | Valid from date; (key-field)
- | Valid to date;(key-field)
- | Transfer Order Type [Code for standing order predefined LTO]; (key field)

In case the requesting System user chooses the "key field" option, CRDM does not return the attributes set in brackets.

Specific message requirements in case of business data response

| MESSAGE ITEM   | UTILISATION                         |
|--|-------------------------------------|
| Identification<br>Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id                  | LDEQ                                |
| Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Id              | Liquidity Transfer Order Identifier |
| Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id | Debited T2S dedicated cash account  |
| Currency<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Ccy              | Currency                            |

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| AmountWithoutCurrency<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcy | Amount  |
| CreditDebitIndicator<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd       | "DBIT"  |
| FromDate<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd/FrDt               | Valid from  |
| ToDate<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd/ToDt                 | Valid to  |
| BICFI<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/SysMmb/FinInstnId/BICFI        | Account owning party of the T2S dedicated cash account  |
| BIC<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/RspnsblPty/FinInstnId/BIC        | Account operating NCB of the T2S dedicated cash account |
| Time<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp/Tm                      | Execution Time  |
| Proprietary<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp/Evt/Prtry        | Execution event e. g. EDLT                              |
| Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Id/Othr/Id   | Credited cash account (External RTGS account number)    |
| ZeroSweepIndicator<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ZeroSweepInd      | All cash indicator "true"                               |

Message usage example in case of business data response:

[camt.070.001.04\\_T2S\\_LiquidityTransferOrderDetailQueryResponse\\_Example.xml](#)

In this example a Liquidity Transfer Order Detail Response with business data referring to a Liquidity Transfer order detail query is sent by CRDM.

Requesting T2S System user does not choose the key field option, CRDM returns all of the following information:

- | NCB BIC: NCBAAA20;



- | Party BIC: AAAAAA20;
- | Currency: EUR;
- | Liquidity Transfer Order Identifier: LIQUTRANORDRID;
- | Liquidity Transfer Order Reference: LIQUIORDERREF;
- | Debit cash account number: DEBITCASHACCOUNT1;
- | Credit cash account number: CREDITCASHACCOUNT2;
- | Amount: 6000000.00;
- | All cash: False;
- | Execution type is time based,
- | Valid from and to date: 2015-08-13-2015-08-30.

Specific message requirements in case of error response:

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| Identification<br>Document/RtrStgOrder/MsgHdr/ReqTp/Prtry/Id   | LDEQ  |
| Proprietary<br>Document/RtrStgOrder/RptOrErr/OprlErr/Err/Prtry | Specific error code as specified in the error code table            |
| Description<br>Document/RtrStgOrder/RptOrErr/OprlErr/Desc      | Textual description in addition to the reported specific error code |

Message usage example in case of error response: camt.070.001.

04 T2S ErroneousMessageLiquidityTransferOrderDetailQueryResponse Example.xml

In this example a Liquidity Transfer Order Detail Response with an erroneous message referring to Liquidity Transfer order detail query, the specified Liquidity Transfer Order Identifier is not known by CRDM is sent to the corresponding party:

- | (ISO) error code;
- | Error information including error text and the wrong Liquidity Order Identifier:  
ORDERID123456789.

Message usage: Liquidity Transfer Order of a Liquidity Transfer Order Link Set Response

This message usage enables the sender to receive information according to their access rights. CBs, settlement banks and payment banks have the possibility to receive all liquidity transfer orders of a liquidity transfer order link set.

In case the requesting System user chooses the key field option, CRDM returns the Liquidity Transfer Order Link information that matches the specified selection parameter and provides all attributes

identifying a standing liquidity transfer order in a link set, i. e. Liquidity Transfer Order Link Identifier, Liquidity Transfer Order Identifier and Transfer Order Sequence.

In case the requesting System user does not choose the key field option, CRDM returns the Liquidity Transfer Order Link information that matches the specified selection parameter and provides:

- | All attributes identifying a standing liquidity transfer order in a link set, i. e. Liquidity Transfer Order Link Identifier, Liquidity Transfer Order Identifier and Transfer Order Sequence;
- | All attributes of the standing liquidity transfer order, i. e.:
  - CB (BIC) (account operating CB),
  - Party (BIC) of the T2S Dedicated Cash Account to which the queried Liquidity transfer Order link set refers,
  - Party Short Name
  - Currency,
  - Liquidity transfer order identifier,
  - Liquidity transfer order reference,
  - Transfer Order Sequence
  - Debit cash account number (T2S Dedicated Cash Account number),
  - Credit cash account number (External RTGS account number),
  - Valid from date,
  - Valid to date,
  - Execution type,
  - Execution event,
  - Execution time
  - Amount All cash
  - Transfer Order Type

Specific message requirements in case of business data response

The Liquidity Transfer Order of a Liquidity Transfer Order Link Set Response contains business data.

| MESSAGE ITEM  | UTILISATION                            |
|---|--|
| Identification<br>Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id     | SLSQ                                   |
| Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Id | Liquidity Transfer<br>Order Identifier |

| MESSAGE ITEM   | UTILISATION                                  |
|--|--|
| <b>Identification</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id                  | Debited T2S dedicated cash account           |
| <b>Currency</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Ccy                               | Currency                                     |
| <b>AmountWithoutCurrency</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcy | Amount                                       |
| <b>CreditDebitIndicator</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd       | "DBIT"                                       |
| <b>Code</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Tp/Cd                           | "PSTO" or "USTO"                             |
| <b>Reference</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Ref                        | Liquidity Transfer Order Reference           |
| <b>FromDate</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd/FrDt               | Valid from                                   |
| <b>ToDate</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd/ToDt                 | Valid to                                     |
| <b>BICFI</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/SysMmb/FinInstnId/BICFI        | Party BIC of the T2S dedicated cash account  |
| <b>Name</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/SysMmb/FinInstnId/Nm            | Party short name of the account owning party |
| <b>BIC</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/RspnsblPty/FinInstnId/BIC        | BIC of the account operating NCB             |
| <b>LinkSetIdentification</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/LkSetId        | Liquidity Transfer Order Link Set Identifier |
| <b>LinkSetOrderSequence</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/LkSetOrdrSeq    | Transfer Order Sequence                      |
| <b>Time</b><br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp/Tm                      | Execution Time                               |

| MESSAGE ITEM   | UTILISATION                                  |
|--|--|
| Proprietary<br>Document/RtrStgOrdR/RptOrErr/Rpt/StgOrdR/ExctnTp/Evt/Prtry      | Execution event                              |
| Identification<br>Document/RtrStgOrdR/RptOrErr/Rpt/StgOrdR/CdtrAcct/Id/Othr/Id | Credit cash account<br>(RTGS account number) |
| Currency<br>Document/RtrStgOrdR/RptOrErr/Rpt/StgOrdR/CdtrAcct/Ccy              | Currency                                     |
| ZeroSweepIndicator<br>Document/RtrStgOrdR/RptOrErr/Rpt/StgOrdR/ZeroSweepInd    | All cash indicator<br>"true"                 |

Message usage example in case of business data response: camt.070.001.

04 T2S LiquidityTransferOrderForLiquidityTransferOrderLinkSetQueryResponse Example.xml

In this example a Liquidity transfer order of a liquidity transfer order link set query response with two different standing orders belonging to the T2S Dedicated Cash Account (DEBITCASH3) within a liquidity transfer order link set is sent to the corresponding party:

- | Details of the first standing order: Liquidity Transfer Order Reference (LIQUIORDERREF3). Amount 690000.00 EUR; LkSetId (LKSETID6) etc.
- | Details of the second standing order: Liquidity Transfer Order Reference (LIQUIORDERREF4), Amount 770000.00 EUR; LkSetId (LKSETID8) etc.

Specific message requirements in case of error response

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| Identification<br>Document/RtrStgOrdR/MsgHdr/ReqTp/Prtry/Id | SLSQ  |
| Error<br>Document/RtrStgOrdR/RptOrErr/OprrErr/Err           | Specific error code as specified in the error code table            |
| Description<br>Document/RtrStgOrdR/RptOrErr/OprrErr/Dsc     | Textual description in addition to the reported specific error code |

Message usage: Liquidity Transfer Order Link Set Query Response

The liquidity transfer order link set response is exchanged between CRDM and a CSD, CB, settlement bank or payment bank. It is used to get information about liquidity transfer order link sets. A liquidity

transfer order link set encompasses standing liquidity transfer orders for a T2S dedicated cash account in a certain order.

This query returns those Liquidity Transfer Order Link Sets that match the specified selection parameter and provide the following information:

- | CB (BIC) (account operating CB);
- | T2S party (BIC and Party short name) of the T2S Dedicated Cash Account (account owning party);
- | Currency;
- | T2S Dedicated Cash Account number;
- | Unique technical identifier of the link set;
- | Valid from date;
- | Valid to date.

Specific message requirements in case of business data response

The Liquidity Transfer Order Link Set Response contains business data.

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| Identification<br>Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id                                   | LLSQ   |
| Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id                  | T2S dedicated cash account number                        |
| Currency<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Ccy                               | Currency   |
| AmountWithoutCurrency<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcy | "0.00"   |
| CreditDebitIndicator<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd       | "DBIT"   |
| FromDate<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd/FrDt               | Valid from   |
| ToDate<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd/ToDt                 | Valid to   |
| BICFI<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/SysMmb/FinInstnId/BICFI        | Party BIC of the T2S dedicated cash account owning party |

| MESSAGE ITEM  | UTILISATION                                 |
|---|---|
| Name<br>Document/RtrStgOrdR/RptOrErr/Rpt/StgOrdR/Err/StgOrdR/SysMmb/FinInstnId/Nm     | Party short name                            |
| BIC<br>Document/RtrStgOrdR/RptOrErr/Rpt/StgOrdR/Err/StgOrdR/RspnsblPty/FinInstnId/BIC | Account operating party                     |
| LinkSetIdentification<br>Document/RtrStgOrdR/RptOrErr/Rpt/StgOrdR/Err/StgOrdR/LkSetId | Unique technical Identifier of the Link Set |

Message usage example in case of business data response: camt.070.001.

04T2S\_LiquidityTransferOrderLinkSetQueryResponse\_Example.xml

In this example a Liquidity Transfer Order Link Set response with the following data is shown:

- | CB BIC: CBAAA33
- | Party BIC: AAAAAA33 - Currency: GBP - T2S dedicated cash account number: CASHACCOUNT1 -
- | Unique technical identifier of the link set: T2SREF33 - Valid from and to date: 2016-07-10 to 2016-07-30 - is sent to the corresponding party.

Specific message requirements in case of error response

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| Identification<br>Document/RtrStgOrdR/MsgHdr/ReqTp/Prtry/Id   | LLSQ  |
| Proprietary<br>Document/RtrStgOrdR/RptOrErr/OpRlErr/Err/Prtry | Specific error code as specified in the error code table            |
| Description<br>Document/RtrStgOrdR/RptOrErr/OpRlErr/Desc      | Textual description in addition to the reported specific error code |

Message usage: Liquidity Transfer Order List Query Response

This query returns those Liquidity Transfer Orders that match the specified selection parameter and provide thus either the key fields of the respective liquidity transfer orders or the key fields and some additional information of the respective liquidity transfer orders.

In case the requesting System user does not choose the key field option, CRDM returns the complete set of data as stated in the following list. If the key-field option is selected, only details categorised as key-field are provided.

- | CB (BIC) (account operating party of the T2S Dedicated Cash Account to which the respective liquidity transfer order is linked) (key-field);
- | Party (Party identifier and BIC and Party short name) (account owning party of the T2S Dedicated Cash Account, to which the respective liquidity transfer order is linked) (key-field);
- | Currency (key-field);
- | Liquidity transfer order identifier (key-field);
- | Debit cash account number (T2S Dedicated Cash Account number) (key-field);
- | Credit cash account number (External RTGS account number) (key-field);
- | Amount (key-field);
- | All cash (key-field);
- | Execution type (key-field);
- | Execution type description;
- | Valid from date (key-field);
- | Valid to date (key-field).
- | Transfer Order Type [Code for standing or predefined LTO]; (key field)

Specific message requirements in case of business data response

The Liquidity Transfer Order List Response contains business data.

| MESSAGE ITEM   | UTILISATION                         |
|--|-------------------------------------|
| Identification<br>Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id                                    | LLIQ                                |
| Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Id                                | Liquidity Transfer Order Identifier |
| Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id                   | Debit cash account                  |
| AmountWithoutCurrency<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcyc | Amount                              |
| CreditDebitIndicator<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd        | "DBIT"                              |
| Code<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Tp/Cd                            | "PSTO" or "USTO"                    |
| FromDate<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd/FrDt                | Valid from                          |

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| ToDate<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd/ToDt               | Valid to   |
| BICFI<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/SysMmb/FinInstnId/BICFI      | Party BIC owning the T2S dedicated cash account    |
| Name<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/SysMmb/FinInstnId/Nm          | Party short name                                   |
| BIC<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/RspnsblPty/FinInstnId/BIC      | Parent Party BIC                                   |
| Time<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp/Tm                    | Execution Time                                     |
| Proprietary<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp/Evt/Prtry      | Execution Event                                    |
| Identification<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Id/Othr/Id | Credit cash account (External RTGS account number) |
| Currency<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Ccy              | Currency   |
| ZeroSweepIndicator<br>Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ZeroSweepInd    | All cash indicator "true"                          |

Message usage example in case of business data response: camt.070.001.

04 T2S LiquidityTransferOrderListQueryResponse Example.xml

In this example a The Liquidity Transfer Order List Response with key field option "yes" is sent to the corresponding party.

Specific message requirements in case of error response



| MESSAGE ITEM   | UTILISATION   |
|--|---|
| <b>Identification</b><br>Document/RtrStgOrdR/MsgHdr/ReqTp/Prtry/Id   | LLIQ  |
| <b>Proprietary</b><br>Document/RtrStgOrdR/RptOrErr/OprlErr/Err/Prtry | Specific error code as specified in the error code table            |
| <b>Description</b><br>Document/RtrStgOrdR/RptOrErr/OprlErr/Desc      | Textual description in addition to the reported specific error code |

### 3.1.1.4 DeleteStandingOrder (camt.071)

#### 3.1.1.4.1 Overview and scope of the message

This chapter illustrates the DeleteStandingOrder message.

The DeleteStandingOrder message is sent by an actor authorised to delete Liquidity transfer Orders.

In response to the DeleteStandingOrder, a Receipt(camt.025) containing a positive technical response to the sender of the message or detailed information in case of an error, is returned.

#### 3.1.1.4.2 Schema

##### Outline of the schema

The DeleteStandingOrder message is composed of the following message building blocks:

##### MessageHeader

This block is mandatory and contains the message identification ("NONREF" value can be used, since it is already contained in the business application header).

##### StandingOrderDetails

This block is mandatory and provides with all the key information to identify an existing Liquidity transfer Order to be deleted. Both identification and account identification must be provided.

##### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.071.001.03>

##### Business rules applicable to the schema

| MESSAGE ITEM                               | BUSINESS RULES                |
|--|-------------------------------|
| DeleteStandingOrder<br>Document/DelStgOrdr | DCD4001<br>DCD4003<br>DCD4030 |

### 3.1.1.4.3 The message in business context

#### *Usage Case: Delete Standing Order*

This usage case describes the deletion of a Liquidity transfer Order in CRDM.

#### *Specific message requirements*

| MESSAGE ITEM  | UTILISATION                                |
|---|--|
| Liquidity transfer Order Identification<br>Document/DelStgOrdr/StgOrdrDtIs/StgOrdr/Id | Liquidity transfer<br>Order identification |
| Account Identification<br>Document/DelStgOrdr/StgOrdrDtIs/StgOrdr/Acct/Id/Othr/Id     | Account<br>Identification                  |

#### **Usage case example:** *DeleteStandingOrder\_example.xml*

In this example it is requested the deletion of the Liquidity transfer Order with Identification “STDID001” for the account identified with “ACC001”.

### 3.1.1.5 GetLimit (camt.009)

#### 3.1.1.5.1 Overview and scope of the message

This chapter illustrates the GetLimit message.

The GetLimit is sent by an authorised party to request information on standing order for limit or limit,

The GetLimit message has the following usages:

- *CRDM Standing Order for Limit Query;*
- *CRDM Limit Query;*
- *TIPS Limit Query.*

These usages are described below, in the chapter “The message in business context”.

In response to the GetLimit(camt.009), a ReturnLimit(camt.010) message containing the requested information is returned.

### 3.1.1.5.2 Schema

#### Outline of the schema

The GetLimit message is composed of the following message building blocks:

#### MessageHeader

This building block is mandatory and contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

#### LimitQueryDefinition

It contains detailed information related to the business query about limit message. It includes sections related to limit type, the credit consumer identifier, the currency code, the limit amount, an attribute to specify a search criteria “=” against the date from which the credit limit is valid.

#### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.009.001.007>

#### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES |
|--|----------------|
| Request Type<br>Document/GetLmt/MsgHdr/ReqTp/Prtry/Id                                      | IIMP152        |
| BICFI<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/BilLmtCtrPtyId/FinInstnId/BICFI | IIMP114        |
| Code<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/CurLmtTp/Cd                      | IIMP114        |
| Identification<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/AcctId/Othr/Id         | IIMP114        |
| LimitCurrency<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtCcy                  | IIMP114        |
| Amount<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtAmt/ImpldCcyAndAmtRg/Amt    | IIMP114        |
| FromDate<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtVldAsOfDt/FrDt            | IIMP114        |

### 3.1.1.5.3 The message in business context

*Usage Case: CRDM Get Standing Order for Limit*

This query type requests usage information about standing order for limit in CRDM.

*Specific message requirements*

The field RequestType must be filled with "LIMI" and at least one of the following search criteria must be provided.

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Identification<br>Document/GetLmt/MsgHdr/ReqTp/Prtry/Id                                    | Fixed value "LIMI"                                 |
| BICFI<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/BilLmtCtrPtyId/FinInstnId/BICFI | Cash Account BIC, to be used for BILL.             |
| Code<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/CurLmtTp/Cd                      | Limit type<br>Possible values:<br>- BILI<br>- MULT |
| Identification<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/AcctId/Othr/Id         | Cash account identification.                       |
| LimitCurrency<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtCcy                  | Limit currency                                     |
| LimitAmount<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtAmt                    | Limit amount                                       |
| FromDate<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/Sch/Crit/LmtVldAsOfDt/FrDt           | Valid as of date                                   |

**Usage case example:** *CRDMStandingOrderforLimitQuery\_example.xml*

In this example a CB with BIC "BITAITRRXXX" queries Bilateral limits.

*Usage Case: CRDM Get Limit Query*

This query type requests usage information about limit in CRDM.

*Specific message requirements*

The field RequestType must be filled with "LIMI" and at least one of the following search criteria must be provided.

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Identification<br>Document/GetLmt/MsgHdr/ReqTp/Prtry/Id                                    | Fixed value "LIMI"   |
| BICFI<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/BilLmtCtrPtyId/FinInstnId/BICFI | Credit consumer  |
| Code<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/CurLmtTp/Cd                      | Limit type<br>Possible values:<br>- UCDD<br>- ACOL<br>- EXGT |

| MESSAGE ITEM   | UTILISATION                 |
|--|-----------------------------|
| Identification<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/AcctId/Othr/Id | Cash account identification |
| LimitCurrency<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtCcy          | Limit currency              |
| LimitAmount<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtAmt            | Limit amount                |
| FromDate<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/Sch/Crit/LmtVldAsOfDt/FrDt   | Valid as of date            |

**Usage case example:** *CRDMLimitQuery\_example.xml*

In this example a CB (“BITAITRRXXX”) queries Auto-collateralisation limits for payment bank “UNCRITMMXXX” valid from 2021-01-01. Usage case example 2:

CRDMLimitQuery PaymentBank example.xml

In this additional example a payment bank queries for unsecured credit limit set for its client with BIC “CLIEXXYAAA” valid from 2010-01-01.

*Usage Case: TIPS Limit Query*

This query type requests usage information about TIPS limit in CRDM.

*Specific message requirements*

The field RequestType must be filled with “LIMI” and at least one of the following search criteria must be provided.

| MESSAGE ITEM   | UTILISATION                              |
|--|--|
| Identification<br>Document/GetLmt/MsgHdr/ReqTp/Prtry/Id                                    | Fixed value “LIMI”                       |
| BICFI<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/BilLmtCtrPtyId/FinInstnId/BICFI | BIC of the TIPS CMB user                 |
| Code<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/CurLmtTp/Cd                      | Limit type<br>Possible values:<br>- INBI |
| Identification<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/AcctId/Othr/Id         | Cash account identification              |
| LimitCurrency<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtCcy                  | Limit currency                           |
| LimitAmount<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtAmt                    | Limit amount                             |
| FromDate<br>Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/Sch/Crit/LmtVldAsOfDt/FrDt           | Valid as of date                         |

### Usage case example: *TIPSLimitQuery\_example.xml*

In this example a CB (“BITAITRRXXX”) queries TIPS limits for payment bank “UNCRITMMXXX” valid from 2021-01-01 and with a limit amount equal to or greater than 500.

#### 3.1.1.6 ReturnLimit (camt.010)

##### 3.1.1.6.1 Overview and scope of the message

This chapter illustrates the ReturnLimit message.

The ReturnLimit is sent by CRDM to respond on a query on Standing Order fo Limit or Limit.

The ReturnLimit message has the following usages:

- *CRDM Standing Order for Limit Query Response;*
- *CRDM Limit Query Response;*
- *TIPS Limit Query Response.*

These usages are described below, in the chapter “The message in business context”.

##### 3.1.1.6.2 Schema

###### Outline of the schema

The ReturnLimit message is composed of the following message building blocks:

###### MessageHeader

It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header) and the identification of the original business query generating the report.

###### ReportOrError

It contains either the information matching the search criteria of the related business query about limit message or an error indication. It includes sections such as limit type, the credit consumer identifier, the currency code, the limit amount, the date from which the credit limit is valid.

###### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.010.001.008>

###### Business rules applicable to the schema

Not applicable (outgoing message).

### 3.1.1.6.3 The message in business context

*Usage Case: CRDM Standing Order for Limit Query Response;*

It provides the requestor with information about the Standing Order for Limit in accordance with the search criteria used within the query

*Specific message requirements*

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Proprietary<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/Sysld/MktInfrstrctrlId/Prtry | NCB responsible for account owner                  |
| BICFI Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/BilLmtCtrPtyld/FinInstnld/BICFI       | Cash Account BIC, to be used for BILI              |
| Code<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/Tp/Cd                               | Limit type<br>Possible values:<br>- BILI<br>- MULT |
| BICFI<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/AcctOwnr/FinInstnld/BICFI          | Account owner                                      |
| Identification<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/Acctld/Othr/ld            | Cash account identification                        |
| AmountWithCurrency<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtOrErr/Lmt/Amt/AmtWthCcy  | Limit amount                                       |
| Date<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtOrErr/Lmt/StartDtTm/Dt                 | Valid as of date                                   |

**Usage case example:** *CRDMStandingOrderforLimitQueryResponse\_example.xml*

In this example a CB with BIC "BITAITRRXXX" had queried Bilateral limits. The result of the query is the Bilateral limit set for the bank linked to cash account identified with "123456". The amount of the limit is 200.000 Euro and starts on 2021-01-01.

*Usage Case: CRDM Limit Query Response*

It provides the requestor with information about the Limit in accordance with the search criteria used within the query

*Specific message requirements*

| MESSAGE ITEM   | UTILISATION                       |
|--|-----------------------------------|
| Proprietary<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/Sysld/MktInfrstrctrlId/Prtry       | NCB responsible for account owner |
| Identification<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/BilLmtCtrPtyld/FinInstnld/BICFI | Credit consumer                   |

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| Code<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/Tp/Cd                              | Limit type<br>Possible values:<br>- UCDT<br>- ACOL<br>- EXGT |
| BICFI<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/AcctOwnr/FinInstnld/BICFI         | Account owner  |
| Identification<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/Acctld/Othr/ld           | Cash account identification                                  |
| AmountWithCurrency<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtOrErr/Lmt/Amt/AmtWthCcy | Limit amount   |
| Date<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtOrErr/Lmt/StartDtTm/Dt                | Valid as of date   |

**Usage case example:** *CRDMLimitQueryResponse\_example.xml*

In this example a CB with BIC "BITAITRRXXX" had queried Autocollateralisation limits for payment bank "UNCRITMMXXX". The result of the query is the Autocollateralisation limit set for the bank linked to cash account identified with "789456". The amount of the limit is 100.000 Euro and starts on 2021-12-31

*Usage Case: TIPS Limit Query Response*

It provides the requestor with information about the TIPS Limit in accordance with the search criteria used within the query

*Specific message requirements*

| MESSAGE ITEM   | UTILISATION                              |
|--|--|
| Proprietary<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/Sysld/MktInfrstrctrld/Prtry        | NCB responsible for account owner        |
| Identification<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/BilLmtCtrPtyld/FinInstnld/BICFI | BIC of the TIPS<br>CMB user              |
| Code<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/Tp/Cd                                     | Limit type<br>Possible values:<br>- INBI |
| BICFI<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/AcctOwnr/FinInstnld/BICFI                | Account owner                            |
| Identification<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/Lmtld/Acctld/Othr/ld                  | Cash account identification              |
| AmountWithCurrency<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtOrErr/Lmt/Amt/AmtWthCcy        | Limit amount                             |
| Date<br>Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtOrErr/Lmt/StartDtTm/Dt                       | Valid as of date                         |

**Usage case example:** *TIPSLimitQueryResponse\_example.xml*



In this example a CB with BIC "BITAITRRXXX" had queried TIPS limit for payment bank "UNCRITMMXXX". The result of the query is the TIPS limit set for the bank linked to cash account identified with "ACC001". The amount of the limit is 150.000 Euro and starts on 2021-01-01.

### 3.1.1.7 ModifyLimit (camt.011)

#### 3.1.1.7.1 Overview and scope of the message

This chapter illustrates the ModifyLimit message.

The ModifyLimit is sent by an authorised party for instructing the update of a standing order for limit or a limit, by providing details about the standing order for limit or limit to be updated.

The ModifyLimit message has the following usages:

- *CRDM Update Standing Order for Limit;*
- *CRDM Update Limit;*
- *TIPS Update Limit.*

These usages are described below, in the chapter "The message in business context".

In response to the ModifyLimit(camt.011), a Receipt(camt.025) message is returned when the requested update has been successfully performed or rejected.

#### 3.1.1.7.2 Schema

##### **Outline of the schema**

The ModifyLimit message is composed of the following message building blocks:

##### **MessageHeader**

This building block is mandatory and contains the message identification ("NONREF" value can be used, since it is already contained in the business application header).

##### **LimitDetails**

This block contains detailed information related to the standing order for limit or RTGS limit to be updated.

It contains detailed information related to the limit to be updated. It includes the following elements:

- The identification of the CB responsible for the account owner;
- The identification of the credit consumer;
- The type of limit to be updated;
- The identification of the credit provider;
- The identification of the account;

- The limit amount to set;
- The date from which the standing order for limit is valid.

### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.011.001.007>

### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES                           |
|---|--|
| Default<br>Document/ModifyLmt/LmtDtls/Lmtld/Dflt  | IIMP199                                  |
| Identification<br>Document/ModifyLmt/LmtDtls/Lmtld/Dflt/Sysld/MktInfrstrctrld/Prtry     | DRU9001<br>DRU9003                       |
| Identification<br>Document/ModifyLmt/LmtDtls/Lmtld/Dflt/BilLmtCtrPtyld/FinInstnld/BICFI | DRU9001<br>DRU9003<br>DRU9059<br>DRU9101 |
| Account owner<br>Document/ModifyLmt/LmtDtls/Lmtld/Dflt/AcctOwnr/FinInstnld/BICFI        | DRU9001<br>DRU9003                       |
| Account identification<br>Document/ModifyLmt/LmtDtls/Lmtld/Dflt/Acctld/Othr/ld          | DRU9001<br>DRU9003<br>DRU9101<br>DRU9233 |
| Amount<br>Document/ModifyLmt/LmtDtls/NewLmtValSet/Amt/AmtWthCcy                         | DRU9055<br>DRU9056<br>DRU9150<br>DRU9800 |

#### 3.1.1.7.3 The message in business context

*Usage Case: CRDM Update Standing Order for Limit*

This usage case describes the update of a standing order for limit in CRDM.

*Specific message requirements*

| MESSAGE ITEM   | UTILISATION                            |
|--|--|
| Identification<br>Document/ModifyLmt/LmtDtls/Lmtld/Dflt/Sysld/MktInfrstrctrld/Prtry<br>BICFI | NCB BIC                                |
| Document/ModifyLmt/LmtDtls/Lmtld/Dflt/BilLmtCtrPtyld/FinInstnld/BICFI                        | Cash Account BIC<br>as Bilateral Limit |

| MESSAGE ITEM   | UTILISATION   |
|--|---|
|  | Counterparty Identification, to be used for BILI    |
| Type<br>Document/ModifyLmt/LmtDtIs/LmtId/Dflt/Tp/Cd                              | Limit Type.<br>Possible values:<br>- BILI<br>- MULT |
| Account owner<br>Document/ModifyLmt/LmtDtIs/LmtId/Dflt/AcctOwnr/FinInstnId/BICFI | Account owner                                       |
| Account identification<br>Document/ModifyLmt/LmtDtIs/LmtId/Dflt/AcctId/Othr/Id   | Account identifier                                  |
| Valid From<br>Document/ModifyLmt/LmtDtIs/NewLmtValSet/StartDtTm/Dt               | Valid From  |
| Amount<br>Document/ModifyLmt/LmtDtIs/NewLmtValSet/Amt/AmtWthCcy                  | Amount  |

**Usage case example:** *CRDMUpdateStandingOrderforLimit\_example.xml*

In this example a CB with BIC “BITAITRRXXX” requests the update of Bilateral standing order for limit set for payment bank with BIC “UNCRITMMXXX” owning the cash account identified with “ACC001”.

*Usage Case: CRDM Update Limit*

This usage case describes the update of a limit in CRDM.

*Specific message requirements*

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| Identification<br>Document/ModifyLmt/LmtDtIs/LmtId/Dflt/SysId/MktInfrstrctrId/Prtry     | NCB BIC  |
| Identification<br>Document/ModifyLmt/LmtDtIs/LmtId/Dflt/BilLmtCtrPtyId/FinInstnId/BICFI | BIC as Bilateral Limit<br>Counterparty Identification        |
| Type<br>Document/ModifyLmt/LmtDtIs/LmtId/Dflt/Tp/Cd                                     | Limit Type<br>Possible values:<br>- UCDD<br>- ACOL<br>- EXGT |
| Account owner<br>Document/ModifyLmt/LmtDtIs/LmtId/Dflt/AcctOwnr/FinInstnId/BICFI        | Account owner  |
| Account identification<br>Document/ModifyLmt/LmtDtIs/LmtId/Dflt/AcctId/Othr/Id          | Account identifier   |
| Valid From<br>Document/ModifyLmt/LmtDtIs/NewLmtValSet/StartDtTm/Dt                      | Valid From   |
| Amount<br>Document/ModifyLmt/LmtDtIs/NewLmtValSet/Amt/AmtWthCcy                         | Amount   |

**Usage case example:** *CRDMUpdateLimit\_example.xml*

In this example a CB with BIC “BITAITRRXXX” requests the update of Auto-collateralization limit set for payment bank with BIC “UNCRITMMXXX” owning the cash account identified with “ACC001”.

*Usage Case: TIPS Update Limit*

This usage case describes the update of a limit in CRDM for TIPS.

*Specific message requirements*

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| <b>Identification</b><br>Document/ModfyLmt/LmtDtls/Lmtld/Dflt/BilLmtCtrPtyld/FinInstnld/BICFI | BIC of the TIPS CMB user                                   |
| <b>Type</b><br>Document/ModfyLmt/LmtDtls/Lmtld/Dflt/Tp/Cd                                     | Limit Type<br>Possible values:<br>- INBI                   |
| <b>Account owner</b><br>Document/ModfyLmt/LmtDtls/Lmtld/Dflt/AcctOwnr/FinInstnld/BICFI        | BIC of the Account owner referenced by the TIPS CMB        |
| <b>Account identification</b><br>Document/ModfyLmt/LmtDtls/Lmtld/Dflt/Acctld/Othr/ld          | Identification of the account linked to the referenced CMB |
| <b>Valid From</b><br>Document/ModfyLmt/LmtDtls/NewLmtValSet/StartDtTm/Dt                      | Valid From   |
| <b>Amount</b><br>Document/ModfyLmt/LmtDtls/NewLmtValSet/Amt/AmtWthCcy                         | Amount   |

**Usage case example:** *TIPSUpdateLimit\_example.xml*

In this example the update of Indirect Bilateral limit set for the account “ACC001” (owned to the PB “UNCRITMMXXX” ) for CMB user is requested.

3.1.1.8 DeleteLimit (camt.012)

3.1.1.8.1 Overview and scope of the message

This chapter illustrates the DeleteLimit message.

The DeleteLimit is sent by an authorised actor for instructing the deletion of a standing order for limit or limit, by providing details about the standing order for limit or limit to be deleted.

The DeleteLimit message has the following usages:

- *CRDM Delete Standing Order for Limit;*
- *CRDM Delete Limit;*
- *TIPS Delete Limit;*

These usages are described below, in the chapter “The message in business context”.

In response to the DeleteLimit(camt.012), a Receipt(camt.025) message is returned when the requested deletion has been successfully performed or rejected.

### 3.1.1.8.2 Schema

#### Outline of the schema

The DeleteLimit message is composed of the following message building blocks:

#### MessageHeader

This building block is mandatory and It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

#### LimitDetails

This building block is mandatory It contains detailed information related to the standing order for limit or RTGS limit to be deleted. It includes elements uniquely identifying a standing order for limit or RTGS limit as responsible CB, credit consumer, type, credit provider and cash account identification.

#### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.012.001.007>

#### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES     |
|--|--------------------|
| Identification<br>Document/DelLmt/LmtDtIs/CurLmtId/SysId/MktInfrstrctrId/Prtry     | DRD9001<br>DRD9003 |
| Identification<br>Document/DelLmt/LmtDtIs/CurLmtId/BilLmtCtrPtyId/FinInstnId/BICFI | DRD9001<br>DRD9003 |
| Type<br>Document/DelLmt/LmtDtIs/CurLmtId/Tp/Cd                                     | DRD9003            |
| Account owner<br>Document/DelLmt/LmtDtIs/CurLmtId/AcctOwnr/FinInstnId/BICFI        | DRD9001<br>DRD9003 |

| MESSAGE ITEM  | BUSINESS RULES |
|---|----------------|
| Account Identification<br>Document/DelLmt/LmtDtIs/CurLmtId/AcctId/Othr/Id | DRD9003        |

### 3.1.1.8.3 The message in business context

*Usage Case: CRDM Delete Standing Order for Limit*

This usage case describes the deletion of a standing order for limit in CRDM.

*Specific message requirements*

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Identification<br>Document/DelLmt/LmtDtIs/CurLmtId/SysId/MktInfrstrctrId/Prtry | NCB BIC  |
| BICFI Document/DelLmt/LmtDtIs/CurLmtId/BilLmtCtrPtyId/FinInstnId/BICFI         | Cash Account BIC as Bilateral Limit Counterparty Identification, to be used for BILI |
| Type<br>Document/DelLmt/LmtDtIs/CurLmtId/Tp/Cd                                 | Limit Type<br>Possible values:<br>- BILI<br>- MULT                                   |
| Account owner<br>Document/DelLmt/LmtDtIs/CurLmtId/AcctOwnr/FinInstnId/BICFI    | Account owner  |
| Account Identification<br>Document/DelLmt/LmtDtIs/CurLmtId/AcctId/Othr/Id      | Account identifier   |

**Usage case example:** *CRDMDeleteStandingOrderforLimit\_example.xml*

In this example a CB with BIC "BITAITRRXXX" requests the deletion of the Multilateral standing order for limit set for payment bank identified with BIC "UNCRITMMXXX" owning the cash account identified with "ACC001".

*Usage Case: CRDM Delete Limit*

This usage case describes the deletion of a limit in CRDM.

*Specific message requirements*

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Identification<br>Document/DelLmt/LmtDtIs/CurLmtId/SysId/MktInfrstrctrId/Prtry     | NCB BIC  |
| Identification<br>Document/DelLmt/LmtDtIs/CurLmtId/BilLmtCtrPtyId/FinInstnId/BICFI | BIC as Bilateral Limit Counterparty Identification |
| Type<br>Document/DelLmt/LmtDtIs/CurLmtId/Tp/Cd                                     | Limit Type<br>Possible values:<br>- UCDD<br>- ACOL |

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
|   | - EXGT             |
| Account owner<br>Document/DelLmt/LmtDtls/CurLmtId/AcctOwnr/FinInstnId/BICFI | Account owner      |
| Account Identification<br>Document/DelLmt/LmtDtls/CurLmtId/AcctId/Othr/Id   | Account identifier |

**Usage case example:** *CRDMDeleteLimit\_example.xml*

In this example a CB with BIC “BITAITRXXX” requests the deletion of the Auto-collateralization limit set for payment bank identified with BIC “UNCRITMMXXX” owning the cash account identified with “ACC001”.

*Usage Case: TIPS Delete Limit*

This usage case describes the deletion of a TIPS limit in CRDM.

*Specific message requirements*

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| Identification<br>Document/DelLmt/LmtDtls/CurLmtId/SysId/MktInfrstrctrId/Prtry     | NCB BIC   |
| Identification<br>Document/DelLmt/LmtDtls/CurLmtId/BilLmtCtrPtyId/FinInstnId/BICFI | BICas Bilateral<br>Limit Counterparty<br>Identification |
| Type<br>Document/DelLmt/LmtDtls/CurLmtId/Tp/Cd                                     | Limit Type<br>Possible values:<br>- INBI                |
| Account owner<br>Document/DelLmt/LmtDtls/CurLmtId/AcctOwnr/FinInstnId/BICFI        | Account owner   |
| Account Identification<br>Document/DelLmt/LmtDtls/CurLmtId/AcctId/Othr/Id          | Account identifier                                      |

**Usage case example:** *TIPSDeleteLimit\_example.xml*

In this example a CB with BIC “BITAITRXXX” requests the deletion of the TIPS limit set for payment bank identified with BIC “UNCRITMMXXX” owning the cash account identified with “ACC001”.

### 3.1.1.9 ModifyReservation (camt.048)

#### 3.1.1.9.1 Overview and scope of the message

This chapter illustrates the ModifyReservation message.

The ModifyReservation message is sent by an authorised actor for instructing the modification of a standing order for reservation, containing the new value and the validity information to be applied to the reservations identified in the message.

In response to the ModifyReservation message, a Receipt (camt.025) is sent, indicating the success or rejection/failure of the modification.

### 3.1.1.9.2 Schema

#### Outline of the schema

The ModifyReservation message is composed of the following message building blocks:

#### MessageHeader

This building block is mandatory and It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

#### ReservationIdentification

This building block is mandatory It contains detailed information related to the standing order for reservation to be updated.

#### ReservationIdentification

This building block is mandatory and non-repetitive. It identifies the modification to be executed. The modifiable attributes are:

- amount with currency;
- l start date.

#### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.048.001.005>

#### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES     |
|---|--------------------|
| Modify Reservation<br>Document/ModifyRsvatn                   | DCU7001<br>DCU7006 |
| Default<br>Document/ModifyRsvatn/RsvatnId/Dflt                | IIMP199            |
| Account<br>Document/ModifyRsvatn/RsvatnId/Dflt/AcctId/Othr/Id | DCU7002            |

### 3.1.1.9.3 The message in business context

*Usage Case: Modify Standing Order for Reservation*

This usage case describes the update of a standing order for reservation in CRDM.

*Specific message requirements*



| MESSAGE ITEM  | UTILISATION  |
|---|--|
| Code<br>Document/ModifyRsvatn/RsvatnId/Dflt/Tp/Cd                             | Possible values:<br>- HPAR<br>- UPAR<br>- CARE                         |
| Account Identification<br>Document/ModifyRsvatn/RsvatnId/Dflt/AcctId/Othr/Id  | Cash Account to which the reservation applies                          |
| New reservation amount<br>Document/ModifyRsvatn/NewRsvatnValSet/Amt/AmtWthCcy | New reservation amount required<br>"Value "0" deletes the reservation" |
| Start Date<br>Document/ModifyRsvatn/NewRsvatnValSet/StartDtTm/Dt              | Reservation Validity date  |

**Usage case example:** camt.048\_ModifyStandingOrderForReservation Request\_Example.xml

In this example, it is requested to update the standing order for reservation to the new value 200.00EUR wth validity 2021-11-16

### 3.1.1.10 Receipt (camt.025)

#### 3.1.1.10.1 Overview and scope of the message

This chapter illustrates the Receipt message.

The Receipt is sent by CRDM to an authorised actor to reply to a previously sent CRDM request. The Receipt message returns a positive response to the sender of the previous message or provides detailed information in case of an error.

The Receipt message has the following usages:

- Liquidity transfer Order notification;
- Standing Order for Limit notification;
- Standing Order for Reservation notification.

These usages are described below, in the chapter "The message in business context".

#### 3.1.1.10.2 Schema

##### Outline of the schema

The Receipt message is composed of the following message building blocks:

##### MessageHeader

This building block is mandatory and It contains the message identification ("NONREF" value can be used, since it is already contained in the business application header)

## ReceiptDetails

This building block is mandatory and non-repetitive. It provides information relating to the status of a previous instruction. It may contain:

- original message identification;
- status code;
- description.

## References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.025.001.005>

## Business rules applicable to the schema

Not applicable (outgoing message).

### 3.1.1.10.3 The message in business context

*Usage Case: Liquidity transfer Order notification;*

In this usage case the recipient of the message is being informed about the processing result of a previously sent Liquidity transfer Order

*Specific message content*

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| OriginalMessageIdentification<br>Document/Rct/RctDtls/OrgnlMsgId/MsgId | Copy of BAH MsgId of incoming message.  |
| Status<br>Document/Rct/RctDtls/ReqHdlg/StsCd                           | Possible values:<br>- LTOC - for Completed;<br>- LTOQ - for Queued;<br>- LTOR - for Rejected. |

## Usage case example: *Liquidity transferOrdernotification\_example.xml*

In this example, the recipient is notified about the successful completion of a CRDM request on a Liquidity transfer Order.

*Usage Case: Standing Order for Limit notification;*

In this usage case the recipient of the message is being informed about the processing result of a previously sent Standing Order for Limit.

*Specific message content*

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| OriginalMessageIdentification<br>Document/Rct/RctDtIs/OrgnlMsgld/Msgld | Copy of BAH Msgld of incoming message.  |
| Status<br>Document/Rct/RctDtIs/ReqHdlg/Stscd                           | Possible values:<br>- LIMC - for Completed;<br>- LIMQ - for Queued;<br>- LIMR - for Rejected. |

**Usage case example:** *StandingOrderforLimitnotification\_example.xml*

In this example, the recipient is notified about the queuing of a CRDM request on a Standing Order for Limit.

*Usage Case: Standing Order for Reservation notification;*

In this usage case the recipient of the message is being informed about the processing result of a previously sent Standing Order for Reservation.

*Specific message content*

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| OriginalMessageIdentification<br>Document/Rct/RctDtIs/OrgnlMsgld/Msgld | Copy of BAH Msgld of incoming message.  |
| Status<br>Document/Rct/RctDtIs/ReqHdlg/Stscd                           | Possible values:<br>- RSVC - for Completed;<br>- RSVQ - for Queued;<br>- RSVR - for Rejected. |

**Usage case example:** *StandingOrderforReservationnotification\_example.xml*

In this example, the recipient is notified about the rejection of a CRDM request on a Standing Order for Reservation.

3.1.1.11 DirectDebitMandateQuery (camt.099)

3.1.1.11.1 Overview and scope of the message

This chapter illustrates the DirectDebitMandateQuery message.

The DirectDebitMandateQuery is sent by an actor authorised to query direct debit mandate data.

In response to the DirectDebitMandateQuery, a DirectDebitMandateReport(camt.100) containing the requested information is returned.

### 3.1.1.11.2 Schema

#### Outline of the schema

The DirectDebitMandateQuery message is composed of the following message building blocks:

#### MessageHeader

This building block is mandatory and It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

#### Search Criteria

This block is optional and it contains detailed information related to the direct debit mandate query message.

Allowed search criteria are:

- Creditor;
- Cash Account;
- Direct Debit Mandate Reference;
- Service, for the specification of the service for which the query must be executed, with the currency details.

#### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.099.001.001>

#### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES |
|---|----------------|
| Creditor<br>Document/DrctDbtMndtQry/SchCrit/Cdtr/Id/Id/AnyBIC   | DCR8002        |
| Cash Account<br>Document/DrctDbtMndtQry/SchCrit/CshAcct/Othr/Id | DCR8001        |

### 3.1.1.11.3 The message in business context

#### Usage Case: Direct Debit Mandate Query

In this usage case data about Direct Debit Mandate is requested.

#### Specific message requirements

| MESSAGE ITEM | UTILISATION |
|--------------|-------------|
| Creditor     | Creditor    |

| MESSAGE ITEM   | UTILISATION                          |
|--|--------------------------------------|
| Document/DrctDbtMndtQry/SchCrit/Cdtr/Id/Id/AnyBIC                                |                                      |
| Responsible Party<br>Document/DrctDbtMndtQry/SchCrit/Cdtr/RspnsblPtyId/Id/AnyBIC | NCB                                  |
| Cash Account<br>Document/DrctDbtMndtQry/SchCrit/CshAcct/Othr/Id                  | Account                              |
| Direct Debit Mandate Reference<br>Document/DrctDbtMndtQry/SchCrit/DrctDbtMndtRef | Direct Debit<br>Mandate<br>Reference |
| Service<br>Document/DrctDbtMndtQry/SchCrit/Svc/SysId/MktInfrstrctrId/Prtry       | Service                              |

**Usage case example:** *Direct Debit MandateQuery\_example.xml*

In this example, Direct Debit Mandates on the account “ACCID001” for RTGS Service are requested.

### 3.1.1.12 DirectDebitMandateReport (camt.100)

#### 3.1.1.12.1 Overview and scope of the message

This chapter illustrates the DirectDebitMandateReport message.

The DirectDebitMandateReport is sent by CRDM to an authorised actor to provide the requested Direct Debit Mandate information.

The DirectDebitMandateReport is sent in response to the DirectDebitMandateQuery(camt.099) message.

#### 3.1.1.12.2 Schema

##### Outline of the schema

The DirectDebitMandateReport message is composed of the following message building blocks:

##### MessageHeader

It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header) and the identification of the original business query generating the report.

##### ReportOrError

This building block is mandatory. It contains either the information matching the search criteria of the related query or an error indication.

##### Direct Debit Mandate Report

It provides requested information on Direct Debit Mandate, with the service information.

The Direct Debit Mandate data includes the following elements:

- Creditor;
- Cash Account;

- Maximum amounts;
- Direct Debit Mandate Reference;
- Valid From;
- Valid To.

### OperationalError

In case of error, it provides the reason why the requested information can not be given.

### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/camt.100.001.001>

### Business rules applicable to the schema

Not applicable (outgoing message).

### 3.1.1.12.3 The message in business context

#### Usage Case: Direct Debit Mandate Report

This message usage provides the sender with requested information about Direct Debit Mandate data.

#### Specific message content

A Direct Debit Mandate Report contains the following set of information.

| MESSAGE ITEM   | UTILISATION                                |
|--|--|
| Service<br>Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/Svc/SysId/MktInfrstrctrId/Prtry                             | Service                                    |
| Creditor<br>Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/Cdtr/Id/Id/AnyBIC                    | Creditor                                   |
| Responsible Party<br>Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/Cdtr/RspnsblPtyId/Id/AnyBIC | NCB  |
| Cash Account<br>Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/CshAcct/Othr/Id                  | Account                                    |
| Amount Type<br>Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/MaxAmi/Tp/Prtry                   | Amount Type:<br>- "PAYM"<br>for<br>Maximum |

| MESSAGE ITEM   | UTILISATION   |
|--|---|
|  | Amount Payment;<br>- "PART" for Maximum Amount Counterparty |
| Amount<br>Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/MaxAmt/Amt                             | Amount  |
| Direct Debit Mandate Reference<br>Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/DrctDbtMndtRef | Direct Debit Mandate Reference                              |
| Valid From<br>Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/VldFr/DtTm                         | Valid From  |
| Valid To<br>Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/VldTo/DtTm                           | Valid To  |

The returned data in case of an error response is listed below:

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| Proprietary<br>Document/DrctDbtMndtRpt/RptOrErr/OprlErr/Err/Prtry | Specific error  |
| Description<br>Document/DrctDbtMndtRpt/RptOrErr/OprlErr/Desc      | Textual description in addition to the reported error |

**Usage case example:** *DirectDebitMandateReportReport\_example.xml*

In this example, detailed information on the Direct Debit Mandate existing on the account "ACCID001" for RTGS Service are reported.

### 3.1.2 Account Management (acmt)

#### 3.1.2.1 AccountQueryList (acmt.025)

##### 3.1.2.1.1 Overview and scope of the message

This chapter illustrates the AccountQueryList message.

The AccountQueryList is sent by an actor authorised to query Cash Account reference data or Settlement Bank Account Group reference data. **{T2 CR0097}** It could be used also to request a list of Cash Account. These query types are described in the section "The message in business context".

In response to the AccountQueryList, an AccountQueryReport (acmt.026) containing the requested information is returned.

### 3.1.2.1.2 Schema

#### Outline of the schema

The AccountQueryList message is composed of the following message building blocks:

#### References

This block is mandatory and contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

#### AccountServiceIdentification

This block is mandatory. It contains the identification of the party receiving the request.

#### Organisation

This block is mandatory. It contains the identification of the party sending the request.

#### Account Search Criteria

This block is mandatory and it contains detailed information related to the business account query message. It includes the following elements:

- Identification;
- Account type;
- Currency;
- Closing and opening date;
- Linked account identifier;
- Account owner;
- Proprietary element to specify the BIC of the CB, the party type and the type of query requested;

#### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/acmt.025.001.02>

#### Business rules applicable to the schema

| MESSAGE ITEM                                | BUSINESS RULES     |
|---|--------------------|
| Identification                              | IIMP054            |
| Document/AcctQryList/AcctSchCrit/Id/Othr/Id | IIMP056<br>IIMP202 |
| Type  | IIMP054            |
| Document/AcctQryList/AcctSchCrit/Tp/Prtry   | IIMP056<br>IIMP202 |
| Currency                                    | IIMP054            |



| MESSAGE ITEM   | BUSINESS RULES   |
|--|--|
| Document/AcctQryList/AcctSchCrit/Ccy                                 | IIMP055<br>IIMP056<br>IIMP057<br>IIMP202                       |
| ClosingDate<br>Document/AcctQryList/AcctSchCrit/ClsgDt               | IIMP054<br>IIMP056<br>IIMP202                                  |
| OpeningDate<br>Document/AcctQryList/AcctSchCrit/OpngDt               | IIMP054<br>IIMP056<br>IIMP202                                  |
| Identification<br>Document/AcctQryList/AcctSchCrit/RefAcctId/Othr/Id | IIMP054<br>IIMP056<br>IIMP202                                  |
| BIC<br>Document/AcctQryList/AcctSchCrit/AcctOwnr/AnyBIC              | IIMP054<br>IIMP056<br>IIMP202 {T2<br>CR0097}                   |
| Identification<br>Document/AcctQryList/AcctSchCrit/Prtry/Id          | IIMP054<br>IIMP056<br>IIMP057<br>IIMP064<br>IIMP065<br>IIMP087 |
| SchemeName<br>Document/AcctQryList/AcctSchCrit/Prtry/SchmeNm         | IIMP087  |

### 3.1.2.1.3 The message in business context

#### Usage Case: Cash Account Reference Data Query

In this usage case reference data about a Cash Account are requested.

#### Specific message requirements

The field RequestType must be filled with "CASH" and at least one of the search criteria must be provided.

| MESSAGE ITEM   | UTILISATION               |
|--|---------------------------|
| Identification<br>Document/AcctQryList/AcctSchCrit/Id/Othr/Id        | Account identifier        |
| Type<br>Document/AcctQryList/AcctSchCrit/Tp/Prtry                    | Account type              |
| Currency<br>Document/AcctQryList/AcctSchCrit/Ccy                     | Currency code             |
| ClosingDate<br>Document/AcctQryList/AcctSchCrit/ClsgDt               | Closing date              |
| OpeningDate<br>Document/AcctQryList/AcctSchCrit/OpngDt               | Opening date              |
| Identification<br>Document/AcctQryList/AcctSchCrit/RefAcctId/Othr/Id | Linked Account Identifier |
| Proprietary<br>Document/AcctQryList/AcctSchCrit/Prtry                | BIC of the NCB Party Type |

| MESSAGE ITEM  | UTILISATION                       |
|---|-----------------------------------|
|   | Request Type - Fixed value "CASH" |
| BIC<br>Document/AcctQryList/AcctSchCrit/AcctOwnr/AnyBIC | Account owner                     |

**Usage case example:** *CashAccountReferenceDataQuery\_example.xml*

In this example, a CB with BIC "BITAITRRXXX" queries reference data for cash account "ACC0001" under its responsibility.

*Usage Case: Cash Account List Query*

This query type requests a list of cash accounts.

*Specific message requirements*

The field RequestType must be filled with "LIST" and at least one of the search criteria below must be provided.

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| Currency<br>Document/AcctQryList/AcctSchCrit/Ccy        | Currency code   |
| Proprietary<br>Document/AcctQryList/AcctSchCrit/Prtry   | BIC of the NCB<br>Party Type<br>Request Type - Fixed value "LIST" |
| BIC<br>Document/AcctQryList/AcctSchCrit/AcctOwnr/AnyBIC | Account owner   |

**Usage case example:** *CashAccountListQuery\_example.xml*

In this example, a CB with BIC "BITAITRRXXX" queries cash accounts under its responsibility.

*Usage Case: Settlement Bank Account Group Query*

In this usage case reference data about a Settlement Bank Account Group are requested. The query can be performed only by the Leader Party of the Settlement Bank Account Group.

*Specific message requirements*

The field RequestType must be filled with "SBAG" and no other search criteria must be provided.

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| Proprietary<br>Document/AcctQryList/AcctSchCrit/Prtry | BIC of the NCB<br>Party Type<br>Request Type - Fixed value "SBAG" |

**Usage case example:** *SettlementBankAccountGroupQuery\_example.xml*

In this example, an AS with BIC "ANSYITRRXXX" queries the Settlement Bank Account Group in which it is defined as Leader Party. **{T2 CR0097}**

### 3.1.2.2 AccountListReport (acmt.026)

#### 3.1.2.2.1 Overview and scope of the message

This chapter illustrates the AccountListReport message.

The AccountListReport is sent by CRDM to an authorised actor to provide the requested Cash Account/Settlement Bank Account Group information, in the following message usages:

- Cash Account Reference Data Query Response;
- Cash Account List Query Response;
- Settlement Bank Account Group Query Response. **{T2 CR0097}**

The section reporting information related to Restrictions only displays those which are active and have a present or future validity period. **{T2S CR0819}**

These message usages are described in the section "The message in business context".

The AccountListReport is sent in response to the AccountQueryList (acmt.025) message.

#### 3.1.2.2.2 Schema

##### Outline of the schema

The AccountListReport message is composed of the following message building blocks:

##### References

This block is mandatory and contains the message identification ("NONREF" value can be used, since it is already contained in the business application header) and the identification of the original message.

##### AccountServicerIdentification

This building block is mandatory. It contains the identification of the Central Bank responsible for the receiving party.

##### Organisation

This building block is mandatory. It contains the identification of the receiving party.

##### ReportOrError

This building block is mandatory. It provides either the information matching the search criteria or an error indication.

It includes the following elements identification, currency, opening and closing dates, restriction information, floor and ceiling notification amounts, linked account reference and type, account owner.

##### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/acmt.026.001.02>

### Business rules applicable to the schema

Not applicable (outgoing message).

#### 3.1.2.2.3 The message in business context

##### Usage Case: Cash Account Reference Data Query Response

This message usage provides the sender with requested information about cash account reference data.

##### Specific message content

A Cash Account Reference Data Query Response contains the following set of information on queried Cash Account.

| MESSAGE ITEM  | UTILISATION                                     |
|---|---|
| Identification<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Id/Othr/Id               | Account identifier                              |
| Type<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Tp/Prtry                           | Account type                                    |
| Currency<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Ccy                            | Currency code                                   |
| FloorNotificationAmount<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/FlrNtfctnAmt    | Floor notification amount                       |
| CeilingNotificationAmount<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/CIngNtfctnAmt | Ceiling notification amount                     |
| ClosingDate<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/ClsgDt                      | Closing Date                                    |
| Restriction<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Rstrctn                     | Account restriction                             |
| OpeningDate<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/OpngDt                      | Opening date                                    |
| ReferenceAccount<br>Document/AcctListRpt/RptOrErr/AcctRpt/RefAcct/Id/Othr/Id          | Linked account reference                        |
| Type<br>Document/AcctListRpt/RptOrErr/AcctRpt/RefAcct/Tp/Prtry                        | Linked account type, only "CASH" for RTGS/CLM   |
| AccountOwner<br>Document/AcctListRpt/RptOrErr/AcctRpt/AcctOwnr/AnyBIC                 | Account owner                                   |
| Proprietary<br>Document/AcctListRpt/RptOrErr/AcctRpt/Prtry                            | NCB responsible for the account owner Pary type |

The returned data in case of an error response is listed below:

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Proprietary<br>Document/AcctListRpt/RptOrErr/Err/Err/Prtry | Specific error code  |
| Description<br>Document/AcctListRpt/RptOrErr/Err/Desc      | Textual description in addition to the reported error code |

**Usage case example:** *CashAccountReferenceDataQueryResponse\_example.xml*

In this example, a CB with BIC “BITAITRRXXX” queried Cash Account with Id “ACC0001”.

Reference data of the queried account is returned in the response.

*Usage Case: Cash Account List Query Response*

This message usage provides the sender with requested information about cash account list.

*Specific message content*

A Cash Account List Query Response contains the list of Cash accounts according to criteria used to query.

| MESSAGE ITEM  | UTILISATION                                     |
|---|---|
| Identification<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Id/Othr/Id | Account identifier                              |
| Currency<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Ccy              | Currency code                                   |
| AccountOwner<br>Document/AcctListRpt/RptOrErr/AcctRpt/AcctOwnr/AnyBIC   | Account owner                                   |
| Proprietary<br>Document/AcctListRpt/RptOrErr/AcctRpt/Prtry              | NCB responsible for the account owner Pary type |

The returned data in case of an error response is listed below:

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Proprietary<br>Document/AcctListRpt/RptOrErr/Err/Err/Prtry | Specific error code  |
| Description<br>Document/AcctListRpt/RptOrErr/Err/Desc      | Textual description in addition to the reported error code |

**Usage case example:** *CashAccountListQueryResponse\_example.xml*

In this example, a CB with BIC “BITAITRRXXX” queried about Cash Accounts under its responsibility. One cash account identified with “123456” and owned by payment bank with BIC “UNCRITMMXXX” is returned in the response.

*Usage Case: Settlement Bank Account Group Query Response*

This message usage provides the sender with requested information about settlement bank account group reference data.

*Specific message content*

A Settlement Bank Account Group Query Response contains the following set of information on queried Settlement Bank Account Group.

| MESSAGE ITEM  | UTILISATION                                     |
|---|---|
| Identification<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Id/Othr/Id | Account identifier. NOTPROVIDED in case of RTGS |

| MESSAGE ITEM  | UTILISATION  |
|---|--|
|   | DCA/RTGS CB Account.   |
| Currency<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Ccy            | Currency Code. XXX in case of RTGS DCA/RTGS CB Account.  |
| ClosingDate<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/ClsgDt      | SBAG Entry Valid To  |
| OpeningDate<br>Document/AcctListRpt/RptOrErr/AcctRpt/Acct/OpngDt      | SBAG Entry Valid From  |
| AccountOwner<br>Document/AcctListRpt/RptOrErr/AcctRpt/AcctOwnr/AnyBIC | Currently active and valid Account BIC (if present). Account BIC of the linked RTGS DCA/RTGS CB Account in case of RTGS Sub Account. |

The returned data in case of an error response is listed below:

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Proprietary<br>Document/AcctListRpt/RptOrErr/Err/Err/Prtry | Specific error code  |
| Description<br>Document/AcctListRpt/RptOrErr/Err/Desc      | Textual description in addition to the reported error code |

**Usage case example:** *SettlementBankAccountGroupQueryResponse\_example.xml*

In this example, an AS with BIC “ANSYITRRXXX” queried the Settlement Bank Account Group in which it is defined as Leader Party.

Reference data of the queried Settlement Bank Account Group is returned in the response. **{T2 CR0097}**

### 3.1.2.3 AccountOpeningRequest (acmt.007)

#### 3.1.2.3.1 Overview and scope of the message

This chapter illustrates the AccountOpeningRequest message.

The AccountOpeningRequest (acmt.007) is sent by an authorised actor to instruct the opening of a Cash Account by providing details about the Cash Account to be opened.

In response, CRDM sends an AccountRequestAcknowledgement (acmt.010) or AccountRequestRejection (acmt.011) messages respectively when the opening of the Cash Account has been successfully processed or queued and when the opening has been rejected.

#### 3.1.2.3.2 Schema

##### Outline of the schema

The AccountOpeningRequest message is composed of the following message building blocks:

## References

This block is mandatory and contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

## Account

This block is mandatory. It contains detailed information related to the open cash account message. It includes the following elements:

- Cash Account number;
- Closing date;
- Type of the cash account;
- Floor and ceiling notification amounts;
- Currency code;
- Reference account and related type;
- Restriction information.

To apply an immediate restriction, the value “1000-01-01T00:01:00” shall be used as the Valid From value for the restriction.

To remove immediately a restriction, the value “9999-12-31T23:59:00” shall be used as the Valid To value for the restriction.

## ContractDates

This building block is optional. It contains detailed information related to the opening date for the account.

## AccountServiceIdentification

This building block is mandatory. It contains detailed information related to the Central Bank responsible for the party operating the account.

## Organisation

This building block is optional. It contains detailed information related to the party operating the account.

## ReferenceAccount

This building block is mandatory. It contains detailed information related to the linked Cash Account, if any.

## References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/acmt.007.001.02>

## Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES   |
|--|--|
| Identification<br>Document/AcctOpngReq/Acct/Id/Othr/Id               | DCC1103<br>DCC1216<br>DCC1532<br>DCC1534<br>DCC1533<br>DCC1535   |
| Proprietary<br>Document/AcctOpngReq/Acct/Tp/Prtry                    | DCC1225<br>DCC1226<br>DCC1530<br>DCC1531<br>DCC1536  |
| Currency<br>Document/AcctOpngReq/Acct/Ccy                            | DCC1100<br>DCC1207<br>DCC1225<br>DCC1226<br>DCC1405<br>DCC1550   |
| FloorNotificationAmount<br>Document/AcctOpngReq/Acct/FlrNtfctnAmt    | DCC1101<br>DCC1800   |
| CeilingNotificationAmount<br>Document/AcctOpngReq/Acct/ClngNtfctnAmt | DCC1101<br>DCC1800   |
| ClosingDate<br>Document/AcctOpngReq/Acct/ClsgDt                      | DCC1210<br>DCC1250   |
| Code<br>Document/AcctOpngReq/Acct/Rstrctn/RstrctnTp/Cd               | DCC1024<br>DCC1213<br>DCC1230<br>DCC1300   |
| ValidFrom<br>Document/AcctOpngReq/Acct/Rstrctn/VldFr                 | DCC1025<br>DCC1208<br>DCC1212<br>DCC1214<br>DCC1230<br>DCC1300<br>DCC1601                                  |
| ValidUntil<br>Document/AcctOpngReq/Acct/Rstrctn/VldUntil             | DCC1209<br>DCC1212<br>DCC1214<br>DCC1230<br>DCC1300  |
| TargetGoLiveDate<br>Document/AcctOpngReq/CtrctDts/TrgtGoLiveDt       | DCC1205  |
| BIC<br>Document/AcctOpngReq/AcctSvcrId/FinInstnId/BICFI              | DCC1001  |
| BIC<br>Document/AcctOpngReq/Org/OrgId/AnyBIC                         | DCC1524<br>DCC1555   |
| Reference Account<br>Document/AcctOpngReq/RefAcct                    | QMPC114  |
| Identification<br>Document/AcctOpngReq/RefAcct/Id/Othr/Id            | DCC1204<br>DCC1206<br>DCC1208<br>DCC1217<br>DCC1219<br>DCC1221<br>DCC1222<br>DCC1224 {T2<br><b>CR0138}</b> |



### 3.1.2.3.3 The message in business context

#### Usage Case: Create Cash Account

This usage case describes the creation of a cash account in CRDM.

#### Specific message requirements

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| Identification<br>Document/AcctOpngReq/Acct/Id/Othr/Id               | Identification of the account.                        |
| Proprietary<br>Document/AcctOpngReq/Acct/Tp/Prtry                    | Account Type  |
| Currency<br>Document/AcctOpngReq/Acct/Ccy                            | Currency  |
| FloorNotificationAmount<br>Document/AcctOpngReq/Acct/FlrNtfctnAmt    | FloorNotificationAmount                               |
| CeilingNotificationAmount<br>Document/AcctOpngReq/Acct/ClngNtfctnAmt | CeilingNotificationAmount                             |
| ClosingDate<br>Document/AcctOpngReq/Acct/ClsgDt                      | ClosingDate   |
| Code<br>Document/AcctOpngReq/Acct/Rstrctn/RstrctnTp/Cd               | Restriction Type                                      |
| ValidFrom<br>Document/AcctOpngReq/Acct/Rstrctn/VldFr                 | Restriction ValidFrom                                 |
| ValidUntil<br>Document/AcctOpngReq/Acct/Rstrctn/VldUntil             | Restriction ValidTo                                   |
| TargetGoLiveDate<br>Document/AcctOpngReq/CtrctDts/TrgtGoLiveDt       | Start date of the operational validity of the account |
| BIC<br>Document/AcctOpngReq/AcctSvcrId/FinInstnId/BICFI              | Responsible NCB                                       |
| BIC<br>Document/AcctOpngReq/Org/OrgId/AnyBIC                         | Party opening the account                             |
| Identification<br>Document/AcctOpngReq/RefAcct/Id/Othr/Id            | Reference Account                                     |
| Type<br>Document/AcctOpngReq/RefAcct/Tp/Prtry                        | Reference Account Type: "Only "CASH" for RTGS/CLM"    |

#### Usage case example: CreateCashAccount\_example.xml

In this example a CB ("BITAITRRXXX") requests the creation of a Cash Account for a payment bank ("UNCRITMMXXX"). The Cash Account to be created is identified with number "CASHACCOUNT1", is issued in EUR currency with a Floor Notification Amount of 1.000 and a Ceiling Notification Amount of 1.000.000. Account should be active starting from 2018-01-01 and must be linked to External RTGS Account with reference "PAYBXXRTGSACCOUNT".

A "BLOC" restriction is applied on the account starting from 2018-02-01 till 2018-02-28.

### 3.1.2.4 AccountRequestAcknowledgement (acmt.010)

#### 3.1.2.4.1 Overview and scope of the message

This chapter illustrates the AccountRequestAcknowledgement message.

The AccountRequestAcknowledgement (acmt.010) is sent by CRDM to inform the CB or any party authorised by them about the status of a Cash Account maintenance request.

This message is sent by CRDM in the following message usages:

- Queued;
- Completed.

These message usages are described in the section "The message in business context".

#### 3.1.2.4.2 Schema

##### Outline of the schema

The AccountRequestAcknowledgement (acmt.010) message is composed of the following message building blocks:

##### References

It contains the message identification ("NONREF" value can be used, since it is already contained in the business application header), the identification of the original message and the status of the original request.

##### Account Identification

This building block is optional. It is present only if the original request has been successfully processed. It contains the identification of the account

##### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/acmt.010.001.02>

##### Business rules applicable to the schema

Not applicable (outgoing message).

#### 3.1.2.4.3 The message in business context

##### *Usage Case: Queued*

This message usage describes an account request acknowledgement message sent by CRDM when a cash account maintenance request has been queued.

##### *Specific message content*

Field for Status is filled with rejection code "QUED".

| MESSAGE ITEM                           | UTILISATION        |
|--|--------------------|
| Status<br>Document/AcctReqAck/Refs/Sts | Fixed value "QUED" |

**Usage case example:** *AccountQueued\_example.xml*

In this example processing for an account opening request sent with reference "SAMPLEOPEACC" has been queued. Thus the sender originating the request is notified with the request acknowledgement.

*Usage Case: Completed*

This message usage describes an account request acknowledgement message sent by CRDM when a cash account maintenance request has been successfully processed.

*Specific message content*

Field for Status is filled with rejection code "COMP".

| MESSAGE ITEM  | UTILISATION                              |
|---|--|
| Status<br>Document/AcctReqAck/Refs/Sts                  | Fixed value "COMP"                       |
| Identification<br>Document/AcctReqAck/AcctId/Id/Othr/Id | Cash account identifier                  |
| Currency<br>Document/AcctReqAck/AcctId/Ccy              | Currency for the cash account identifier |

**Usage case example:** *AccountCompleted\_example.xml*

In this example processing for an account opening request sent with reference "SAMPLEOPEACC" has been successfully processed. Thus the sender originating the request is notified with the request acknowledgement containing the identification and currency of the account.

### 3.1.2.5 AccountRequestRejection (acmt.011)

#### 3.1.2.5.1 Overview and scope of the message

This chapter illustrates the AccountRequestRejection message.

The AccountRequestRejection (acmt.011) is sent by CRDM to inform the CB or any party authorised by them about rejection of a Cash Account maintenance request.

### 3.1.2.5.2 Schema

#### Outline of the schema

The AccountRequestRejection (acmt.011) message is composed of the following message building blocks:

#### References

It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header), the identification of the original message and the reason why it has been rejected.

#### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/acmt.011.001.02>

#### Business rules applicable to the schema

Not applicable (outgoing message).

### 3.1.2.5.3 The message in business context

#### *Usage Case: Rejected*

This message usage describes an account request acknowledgement message sent by CRDM when a cash account maintenance request has been rejected.

#### *Specific message content*

| MESSAGE ITEM                                  | UTILISATION         |
|---|---------------------|
| Status<br>Document/AcctReqRjctn/Refs/RjctnRsn | Reason of rejection |

#### **Usage case example:** *AccountRejected\_example.xml*

In this example processing for an account opening request sent with reference “SAMPLEOPEACC” has been rejected. Thus the sender originating the request is notified with the request rejection.

### 3.1.2.6 AccountExcludedMandateMaintenanceRequest (acmt.015)

#### 3.1.2.6.1 Overview and scope of the message

This chapter illustrates the AccountExcludedMandateMaintenanceRequest message.

The AccountExcludedMandateMaintenanceRequest (acmt.015) is sent by CBs or any party authorised by them to instruct the update of a Cash Account by providing details about the Cash Account to be updated.

Payment Banks can use the AccountExcludedMandateMaintenanceRequest (acmt.015) to instruct an update of the attributes related to floor/ceiling amounts for Cash Accounts for which they are defined as Account Owner or Co-Manager.

In response, CRDM sends an AccountRequestAcknowledgement (acmt.010) or AccountRequestRejection (acmt.011) messages respectively when the update of the Cash Account has been successfully processed or queued and when the update has been rejected.

### 3.1.2.6.2 Schema

#### **Outline of the schema**

The AccountExcludedMandateMaintenanceRequest message is composed of the following message building blocks:

#### **References**

This block is mandatory and contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

#### **Account**

It must contain a reference to the related Cash Account to be updated as well as a set of updates to be executed.

The updates to be executed might be: the lower threshold (floor) for notifying the cash manager, the upper threshold (ceiling) for notifying the cash manager, a code defined by the CB to identify a restriction to be applied to the cash account, date and time from which restriction is valid and date and time until restriction is valid.

To apply an immediate restriction, the value “1000-01-01T00:01:00” shall be used as the Valid From value for the restriction.

To remove immediately a restriction, the value “9999-12-31T23:59:00” shall be used as the Valid To value for the restriction.

#### **AccountServiceIdentification**

This building block is mandatory. It contains detailed information related to the Central Bank responsible for the account owner.

#### **Organisation**

This building block is mandatory. It contains detailed information related to the of the account owner.

#### **References/links**

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/acmt.015.001.02>

## Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES   |
|---|--|
| Identification<br>Document/AcctExclMndtMntncReq/Acct/Id/Othr/Id               | DCU1003<br>DCU1555<br>DCU1556<br>DCU1557<br>DCU1558<br>DCU1214   |
| Currency<br>Document/AcctExclMndtMntncReq/Acct/Ccy                            | DCU1218  |
| FloorNotificationAmount<br>Document/AcctExclMndtMntncReq/Acct/FlrNtfctnAmt    | DCU1101<br>DCU1800   |
| CeilingNotificationAmount<br>Document/AcctExclMndtMntncReq/Acct/ClngNtfctnAmt | DCU1101<br>DCU1800   |
| ClosingDate<br>Document/AcctExclMndtMntncReq/Acct/ClsgDt                      | DCU1030<br>DCU1040<br>DCU1041<br>DCU1400<br>DCU1532<br>DCU1534<br>DCU1205 {T2<br><b>CR0138}</b><br>DCU1210<br>DCU1250<br>DCU1215 |
| Code<br>Document/AcctExclMndtMntncReq/Acct/Rstrctn/ Rstrctn/RstrctnTp/Cd      | DCU1024<br>DCU1216<br>DCU1217<br>DCU1222<br>DCU1263<br>DCU1300   |
| ValidFrom<br>Document/AcctExclMndtMntncReq/Acct/Rstrctn/Rstrctn/VldFr         | DCU1211<br>DCU1219<br>DCU1223<br>DCU1300<br>DCU1600  |
| ValidUntil<br>Document/AcctExclMndtMntncReq/Acct/Rstrctn/Rstrctn/VldUntil     | DCU1212<br>DCU1216<br>DCU1220<br>DCU1223<br>DCU1300<br>DCU1313<br>DCU1600  |
| BIC<br>Document/AcctExclMndtMntncReq/AcctSvcrld/FinInstnld/BIC                | DCU1001  |
| BIC<br>Document/AcctExclMndtMntncReq/Org/Orgld/AnyBIC                         | DCU1001  |

### 3.1.2.6.3 The message in business context

#### Usage Case: Update Cash Account

This usage case describes the update of a cash account in CRDM.

#### Specific message requirements

| MESSAGE ITEM  | UTILISATION                     |
|---|---------------------------------|
| Identification<br>Document/AcctExclMndtMntncReq/Acct/Id/Othr/Id               | Identification of the account.  |
| Currency<br>Document/AcctExclMndtMntncReq/Acct/Ccy                            | Currency                        |
| FloorNotificationAmount<br>Document/AcctExclMndtMntncReq/Acct/FlrNtfctnAmt    | FloorNotificationAmount         |
| CeilingNotificationAmount<br>Document/AcctExclMndtMntncReq/Acct/CIngNtfctnAmt | CeilingNotificationAmount       |
| ClosingDate<br>Document/AcctExclMndtMntncReq/Acct/ClsgDt                      | ClosingDate                     |
| Code<br>Document/AcctExclMndtMntncReq/Acct/Rstrctn/RstrctnTp/Cd               | Restriction Type                |
| ValidFrom<br>Document/AcctExclMndtMntncReq/Acct/Rstrctn/VldFr                 | Restriction ValidFrom           |
| ValidUntil<br>Document/AcctExclMndtMntncReq/Acct/Rstrctn/VldUntil             | Restriction ValidTo             |
| BIC<br>Document/AcctExclMndtMntncReq/AcctSvcrld/FinInstnld/BIC                | Responsible NCB                 |
| BIC<br>Document/AcctExclMndtMntncReq/Org/Orgld/AnyBIC                         | BIC of the owner of the account |

#### Usage case example: UpdateCashAccount\_example.xml

In this example a CB (“BITAITRRXXX”) requests the UPDATE of the Cash Account identified with “123456” previously created and linked to payment bank “UNCRITMMXXX”.

CB requests to apply a “BLOC” restriction on the account valid from 00:00:01 on 2018-09-25 till 23:59:59 on the same day.

### 3.1.2.7 AccountClosingRequest (acmt.019)

#### 3.1.2.7.1 Overview and scope of the message

This chapter illustrates the AccountClosingRequest message.

The AccountClosingRequest (acmt.019) is sent by CBs or any party authorised by them to instruct the deletion of a Cash Account by providing details about the Cash Account to be deleted.

In response, CRDM sends an AccountRequestAcknowledgement (acmt.010) message when the delete of the Cash Account has been successfully either queued or processed or an AccountRequestRejection (acmt.011) when the deletion has been rejected.

#### 3.1.2.7.2 Schema

##### Outline of the schema

The AccountClosingRequest message is composed of the following message building blocks:

##### References

This block is mandatory and contains the message identification (“NONREF” value can be used, since it is already contained in the business application header). identify the message.

##### AccountIdentification

This block is mandatory and it contains the identification of the cash account to be deleted.

##### Contract Details

This block is mandatory and it contains the indicator for the deletion of the cash account.

##### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/acmt.019.001.02>

#### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES                                      |
|---|---|
| Identification<br>Document/AcctClsgReq/AcctId/Id/Othr/Id  | DCD1001<br>DCD1003<br>DCD1030<br>DCD1014<br>DCD1300 |
| RemovalIndicator<br>Document/AcctClsgReq/CtrctDts/Rmvllnd | IIMP063   |

#### 3.1.2.7.3 The message in business context



### Usage Case: Delete Cash Account

This usage case describes the deletion of a cash account in CRDM.

#### Specific message requirements

| MESSAGE ITEM   | UTILISATION                                |
|--|--|
| Identification<br>Document/AcctClsgReq/AcctId/Id/Othr/Id | Identification of the account.             |
| RemovalIndicator<br>Document/AcctClsgReq/CtrctDts/RmvInd | Indicator for the deletion of the account. |

#### Usage case example: *DeleteCashAccount\_example.xml*

In this example a CB requests the deletion for the Cash Account with identifier "123456".

## 3.1.3 Reference Data Management (reda)

### 3.1.3.1 PartyQuery(reda.015)

#### 3.1.3.1.1 Overview and scope of the message

This chapter illustrates the PartyQuery message.

The PartyQuery is sent by an actor authorised to query Party reference data.

This message is sent to make the following type of queries:

- Party Reference Data Query;
- Party List Query;
- Restricted Party Query.

These query types are described in the section "The message in business context".

In response to the PartyQuery, a PartyReport (reda.017) containing the requested information is returned.

#### 3.1.3.1.2 Schema

##### Outline of the schema

The PartyQuery message is composed of the following message building blocks:

##### MessageHeader

This building block contains the message identification ("NONREF" value can be used, since it is already contained in the business application header).

##### Search Criteria

This block is mandatory and it contains detailed information related to the business party query message. It includes the following elements:

- Identification;
- Opening and closing date;
- Type of the party;
- CB identification;

### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.015.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES   |
|---|--|
| PartyQuery<br>Document/PtyQry                                       | DPR1001  |
| Identification<br>Document/PtyQry/MsgHdr/ReqTp/Prtry/Id             | IIMP036<br>IIMP039<br>IIMP037<br>IIMP038<br>IIMP040<br>IIMP041 |
| OpeningDate<br>Document/PtyQry/SchCrit/OpngDt                       | IIMP036<br>IIMP039   |
| ClosingDate<br>Document/PtyQry/SchCrit/ClsgDt                       | IIMP036<br>IIMP039   |
| Type<br>Document/PtyQry/SchCrit/Tp                                  | IIMP036<br>IIMP039<br>IIMP038<br>IIMP041                       |
| Responsible Party<br>Document/PtyQry/SchCrit/RspnsbIPtyId/Id/AnyBIC | IIMP036<br>IIMP039<br>IIMP037<br>IIMP038<br>IIMP040<br>IIMP041 |
| Identification<br>Document/PtyQry/SchCrit/PtyId/Id/AnyBIC           | IIMP036<br>IIMP039   |
| RestrictionIdentification<br>Document/PtyQry/SchCrit/RstrctnId      | IIMP038<br>IIMP041   |
| RestrictionIssueDate<br>Document/PtyQry/SchCrit/RstrctnIsseDt       | IIMP038<br>IIMP041   |

#### 3.1.3.1.3 The message in business context

*Usage Case: Party Reference Data Query*

In this usage case reference data about a party is requested.

### Specific message requirements

At least one of the search criteria must be provided.

| MESSAGE ITEM  | UTILISATION           |
|---|-----------------------|
| Identification<br>Document/PtyQry/MsgHdr/ReqTp/Prtry/Id             | Fixed value "PYRD"    |
| OpeningDate<br>Document/PtyQry/SchCrit/OpngDt                       | Opening Date          |
| ClosingDate<br>Document/PtyQry/SchCrit/ClsgDt                       | Closing Date          |
| Type<br>Document/PtyQry/SchCrit/Tp                                  | Party type            |
| Responsible Party<br>Document/PtyQry/SchCrit/RspnsbIPtyId/Id/AnyBIC | Responsible Party BIC |
| Identification<br>Document/PtyQry/SchCrit/PtyId/Id/AnyBIC           | Party BIC             |

#### Usage case example: *PartyReferenceDataQuery\_example.xml*

In this example a Central Bank with BIC "BITAITRRXXX" queries reference data of the payment bank with BIC "UNCRITMMXXX" under its responsibility.

#### Usage Case: *Party List Query*

This query type requests a list of parties.

#### Specific message requirements

The field RequestType must be filled with "PYLI" and the Responsible party identification have to be provided.

| MESSAGE ITEM  | UTILISATION           |
|---|-----------------------|
| Identification<br>Document/PtyQry/MsgHdr/ReqTp/Prtry/Id             | Fixed value "PYLI"    |
| Responsible Party<br>Document/PtyQry/SchCrit/RspnsbIPtyId/Id/AnyBIC | Responsible Party BIC |

#### Usage case example: *PartyListQuery\_example.xml*

In this example a Central Bank with BIC "BITAITRRXXX" requests a list of the parties it is responsible for.

#### Usage Case: *Restricted Party Query*

This query type requests the parties for which a restriction has been issued.

#### Specific message requirements

The field RequestType must be filled with "PYRS" and at least one of the search criteria below must be provided.

| MESSAGE ITEM  | UTILISATION            |
|---|------------------------|
| Identification<br>Document/PtyQry/MsgHdr/ReqTp/Prtry/Id             | Fixed value "PYRS"     |
| Type<br>Document/PtyQry/SchCrit/Tp                                  | Party type             |
| Responsible Party<br>Document/PtyQry/SchCrit/RspnsbIPtyId/Id/AnyBIC | Responsible Party BIC  |
| RestrictionIdentification<br>Document/PtyQry/SchCrit/RstrctnId      | Restriction type       |
| RestrictionIssueDate<br>Document/PtyQry/SchCrit/RstrctnIsseDt       | Restriction issue date |

**Usage case example:** *RestrictedPartyQuery\_example.xml*

In this example a Central Bank with BIC "NCBAXXYAAA" requests a list of the restricted parties starting from 2021-08-01.

### 3.1.3.2 PartyReport(reda.017)

#### 3.1.3.2.1 Overview and scope of the message

This chapter illustrates the PartyReport message.

The PartyReport is sent by CRDM to an authorised actor to provide the requested Party information.

This message is sent by CRDM in the following message usages:

- Party Reference Data Response;
- Party List Response;
- Restricted Party Response.

The section reporting information related to Restrictions only displays those which are active and have a present or future validity period. **{T2S CR0819}**

These message usages are described in the section "The message in business context".

The PartyReport is sent in response to the PartyQuery(reda.015) message.

#### 3.1.3.2.2 Schema

##### Outline of the schema

The PartyReport message is composed of the following message building blocks:

##### MessageHeader

It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header) and the identification of the original business query generating the report.

### **ReportOrError**

This building block is mandatory it contains either the information matching the search criteria of the related query or an error indication.

### **PartyReport**

This building block is optional. It provides requested information on party.

It includes the following elements:

- Identification;
- Opening and closing date;
- Party type;
- Technical address;
- Long and short names;
- Address;
- Restriction information.

### **OperationalError**

This building block is optional. It provides the reason why the requested information can not be given.

### **References/links**

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.017.001.01>

### **Business rules applicable to the schema**

Not applicable (outgoing message).

#### 3.1.3.2.3 The message in business context

##### *Usage Case: Party Reference Data Response*

This message usage provides the sender with requested information about party reference data.

##### *Specific message content*

A Party Reference Data Response contains the following set of information on queried party.

| MESSAGE ITEM   | UTILISATION                                |
|--|--|
| PartyIdentification<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyId                         | Identification of the party to be reported |
| OpeningDate<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/OpngDt                | Opening date for the party                 |
| ClosingDate<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/ClsgDt                | Closing date for the party                 |
| Type<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Tp/Cd                        | Party type                                 |
| TechnicalAddress<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/TechAdr/TechAdr  | Technical addresses for the party          |
| Identification<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/PtyId/Id/Id/AnyBIC | Party code for the party                   |
| Name<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Nm                           | Long and short names for the party         |
| Address<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Adr                       | Address for the party                      |
| Restriction<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Rstrctn               | Restrictions issued on the party           |

The returned data in case of an error response is listed below:

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| Proprietary<br>Document/PtyRpt/RptOrErr/OpriErr/Err/Prtry | Specific error code  |
| Description<br>Document/PtyRpt/RptOrErr/OpriErr/Desc      | Textual description in addition to the reported error code |

**Usage case example:** *PartyReferenceDataResponse\_example.xml*

In this example, a CB with BIC “BITAITRRXXX” queried reference data of the payment bank with BIC “UNCRITMMXXX” under its responsibility.

Reference data of the party “UNCRITMMXXX” is returned.

*Usage Case: Party List Response*

This message usage provides the sender with the list of parties matching criteria.

*Specific message content*

A Party List Response contains the information to identify parties according to criteria used to query.

| MESSAGE ITEM   | UTILISATION                                |
|--|--|
| PartyIdentification<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyId | Identification of the party to be reported |
| Name<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Nm   | Long and short names for the party         |

**Usage case example:** *PartyListResponse\_example.xml*

In this example, a CB with BIC “BITAITRRXXX” queried a list of the parties it is responsible for.

One Party (“UNCRITMMXXX”) is returned in the response.

*Usage Case: Restricted Party Response*

This message usage provides the sender with requested information about restricted parties.

*Specific message content*

A Party List Response contains the information to identify parties according to criteria used to query.

| MESSAGE ITEM  | UTILISATION                                |
|---|--|
| PartyIdentification<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyId                | Identification of the party to be reported |
| Type<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Tp/Cd               | Party type                                 |
| Restriction<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Rstrctn      | Restrictions issued on the party           |
| Valid From<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Rstrctn/VldFr | Restricted on date                         |
| Type<br>Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Rstrctn/Tp          | Restriction type                           |

**Usage case example:** *RestrictedPartyResponse\_example.xml*

In this example, a CB with BIC “BITAITRRXXX” queried a list of the parties it is responsible for.

One Party (“UNCRITMMXXX”) is returned in the response.

### 3.1.3.3 CashAccountAuditTrailQuery (reda.039)

#### 3.1.3.3.1 Overview and scope of the message

This chapter illustrates the CashAccountAuditTrailQuery message.

The CashAccountAuditTrailQuery is sent by an actor authorised to query on audit trail for Cash Account reference data.

In response to the CashAccountAuditTrailQuery, a CashAccountAuditTrailReport(reda.040) containing the requested information is returned.

### 3.1.3.3.2 Schema

#### Outline of the schema

The CashAccountAuditTrailQuery message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory. It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

#### Search Criteria

This block is mandatory and it contains detailed information related to the business Cash Account audit trail query message. It includes the following elements:

- Cash Account identification;
- Date period.

#### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.039.001.01>

#### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES     |
|--|--------------------|
| CashAccountAuditTrailQuery<br>Document/CshAcctAudtTrlQry                               | DRRI001<br>DRRI002 |
| Cash Account Identification<br>Document/CshAcctAudtTrlQry/SchCrit/CshAcctId/Id/Othr/Id | IIMP073            |
| Date period<br>Document/CshAcctAudtTrlQry/SchCrit/DtPrd                                | IIMP073            |

### 3.1.3.3.3 The message in business context

#### Usage Case: Cash Account Audit Trail Query

In this usage case audit trail reference data for Cash Account is requested.



### Specific message requirements

| MESSAGE ITEM   | UTILISATION                    |
|--|--------------------------------|
| Cash Account Identification<br>Document/CshAcctAudtTrlQry/SchCrit/CshAcctId/Id/Othr/Id | Cash Account<br>Identification |
| Date period<br>Document/CshAcctAudtTrlQry/SchCrit/DtPrd                                | Date period                    |

#### Usage case example: *CashAccountAuditTrailQuery\_example.xml*

In this example a Central Bank queries audit trail information for Cash Account identified with “ACC001” and date period from 2018-01-01 to 2018-01-05.

### 3.1.3.4 CashAccountAuditTrailReport (reda.040)

#### 3.1.3.4.1 Overview and scope of the message

This chapter illustrates the CashAccountAuditTrailReport message.

The CashAccountAuditTrailReport is sent by CRDM to an authorised actor to provide the requested Cash Account audit trail information.

The CashAccountAuditTrailReport is sent in response to the CashAccountAuditTrailQuery(reda.039) message.

#### 3.1.3.4.2 Schema

##### Outline of the schema

The CashAccountAuditTrailReport message is composed of the following message building blocks:

##### MessageHeader

It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header) and the identification of the original business query generating the report.

##### ReportOrError

This building block is mandatory it contains either the information matching the search criteria of the related query or an error indication.

*CashAccountAuditTrailReport* This building block is optional. It provides requested information on Cash Account audit trail. It includes the following elements:

- Identification of the Cash Account;
- Name of the field changed;
- Value of the field before the change;

- Value of the field after the change;
- Timestamp of the change;
- Name of the user who instructed the change;
- Name of the user who approved the change in a four eyes scenario.

*BusinessError* This building block is optional. It provides the reason why the requested information can not be given

### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.040.001.01>

### Business rules applicable to the schema

Not applicable (outgoing message).

### 3.1.3.4.3 The message in business context

#### *Usage Case: Cash Account Audit Trail Report*

This message usage provides the sender with requested information about Cash Account audit trail reference data.

#### *Specific message content*

A Cash Account Audit Trail Report contains the following set of information on queried object.

| MESSAGE ITEM   | UTILISATION            |
|--|------------------------|
| Field Name<br>Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/FldNm          | Field Name             |
| Old Field Value<br>Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/OdFldVal  | Old Field Value        |
| New Field Value<br>Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/NewFldVal | New Field Value        |
| Timestamp<br>Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/OprTmStmp       | Timestamp              |
| Instructing User<br>Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/InstgUsr | Instructing User       |
| Approving User<br>Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/ApprovgUsr | Approving User         |
| Account Identification<br>Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctId/Id/Othr/Id           | Account Identification |

The returned data in case of an error response is listed below:

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Proprietary<br>Document/CshAcctAudtTrlRpt/RptOrErr/OprlErr/Err/Prtry | Specific error code  |
| Description<br>Document/CshAcctAudtTrlRpt/RptOrErr/OprlErr/          | Textual description in addition to the reported error code |

**Usage case example:** *CashAccountAuditTrailReport\_example.xml*

In this example a Central Bank participating with BIC "BITAITRRXXX" queried audit trail information for Cash Account identified with "ACC001" during the period from 2018-01-01 to 2018-01-05.

One occurrence is returned reporting a change for the Cash Account. Ceiling Notification Amount has been set to 1.000.000 instead of 500.000. Modification has been instructed by user "USERTWOEYES" on 2018-01-03 at 17:59.

### 3.1.3.5 PartyAuditTrailQuery (reda.042)

#### 3.1.3.5.1 Overview and scope of the message

This chapter illustrates the PartyAuditTrailQuery message.

The PartyAuditTrailQuery is sent by an actor authorised to query on audit trail for Party reference data. In response to the PartyAuditTrailQuery, a PartyAuditTrailReport(reda.043) containing the requested information is returned.

#### 3.1.3.5.2 Schema

##### Outline of the schema

The PartyAuditTrailQuery message is composed of the following message building blocks:

##### MessageHeader

This building block contains the message identification ("NONREF" value can be used, since it is already contained in the business application header).

##### Search Criteria

This block is mandatory and it contains detailed information related to the business Party audit trail query message. It includes the following elements:

- Party identification;
- Date period.

##### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.042.001.01>

### Business rules applicable to the schema

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| MESSAGE ITEM  | BUSINESS RULES     |
|---|--------------------|
| PartyAuditTrailQuery<br>Document/PtyAudtTrlQry                            | DRRI001<br>DRRI002 |
| Party Identification<br>Document/PtyAudtTrlQry/SchCrit/PtyId/Id/Id/AnyBIC | IIMP070            |
| Date period<br>Document/PtyAudtTrlQry/SchCrit/DtPrd                       | IIMP070            |

### 3.1.3.5.3 The message in business context

#### Usage Case: Party Audit Trail Query

In this usage case audit trail reference data for Party is requested.

#### Specific message requirements

| MESSAGE ITEM   | UTILISATION                         |
|--|-------------------------------------|
| Party Identification<br>Document/PtyAudtTrlQry/SchCrit/PtyId/Id/Id/AnyBIC                          | Party Identification                |
| Responsible Party identification<br>Document/PtyAudtTrlQry/SchCrit/PtyId/RspnsblPtyId/Id/Id/AnyBIC | Responsible Party<br>Identification |
| Date period<br>Document/CshAcctAudtTrlQry/SchCrit/DtPrd  | Date period                         |

#### Usage case example: PartyAuditTrailQuery\_example.xml

In this example a Central Bank with BIC "BITAITRRXXX" queries audit trail information for party with BIC "UNCRITMMXXX" for which it is responsible.

### 3.1.3.6 PartyAuditTrailReport (reda.043)

#### 3.1.3.6.1 Overview and scope of the message

This chapter illustrates the PartyAuditTrailReport message.

The PartyAuditTrailReport is sent by CRDM to an authorised actor to provide with requested Party audit trail information.

The PartyAuditTrailReportV01 reports changes applied to the following entities:

- Party;
- Party Name;
- Party Address;
- Party Code;
- Party Contact

The PartyAuditTrailReport is sent in response to the PartyAuditTrailQuery(reda.042) message.

### 3.1.3.6.2 Schema

#### Outline of the schema

The PartyAuditTrailReport message is composed of the following message building blocks:

#### MessageHeader

It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header) and the identification of the original business query generating the report.

#### ReportOrError

This building block is mandatory it contains either the information matching the search criteria of the related query or an error indication.

*PartyAuditTrailReport* This building block is optional. It provides requested information on Party Account audit trail. It includes the following elements:

- Identification of the Party;
- Name of the field changed;
- Value of the field before the change;
- Value of the field after the change;
- Timestamp of the change;
- Name of the user who instructed the change;
- Name of the user who approved the change in a four eyes scenario.

#### OperationalError

This building block is optional. It provides the reason why the requested information can not be given.

#### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.043.001.01>

### Business rules applicable to the schema

Not applicable (outgoing message).

#### 3.1.3.6.3 The message in business context

##### Usage Case: Party Audit Trail Report

This message usage provides the sender with requested information about Party audit trail reference data.

##### Specific message content

A Party Audit Trail Report contains the following set of information on queried object.

| MESSAGE ITEM   | UTILISATION           |
|--|-----------------------|
| Field Name<br>Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/Rcrd/Othr/FldNm            | Field Name            |
| Old Field Value<br>Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/Rcrd/Othr/OdFldVal    | Old Field Value       |
| New Field Value<br>Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/Rcrd/Othr/NewFldVal   | New Field Value       |
| Timestamp<br>Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/OprTmStmp                   | Timestamp             |
| Instructing User<br>Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/InstgUsr             | Instructing User      |
| Approving User<br>Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/ApprvgUsr              | Approving User        |
| Party Identification<br>Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyId/Id/Id/AnyBIC                       | Party Identification  |
| Responsible Party Identification<br>Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyId/RspnsblPtyId/Id/AnyBIC | Responsible Party BIC |

The returned data in case of an error response is listed below:

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Proprietary<br>Document/PtyAudtTrlRpt/RptOrErr/OprlErr/Err/Prtry | Specific error code  |
| Description<br>Document/PtyAudtTrlRpt/RptOrErr/OprlErr/Dsc       | Textual description in addition to the reported error code |

##### Usage case example: *PartyAuditTrailReport\_example.xml*

In this example a Central Bank participating with BIC "BITAITRRXXX" queried audit trail information for payment bank with BIC "UNCRITMMXXX".

One occurrence is returned reporting a change for the party. Postal Code has been changed from “54321” to “12345”. Modification has been instructed by user “USER1” and confirmed on 2018-01-03 at 17:59 by user “USER2”.

### 3.1.3.7 CalendarQuery(reda.064)

#### 3.1.3.7.1 Overview and scope of the message

This chapter illustrates the CalendarQuery message.

The CalendarQuery is sent by an actor authorised to query calendar data.

In response to the CalendarQuery, a CalendarReport(reda.065) containing the requested information is returned.

#### 3.1.3.7.2 Schema

##### Outline of the schema

The CalendarQuery message is composed of the following message building blocks:

##### MessageHeader

This building block is mandatory and It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

##### Search Criteria

This block is optional and it contains detailed information related to the calendar query message.

Allowed search criteria are:

- Year;
- Month;
- Service, for the specification of the service for which the query must be executed, with the currency details.

##### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.064.001.01>

##### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES |
|---------------|----------------|
| CalendarQuery | QMPC104        |

| MESSAGE ITEM   | BUSINESS RULES |
|--|----------------|
| Document/CalQry  |                |
| Search Criteria<br>Document/CalQry/SchCrit                         | QMPC111        |
| Year<br>Document/CalQry/SchCrit/Yr                                 | QMPC113        |
| Month<br>Document/CalQry/SchCrit/Mnth                              | QMPC113        |
| Service<br>Document/CalQry/SchCrit/Svc/SysId/MktInfrstrctrId/Prtry | QMPC112        |
| Currency<br>Document/CalQry/SchCrit/Svc/SysCcy                     | QMPC112        |

### 3.1.3.7.3 The message in business context

#### *Usage Case: Calendar Query*

In this usage case data about calendar is requested.

#### *Specific message requirements*

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Year<br>Document/CalQry/SchCrit/Yr                                 | Year   |
| Month<br>Document/CalQry/SchCrit/Mnth                              | Month  |
| Service<br>Document/CalQry/SchCrit/Svc/SysId/MktInfrstrctrId/Prtry | Service  |
| Currency<br>Document/CalQry/SchCrit/Svc/SysCcy                     | Currency of the Service for which the Calendar is requested. |

#### **Usage case example:** *Calendar Query\_example.xml*

In this example, the RTGS calendar for December 2018 for currency EUR is requested.

### 3.1.3.8 CalendarReport(reda.065)

#### 3.1.3.8.1 Overview and scope of the message

This chapter illustrates the CalendarReport message.

The CalendarReport is sent by CRDM to an authorised actor to provide the requested Calendar information.

The CalendarReport is sent in response to the CalendarQuery(reda.064) message.



### 3.1.3.8.2 Schema

#### **Outline of the schema**

The CalendarReport message is composed of the following message building blocks:

#### **MessageHeader**

It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header) and the identification of the original business query generating the report.

#### **ReportOrError**

This building block is mandatory it contains either the information matching the search criteria of the related query or an error indication.

#### **CalendarReport**

This building block is Mandatory. It provides requested information on calendar, with the service information.

The CalendarData includes the following elements:

- Date;
- Status.

#### **OperationalError**

This building block is optional. It provides the reason why the requested information can not be given.

#### **References/links**

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.065.001.01>

#### **Business rules applicable to the schema**

Not applicable (outgoing message).

### 3.1.3.8.3 The message in business context

#### *Usage Case: Calendar Report*

This message usage provides the sender with requested information about calendar data.

#### *Specific message content*

A Calendar Report contains the following set of information on queried calendar.

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| Date<br>Document/CalRpt/RptOrErr/CalRpt/CalOrErr/CalData/SysDt              | Date  |
| Status<br>Document/CalRpt/RptOrErr/CalRpt/CalOrErr/CalData/SysSts/Cd        | Status  |
| Service<br>Document/CalRpt/RptOrErr/CalRpt/Svc/SysId/MktInfrstrctrlId/Prtry | Service   |
| Currency<br>Document/CalRpt/RptOrErr/CalRpt/Svc/SysCcy                      | Currency of the Service for which the Calendar is returned. |

The returned data in case of an error response is listed below:

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| Proprietary<br>Document/CalRpt/RptOrErr/OprlErr/Err/Prtry | Specific error  |
| Description<br>Document/CalRpt/RptOrErr/OprlErr/Desc      | Textual description in addition to the reported error |

**Usage case example:** *CalendarReport\_example.xml*

In this example, the RTGS calendar for December 2018 for currency EUR is reported.

### 3.1.3.9 PartyCreationRequest(reda.014)

#### 3.1.3.9.1 Overview and scope of the message

This chapter illustrates the PartyCreationRequest message.

The PartyCreationRequest is sent by an authorised actor for instructing the creation of a party by providing details about the party to be created.

In the response, CRDM sends a PartyStatusAdvice (reda.016) when the creation of the party has been successfully processed, queued or has been rejected.

#### 3.1.3.9.2 Schema

##### Outline of the schema

The PartyCreationRequest message is composed of the following message building blocks:

##### MessageHeader

This building block is mandatory and it contains the message identification (“NONREF” value can be used, since it is already contained in the business application header).

##### Party

This building block is mandatory and it contains detailed information related to the party creation message. It includes the following elements:

- Identification;
- Address;
- Opening and closing dates;
- Type of the party;
- Technical address;
- Market specific attributes;
- Short and long names;
- Restriction information.

To apply an immediate restriction, the value “1000-01-01T00:01:00” shall be used as the Valid From value for the restriction.

To remove immediately a restriction, the value “9999-12-31T23:59:00” shall be used as the Valid To value for the restriction.

##### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.014.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES                           |
|--|--|
| PartyCreation RequestV01<br>Document/PtyCreReq           | DPC1001                                  |
| ValidFrom<br>Document/PtyCreReq/Pty/PtyId/Id/VldFr       | DPC1300                                  |
| Identification<br>Document/PtyCreReq/Pty/PtyId/Id/AnyBIC | DPC1013<br>DPC1180                       |
| Address<br>Document/PtyCreReq/Pty/Adr                    | DPC1305<br>IIMP132                       |
| Country<br>Document/PtyCreReq/Pty/Adr/Ctry               | DPC1021                                  |
| Valid From<br>Document/PtyCreReq/Pty/Adr/VldFr           | DPC1301                                  |
| OpeningDate<br>Document/PtyCreReq/Pty/OpngDt             | DPC1205                                  |
| ClosingDate<br>Document/PtyCreReq/Pty/ClsgDt             | DPC1206                                  |
| Type<br>Document/PtyCreReq/Pty/Tp/Cd                     | DPC1002<br>DPC1305<br>IIMP132            |
| Value<br>Document/PtyCreReq/Pty/MktSpfcAttr/Val          | DPC1252<br>DPC1254<br>DPC1256<br>DPC1257 |
| ValidFrom<br>Document/PtyCreReq/Pty/Nm/VldFr             | DPC1302                                  |
| ValidFrom<br>Document/PtyCreReq/Pty/Rstrctn/VldFr        | DPC1208<br>DPC1209<br>DPC1230<br>DPC1600 |
| ValidTo<br>Document/PtyCreReq/Pty/Rstrctn/VldTo          | DPC1207<br>DPC1209<br>DPC1230            |
| Type<br>Document/PtyCreReq/Pty/Rstrctn/Tp                | DPC1024<br>DPC1025<br>DPC1230            |

#### 3.1.3.9.3 The message in business context

##### Usage Case: Create Party

This usage case describes the creation of a party in CRDM.

##### Specific message requirements

| MESSAGE ITEM                                       | UTILISATION                  |
|--|------------------------------|
| ValidFrom<br>Document/PtyCreReq/Pty/PtyId/Id/VldFr | Identification Valid<br>From |

| MESSAGE ITEM  | UTILISATION            |
|---|------------------------|
| Identification<br>Document/PtyCreReq/Pty/PtyId/Id/Id/AnyBIC | Party BIC              |
| LEI<br>Document/PtyCreReq/Pty/PtyId/Id/LEI                  | LEI                    |
| Address<br>Document/PtyCreReq/Pty/Adr                       | Party Address          |
| Country<br>Document/PtyCreReq/Pty/Adr/Ctry                  | Country                |
| Valid From<br>Document/PtyCreReq/Pty/Adr/VldFr              | Address Valid From     |
| OpeningDate<br>Document/PtyCreReq/Pty/OpngDt                | Party Opening Date     |
| ClosingDate<br>Document/PtyCreReq/Pty/ClsgDt                | Party Closing Date     |
| Type<br>Document/PtyCreReq/Pty/Tp/Cd                        | Party Type             |
| ValidFrom<br>Document/PtyCreReq/Pty/Nm/VldFr                | Party Name Valid From  |
| Name<br>Document/PtyCreReq/Pty/Nm/Nm                        | Party name             |
| Short Name<br>Document/PtyCreReq/Pty/Nm/ShrtNm              | Party name             |
| ValidFrom<br>Document/PtyCreReq/Pty/Rstrctn/VldFr           | Restriction Valid From |
| ValidTo<br>Document/PtyCreReq/Pty/Rstrctn/VldTo             | Restriction Valid To   |
| Type<br>Document/PtyCreReq/Pty/Rstrctn/Tp                   | Restriction Type       |

**Usage case example:** *CreateParty\_example.xml*

In this example a Central Bank requests the creation of a payment bank. The party is valid starting from 2021-01-01 and identified with BIC "UNCRITMMXXX". Address and names are filled with sample data.

### 3.1.3.10 PartyStatusAdvice (reda.016)

#### 3.1.3.10.1 Overview and scope of the message

This chapter illustrates the PartyStatusAdvice message.

The PartyStatusAdvice (reda.016) is sent by CRDM to an authorised actor to inform about the status of a party maintenance request (creation, update and delete).

This message is sent by CRDM in the following message usages:

- Rejected;
- Queued;
- Completed.

These message usages are described in the section “The message in business context”.

### 3.1.3.10.2 Schema

#### Outline of the schema

The PartyStatusAdvice message is composed of the following message building blocks:

#### MessageHeader

It contains the message identification (“NONREF” value can be used, since it is already contained in the business application header). **and the identification of the original message** generating the status advice.

#### PartyStatus

This building block is mandatory. It contains detailed information related to the status of the original maintenance request. It includes the following elements:

- Status;
- Reason;
- Additional reason information;
- In case of a completed maintenance request, the party identification.

#### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.016.001.01>

#### Business rules applicable to the schema

Not applicable (outgoing message).

### 3.1.3.10.3 The message in business context

#### *Usage Case: Rejected*

This message usage describes a party status advice message sent by CRDM when a maintenance request has been rejected.

#### *Specific message content*

Field for Status is filled with rejection code “REJT”.

| MESSAGE ITEM | UTILISATION        |
|--------------|--------------------|
| Status       | Fixed value "REJT" |

| MESSAGE ITEM                                      | UTILISATION        |
|---|--------------------|
| Document/PtyStsAdvc/PtySts/Sts                    |                    |
| StatusReason<br>Document/PtyStsAdvc/PtySts/StsRsn | Details for reason |

**Usage case example:** *PartyStatusRejected\_example.xml*

In this example processing for a party creation request sent with reference "SAMPLEPARTYCRE" has been rejected. Thus the sender originating the maintenance request is notified with the status advice.

*Usage Case: Queued*

This message usage describes a party status advice message sent by CRDM when a maintenance request has been queued.

*Specific message content*

Field for Status is filled with rejection code "QUED".

| MESSAGE ITEM                                      | UTILISATION           |
|---|-----------------------|
| Status<br>Document/PtyStsAdvc/PtySts/Sts          | Fixed value<br>"QUED" |
| StatusReason<br>Document/PtyStsAdvc/PtySts/StsRsn | Details for reason    |

**Usage case example:** *PartyStatusQueued\_example.xml*

In this example processing for a party update request sent with reference "SAMPLEPARTYUPD" has been queued. Thus the sender originating the maintenance request is notified with the status advice.

*Usage Case: Completed*

This message usage describes a party status advice message sent by CRDM when a maintenance request has been successfully processed.

*Specific message content*

Field for Status is filled with rejection code "COMP".

| MESSAGE ITEM   | UTILISATION                                 |
|--|---|
| Status<br>Document/PtyStsAdvc/PtySts/Sts                         | Fixed value<br>"COMP"                       |
| SystemPartyIdentification<br>Document/PtyStsAdvc/PtySts/SysPtyId | Identification of the party involved in the |

| MESSAGE ITEM | UTILISATION         |
|--------------|---------------------|
|              | maintenance request |

**Usage case example:** *PartyStatusCompleted\_example.xml*

In this example processing for a party deletion maintenance request sent with reference "SAMPLEPARTYDEL" has been successfully processed. Thus the sender originating the request is notified with the status advice containing the identification of the deleted party with BIC "UNCRITMMXXX" belonging to CB with BIC "BITAITRRXXX".

### 3.1.3.11 PartyModificationRequest (reda.022)

#### 3.1.3.11.1 Overview and scope of the message

This chapter illustrates the PartyModificationRequest message.

The PartyModificationRequest (reda.022) is sent by an authorised actor for instructing the update of a party by providing details about the party to be updated.

With a PartyModificationRequest (reda.022), only one modification can be instructed.

In the response, CRDM sends a PartyStatusAdvice (reda.016) when the update of the party has been successfully processed, queued or has been rejected.

#### 3.1.3.11.2 Schema

##### Outline of the schema

The PartyModificationRequest message is composed of the following message building blocks:

##### MessageHeader

This building block is mandatory and It contains the message identification ("NONREF" value can be used, since it is already contained in the business application header).

##### SystemPartyIdentification

This building block is mandatory and it contains the identification of the party to be updated.

##### Modification

This building block is mandatory and contains detailed information related to the party modification message. It includes the following elements:



Opening and closing date, party code, address, technical address, market specific attributes, short and long names and restriction information.

Technical address can be added or deleted only.

### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.022.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES                           |
|---|--|
| PartyModificationRequest<br>Document/PtyModReq                | DPU1001<br>DXAA007                       |
| SystemPartyIdentification<br>Document/PtyModReq/SysPtyId      | DPU1003                                  |
| ScopeIndication<br>Document/PtyModReq/Mod/Scplndctn           | IIMP101                                  |
| OpeningDate<br>Document/PtyModReq/Mod/ReqdMod/SysPtyDt/OpngDt | DPU1206<br>IIMP106                       |
| ClosingDate<br>Document/PtyModReq/Mod/ReqdMod/SysPtyDt/ClsdDt | DPU1205<br>DPU1030<br>IIMP106<br>DPU1250 |
| PartyIdentification<br>Document/PtyModReq/Mod/ReqdMod/PtyId   | DPU1005<br>DPU1010<br>DPU1501            |
| ValidFrom<br>Document/PtyModReq/Mod/ReqdMod/PtyId/VldFr       | DPU1009<br>IIMP107                       |
| PartyBIC<br>Document/PtyModReq/Mod/ReqdMod/PtyId/Id/Id/AnyBIC | DPU1013<br>DPU1180<br>DPU1350<br>DPU1351 |
| PartyName<br>Document/PtyModReq/Mod/ReqdMod/PtyNm             | DPU1005<br>DPU1010<br>DPU1500            |
| ValidFrom<br>Document/PtyModReq/Mod/ReqdMod/PtyNm/VldFr       | DPU1009<br>IIMP108                       |
| TechnicalAddress<br>Document/PtyModReq/Mod/ReqdMod/TechAdr    | DPU1005<br>IIMP101<br>IIMP110<br>DPU1007 |
| PartyAddress<br>Document/PtyModReq/Mod/ReqdMod/PtyAdr         | DPU1005<br>DPU1010<br>DPU1305<br>DPU1500 |
| Country<br>Document/PtyModReq/Mod/ReqdMod/PtyAdr/Ctry         | DPU1021                                  |
| ValidFrom   | DPU1009                                  |

| MESSAGE ITEM   | BUSINESS RULES                                      |
|--|---|
| Document/PtyModReq/Mod/ReqdMod/PtyAdr/VldFr                                    | IIMP109   |
| SystemRestriction<br>DocumentDocumentDocument/PtyModReq/Mod/ReqdMod/SysRstrctn | DPU1025   |
| ValidFrom<br>Document/PtyModReq/Mod/ReqdMod/SysRstrctn/VldFr                   | IIMP104<br>DPU1208<br>DPU1209<br>DPU1300<br>DPU1600 |
| ValidTo<br>Document/PtyModReq/Mod/ReqdMod/SysRstrctn/VldTo                     | DPU1207<br>DPU1209<br>DPU1300<br>DPU1600            |
| Type<br>Document/PtyModReq/Mod/ReqdMod/SysRstrctn/Tp                           | DPU1024<br>DPU1233<br>DPU1300<br>IIMP104            |
| Name<br>Document/PtyModReq/Mod/ReqdMod/MktSpfcAttr/Nm                          | DPU1252<br>DPU1255<br>DPU1258<br>IIMP105            |
| Value<br>Document/PtyModReq/Mod/ReqdMod/MktSpfcAttr/Val                        | DPU1254<br>DPU1256<br>DPU1257                       |

### 3.1.3.11.3 The message in business context

#### *Usage Case: Update Party*

This usage case describes the update of a party in CRDM.

#### *Specific message requirements*

| MESSAGE ITEM  | UTILISATION                     |
|---|---------------------------------|
| SystemPartyIdentification<br>Document/PtyModReq/SysPtyId            | Party Identification            |
| ScopeIndication<br>Document/PtyModReq/Mod/ScpIndctn                 | Modification request type       |
| OpeningDate<br>Document/PtyModReq/Mod/ReqdMod/SysPtyDt/OpngDt       | Party Opening Date              |
| ClosingDate<br>Document/PtyModReq/Mod/ReqdMod/SysPtyDt/ClsngDt      | Party Closing Date              |
| ValidFrom<br>Document/PtyModReq/Mod/ReqdMod/PtyId/VldFr             | Party Identification Valid From |
| Identification<br>Document/PtyModReq/Mod/ReqdMod/PtyId/Id/Id/AnyBIC | Party Identification            |
| LEI<br>Document/PtyModReq/Mod/ReqdMod/PtyId/Id/LEI                  | LEI                             |

| MESSAGE ITEM   | UTILISATION                     |
|--|---------------------------------|
| ValidFrom<br>Document/PtyModReq/Mod/ReqdMod/PtyNm/VldFr      | Party Name Valid From           |
| TechnicalAddress<br>Document/PtyModReq/Mod/ReqdMod/TechAdr   | Technical Address               |
| PartyAddress<br>Document/PtyModReq/Mod/ReqdMod/PtyAdr        | Postal Address                  |
| Country<br>Document/PtyModReq/Mod/ReqdMod/PtyAdr/Ctry        | Country                         |
| ValidFrom<br>Document/PtyModReq/Mod/ReqdMod/PtyAdr/VldFr     | Party Address Valid From        |
| ValidFrom<br>Document/PtyModReq/Mod/ReqdMod/SysRstrctn/VldFr | Restriction Valid From          |
| ValidTo<br>Document/PtyModReq/Mod/ReqdMod/SysRstrctn/VldTo   | Restriction Valid To            |
| Type<br>Document/PtyModReq/Mod/ReqdMod/SysRstrctn/Tp         | Restriction Type                |
| Name<br>Document/PtyModReq/Mod/ReqdMod/MktSpcfcAttr/Nm       | Market Specific Attribute Name  |
| Value<br>Document/PtyModReq/Mod/ReqdMod/MktSpcfcAttr/Val     | Market Specific Attribute Value |

**Usage case example:** *UpdateParty\_example.xml*

In this example a CB with BIC "BITAITRRXXX" requests the update of payment bank with BIC "UNCRITMMXXX".

New address for the party is provided starting from 2021-02-01.

### 3.1.3.12 PartyDeletionRequest (reda.031)

#### 3.1.3.12.1 Overview and scope of the message

This chapter illustrates the PartyDeletionRequest message.

The PartyDeletionRequest (reda.031) is sent by an authorised actor for instructing the deletion of a party by providing details about the party to be deleted.

In the response, CRDM sends a PartyStatusAdvice (reda.016) when the deletion of the party has been successfully processed, queued or has been rejected.

#### 3.1.3.12.2 Schema

##### Outline of the schema

The PartyDeletionRequest message is composed of the following message building blocks:

##### MessageHeader

This building block is mandatory and it contains the message identification ("NONREF" value can be used, since it is already contained in the business application header).

## SystemPartyIdentification

This building block is mandatory and it contains the identification of the party to be deleted.

### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.031.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES                |
|--|-------------------------------|
| PartyDeletionRequest<br>Document/PtyDeltnReq   | DPD1001                       |
| RelatedPartyIdentification<br>Document/PtyDeltnReq/SysPtyId//Id/Id/AnyBIC              | DPD1003<br>DPD1030<br>DPD1300 |
| ResponsiblePartyIdentification<br>Document/PtyDeltnReq/SysPtyId/RspnsblPtyId/Id/AnyBIC | DPD1003<br>DPD1030<br>DPD1300 |

### 3.1.3.12.3 The message in business context

#### Usage Case: Delete Party

This usage case describes the deletion of a party in CRDM.

#### Specific message requirements

| MESSAGE ITEM   | UTILISATION           |
|--|-----------------------|
| RelatedPartyIdentification<br>Document/PtyDeltnReq/SysPtyId//Id/Id/AnyBIC              | Party BIC             |
| ResponsiblePartyIdentification<br>Document/PtyDeltnReq/SysPtyId/RspnsblPtyId/Id/AnyBIC | Responsible Party BIC |

#### Usage case example: DeleteParty\_example.xml

In this example a CB with BIC "BITAITRRXXX" requests the deletion of party "UNCRITMMXXX".

### 3.1.3.13 SecurityCreationRequest (reda.006)

#### 3.1.3.13.1 Overview and scope of the message

This chapter illustrates the SecurityCreationRequest message.

The SecurityCreationRequest is sent by CSDs or any party authorised by them to CRDM.

It is used for instructing the creation of a security by providing details about the security to be created. In the response, CRDM sends reda.008 when the creation of the security has been successfully processed, queued or has been rejected.

### 3.1.3.13.2 Schema

#### **Outline of the schema**

The SecurityCreationRequest message is composed of the following message building blocks:

#### **Identification**

This building block is mandatory and non repetitive. It must contain an identification assigned by CRDM to uniquely and unambiguously identify the message.

#### **Security**

This building block is mandatory and non repetitive. It contains detailed information related to the security creation message. It includes the following elements:

- Identification;
- Long and short names with related starting validity date;
- Denomination currency;
- Expiration/maturity date;
- CFI identifier;
- Restriction information.

To apply an immediate restriction, the value "1000-01-01T00:01:00" shall be used as the Valid From value for the restriction.

To remove immediately a restriction, the value "9999-12-31T23:59:00" shall be used as the Valid To value for the restriction.

#### **Issuance**

This building block is mandatory and non repetitive. It contains detailed information related to the issuance of the security. It includes the following elements:

- | Country of issuance;
- | Issue date;
- | Starting validity date for ISIN.

#### **Settlement Information**

This building block is mandatory and non repetitive. It contains detailed settlement information for the related security. It includes the following elements:

- | Security quantity type;
- | Minimum settlement unit;
- | Settlement unit multiple;
- | Deviating settlement unit.

## Supplementary Data

This building block is optional and non repetitive. It contains detailed information on market-specific attributes for the securities.

## References/Links

The schema, the additional schema required to fill the "Supplementary Data" block and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.006.001.01>

## Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES                |
|---|-------------------------------|
| SecurityCreationRequest<br>Document/SctyCreReq  | DSC1001                       |
| ISIN<br>Document/SctyCreReq/Scty/FinInstrmId /ISIN  | DSC1013<br>DSC1029            |
| Date<br>Document/SctyCreReq/Scty/FinInstrmAttrbts/NmVldFr/Dt  | DSC1027                       |
| DenominationCurrency<br>Document/SctyCreReq/Scty/FinInstrmAttrbts/DnmtnCcy                                  | DSC1022                       |
| ExpiryDate<br>Document/SctyCreReq/Scty/FinInstrmAttrbts/XpryDt  | DSC1025<br>DSC1028            |
| ClassificationFinancialInstrument<br>Document/SctyCreReq/Scty/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm | DSC1700                       |
| CountryOfIssue<br>Document/SctyCreReq/Scty/FinInstrmAttrbts/Issnc/CtryOfIsse                                | DSC1021                       |
| ISINValidFrom<br>Document/SctyCreReq/Scty/FinInstrmAttrbts/Issnc/ISINVldFr                                  | DSC1026                       |
| FromDateTime<br>Document/SctyCreReq/Scty/FinInstrmAttrbts/Rstrctn/FctvPrd/FrDtTm                            | DSC1040<br>DSC1301<br>DSC1600 |
| ToDateTime<br>Document/SctyCreReq/Scty/FinInstrmAttrbts/Rstrctn/FctvPrd/ToDtTm                              | DSC1040<br>DSC1301            |

| MESSAGE ITEM  | BUSINESS RULES |
|---|----------------|
| Identification  | DSC1024        |
| Document/SctyCreReq/Scty/FinInstrmAttrbts/Rstrctn/RstrctnTp/PrtryRstrctn/Id | DSC1301        |
| Code  | IIMP133        |
| /Document/SctyCreReq/Scty/FinInstrmAttrbts/SttlmInf/SctiesQtyTp/Cd          |                |
| Unit  | IIMP133        |
| /Document/SctyCreReq/Scty/FinInstrmAttrbts/SttlmInf/MinDnmtn/Unit           |                |
| FaceAmount  | DSC1800        |
| Document/SctyCreReq/Scty/FinInstrmAttrbts/SttlmInf/MinDnmtn/FaceAmt         | IIMP133        |
| FaceAmount  | DSC1300        |
| Document/SctyCreReq/Scty/FinInstrmAttrbts/SttlmInf/MinMltpQty/FaceAmt       | DSC1800        |
|   | IIMP133        |
| Unit  | DSC1300        |
| /Document/SctyCreReq/Scty/FinInstrmAttrbts/SttlmInf/MinMltpQty/Unit         | IIMP133        |
| Unit  | IIMP133        |
| /Document/SctyCreReq/Scty/FinInstrmAttrbts/SttlmInf/DevtgSttlmUnit/Unit     |                |
| DeviatingSettlementUnit   | DSC1032        |
| Document/SctyCreReq/Scty/FinInstrmAttrbts/SttlmInf/DevtgSttlmUnit           |                |
| FaceAmount  | DSC1800        |
| Document/SctyCreReq/Scty/FinInstrmAttrbts/SttlmInf/DevtgSttlmUnit/FaceAmt   | IIMP133        |
| Document/MktSpfcAttr/Val  | DSC1252        |
|   | DSC1254        |
|   | DSC1256        |
|   | DSC1257        |

### 3.1.3.13.3 The message in business context

**Usage case example:** *CreateSecurities\_example.xml*

In this example a CSD participating in CRDM requests the creation of a security in CRDM. ISIN for the security is “XXABCDEFGHJIJ” and security names are sample ones. Security is defined as an equity/share, it is issued in Italy in EUR currency and expires on 11-04-2016.

Settlement occurs in Units with a minimum settlement unit of 50 and multiple 5 or deviating settlement units 73 and 79.

### 3.1.3.14 SecurityMaintenanceRequest (reda.007)

#### 3.1.3.14.1 Overview and scope of the message

This chapter illustrates the SecurityMaintenanceRequest message.

The SecurityMaintenanceRequest is sent by CSDs or any party authorised by them to CRDM.

It is used for instructing the update of a security by providing details about the security to be updated.

With a SecurityMaintenanceRequest, only one modification can be instructed.

In the response, CRDM sends reda.029 when the update of the security has been successfully processed, queued or rejected.

#### 3.1.3.14.2 Schema

##### Outline of the schema

The SecurityMaintenanceRequest message is composed of the following message building blocks:

##### Identification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### Update Type

This building block is mandatory and non repetitive. It contains detailed information related to the security maintenance message. According to the type of modification requested, it includes one of the modification blocks.

##### Add

This building block is optional and non repetitive. It contains detailed information related to the attributes to be added to the security. It includes the following elements:

- Long and short names with related starting validity date;
- ISIN with related starting validity date;
- Restriction information;
- Deviating settlement unit;
- Market-specific attribute.

To apply an immediate restriction, the value "1000-01-01T00:01:00" shall be used as the Valid From value for the restriction.

##### Delete

This building block is optional and non repetitive. It contains detailed information related to the attributes to be deleted from the security. It includes the following elements:

- | Long and short names with related starting validity date;
- | ISIN with related starting validity date;



- | Restriction information;
- | Deviating settlement unit;
- | Market-specific attributes.

### Modify

This building block is optional and non repetitive. It contains detailed information related to the attributes to be updated for the security. It includes the following elements

- | Long and short names with related starting validity date;
- | Denomination currency;
- | Maturity or expiry date;
- | Issue date;
- | Restriction information;
- | Security quantity type;
- | Minimum denomination quantity;
- | Minimum multiple quantity;
- | Market-specific attributes
- | CFI
- | Country of Issuance.

To remove immediately a restriction, the value “9999-12-31T23:59:00” shall be used as the Valid To value for the restriction. To update a restriction, the Valid From timestamp (including seconds) of the intraday restriction to be updated must be specified in the reda.007.

### SecurityIdentification

This building block is mandatory and non repetitive. It contains the identification for the security to be modified.

### References/Links

The schema, the additional schema required to fill the “Supplementary Data” block and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.007.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM                  | BUSINESS RULES |
|-------------------------------|----------------|
| SecurityMaintenanceRequest    | DSU1001        |
| Document/SctyMntncReq         | DXAA002        |
| FinancialInstrumentAttributes | IIMP062        |

| MESSAGE ITEM  | BUSINESS RULES |
|---|----------------|
| Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts                    |                |
| ISOSecurityLongName   | DSU1006        |
| Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts/ISOsctyLngNm       | IIMP137        |
| ISOSecurityShortName  | DSU1006        |
| Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts/ISOsctyShrtNm      | IIMP137        |
| NameValidFrom   | DSU1006        |
| Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts/NmVldFr            | DSU1009        |
| Date  | IIMP137        |
| /Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts/NmVldFr/Dt        |                |
| FromDateTime  | DSU1007        |
| Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts/Rstrctn/FctvPrd/Fr | DSU1040        |
| DtTm  | DSU1600        |
| ToDateTime  | DSU1007        |
| Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts/Rstrctn/FctvPrd/T  | DSU1040        |
| oDtTm   |                |
| RestrictionType   | DSU1024        |
| Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts/Rstrctn/RstrctnTp  |                |
| Identification  | DSU1300        |
| Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts/Rstrctn/RstrctnTp/ |                |
| PrtryRstrctn/Id   |                |
| DeviatingSettlementUnit   | DSU1030        |
| Document/SctyMntncReq/UpdTp/UpdTp/Add/FinInstrmAttrbts/SttlmInf/DevtgSttl | DSU1700        |
| mUnit   |                |
| SupplementaryData   | DSU1252        |
| Document/SctyMntncReq/UpdTp/UpdTp/Add/SplntryData                         | DSU1254        |
|   | DSU1256        |
|   | DSU1257        |
|   | DSU1258        |
| FinancialInstrumentAttributes   | IIMP062        |
| Document/SctyMntncReq/UpdTp/UpdTp/Del/FinInstrmAttrbts                    |                |
| ISOSecurityLongName   | DSU1006        |

| MESSAGE ITEM   | BUSINESS RULES |
|--|----------------|
| Document/SctyMntncReq/UpdTp/UpdTp/Del/FinInstrmAttrbts/ISOSctyLngNm                      | IIMP137        |
| ISOSecurityShortName   | DSU1006        |
| Document/SctyMntncReq/UpdTp/UpdTp/Del/FinInstrmAttrbts/ISOSctyShrtNm                     | IIMP137        |
| NameValidFrom  | DSU1006        |
| Document/SctyMntncReq/UpdTp/UpdTp/Del/FinInstrmAttrbts/NmVldFr                           |                |
| Date   | DSU1007        |
| Document/SctyMntncReq/UpdTp/UpdTp/Del/FinInstrmAttrbts/NmVldFr/Dt                        | IIMP137        |
| FromDateTime   | DSU1042        |
| Document/SctyMntncReq/UpdTp/UpdTp/Del/FinInstrmAttrbts/Rstrctn/FctvPrd/FrDtTm            |                |
| Identification   | DSU1042        |
| Document/SctyMntncReq/UpdTp/UpdTp/Del/FinInstrmAttrbts/Rstrctn/RstrctnTp/PrtryRstrctn/Id |                |
| DeviatingSettlementUnit  | DSU1031        |
| Document/SctyMntncReq/UpdTp/UpdTp/Del/FinInstrmAttrbts/SttlmInf/DevvgSttlmUnit           | DSU1032        |
| SupplementaryData  | DSU1255        |
| Document/SctyMntncReq/UpdTp/UpdTp/Del/SplmtryData  |                |
| FinancialInstrumentAttributes  | IIMP062        |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts                                 |                |
| ISOSecurityLongName  | DSU1006        |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/ISOSctyLngNm                    | IIMP137        |
| ISOSecurityShortName   | DSU1006        |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/ISOSctyShrtNm                   | IIMP137        |
| NameValidFrom  | DSU1006        |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/NmVldFr                         |                |
| Date   | IIMP137        |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/NmVldFr/Dt                      |                |
| DenominationCurrency   | DSU1022        |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/DnmtnCcy                        | DSU1705        |

| MESSAGE ITEM   | BUSINESS RULES     |
|--|--------------------|
| ExpiryDate   | DSU1025            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/XpryDt                                | DSU1026            |
| FromDateTime   | DSU1040            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/Rstrctn/FctvPrd/<br>FrDtTm            | DSU1041            |
| ToDateTime   | DSU1040            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/Rstrctn/FctvPrd/<br>ToDtTm            | DSU1600            |
| Identification   | DSU1041            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/Rstrctn/Rstrctn<br>Tp/PrtryRstrctn/Id | DSU1300            |
| Code   | DSU1031            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/SttlmInf/SctiesQ<br>tyTp/Cd           | DSU1700<br>DSU1706 |
| MinimumDenomination  | DSU1030            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/SttlmInf/MinDn<br>mntn                | DSU1031<br>DSU1700 |
| FaceAmount   | DSU1800            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/SttlmInf/MinDn<br>mntn/FaceAmt        |                    |
| MinimumMultipleQuantity  | DSU1030            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/SttlmInf/MinMltp<br>lQty              | DSU1031            |
| FaceAmount   | DSU1301            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/SttlmInf/MinMltp<br>lQty/FaceAmt      | DSU1800            |
| Unit   | DSU1301            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/SttlmInf/MinMlt<br>plQty/Unit         | DSU1704            |
| SupplementaryData  | DSU1254            |
| Document/SctyMntncReq/UpdTp/UpdTp/Modfy/SplmtryData  |                    |
| ISIN   | DSU1003            |

| MESSAGE ITEM  | BUSINESS RULES               |
|---|------------------------------|
| Document/SctyMntncReq/FinInstrmId/ISIN  | DSU1005                      |
| ClassificationFinancialInstrument   | DSU1410                      |
| /Document/SctyMntncReq/UpdTp/UpdTp/Modify/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm | DSU1420{ <b>T2S CR0819</b> } |
| CountryOfIssue  | DSU1400                      |
| /Document/SctyMntncReq/UpdTp/UpdTp/Modify/FinInstrmAttrbts/Issnc/CtryOfIssue            |                              |
| IssueDate   | DSU1700                      |
| /Document/SctyMntncReq/UpdTp/UpdTp/Modify/FinInstrmAttrbts/Issnc/IssueDate              |                              |

### 3.1.3.14.3 The message in business context

**Usage case example:** *UpdateSecurity\_example.xml*

In this example a CSD requests the update of security with ISIN “XXABCDEFGHJIJ”. A new deviating settlement unit of 19 is added.

### 3.1.3.15 SecurityCreationStatusAdvice (reda.008)

#### 3.1.3.15.1 Overview and scope of the message

This chapter illustrates the SecurityCreationStatusAdvice message.

The SecurityCreationStatusAdvice is sent by CRDM to inform the CSD or any party authorised by them about the status of a security creation request.

This message is sent by CRDM in the following message usages:

- | Rejected;
- | Queued;
- | Completed.

These message usages are described in the section “The message in business context”.

#### 3.1.3.15.2 Schema

##### Outline of the schema

The SecurityCreationStatusAdvice message is composed of the following message building blocks:

##### Identification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

##### RequestMessageIdentification

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the status advice.

### SecurityIdentification

This building block is optional and non repetitive. It contains the identification of the security whether original request has been successfully processed.

### ProcessingStatus

This building block is mandatory and non repetitive. It contains detailed information related to the status of the original request. It includes the following elements:

- Status;
- Reason;
- Additional reason information.

### References/Links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.008.001.01>

### Business rules applicable to the schema

Not applicable (CRDM outgoing message)

#### 3.1.3.15.3 The message in business context

##### *Usage case: Rejected*

This message usage describes a security creation status advice message sent by CRDM when a creation request has been rejected.

##### *Specific message requirements*

Field for Status is filled with rejection code "REJT".

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Identification<br>Document/SctyCreStsAdv/PrctgSts/Prtry/PrtrySts/Id | Fixed value "REJT" |
| ProprietaryReason<br>Document/SctyCreStsAdv/PrctgSts/Prtry/PrtryRsn | Details for reason |

**Usage case example:** *SecurityCreationRejected\_example.xml*

In this example processing for a security creation request sent with reference “SAMPLET2SCRESEC” has been rejected. Thus the sender originating the request is notified with the status advice.

*Message usage: Queued*

This message usage describes a security creation status advice message sent by CRDM when a creation request has been queued.

*Specific message requirements*

Field for Status is filled with rejection code “QUED”.

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Identification<br>Document/SctyCreStsAdvC/PrcgSts/Prtry/PrtrySts/Id | Fixed value "QUED" |
| ProprietaryReason<br>Document/SctyCreStsAdvC/PrcgSts/Prtry/PrtryRsn | Details for reason |

**Usage case example:** *SecurityCreationQueued\_example.xml*

In this example processing for a security creation request sent with reference “SAMPLET2SCRESEC” has been queued. Thus the sender originating the request is notified with the status advice.

*Usage case: Completed*

This message usage describes a security creation status advice message sent by CRDM when a creation request has been successfully processed.

*Specific message requirements*

Field for Status is filled with rejection code “COMP”.

| MESSAGE ITEM  | UTILISATION         |
|---|---------------------|
| ISIN<br>Document/SctyCreStsAdvC/FinInstrmId/ISIN                    | Security identifier |
| Identification<br>Document/SctyCreStsAdvC/PrcgSts/Prtry/PrtrySts/Id | Fixed value "COMP"  |

**Usage case example:** *SecurityCreationCompleted\_example.xml*

In this example processing for a security creation request sent with reference “SAMPLET2SCRESEC” has been successfully processed. Thus the sender originating the request is notified with the status advice containing the identification of the created security.

### 3.1.3.16 SecurityActivityAdvice (reda.009)

#### 3.1.3.16.1 Overview and scope of the message

This chapter illustrates the SecurityActivityAdvice message.

The SecurityActivityAdvice is sent by CRDM to CSDs or any party authorised by them and is sent according to the related report configuration set up to provide with information on changes occurred for securities in the data scope of the report owner during the business day.

In case the size of the message to be sent exceeds the maximum size of 32 MB the message will be split into several messages.

The SecurityActivityAdvice reports changes applied to the following entities:

- | Securities;
- | Securities Name;
- | Securities Code;
- | Security Restriction;
- | Market Specific Attributes;
- | Deviating Settlement Unit.

The following table is an exhaustive description of the returned fields for each entity:

| ENTITY          | ATTRIBUTE                     | RETURNED FIELD NAME                |
|-----------------|-------------------------------|------------------------------------|
| Securities      | CFI                           | Security.CFI                       |
| Securities      | Issue Date                    | Security.IssueDate                 |
| Securities      | Final Maturity or Expiry Date | Security.FinalMaturityorExpiryDate |
| Securities      | Settlement Type               | Security.SettlementType            |
| Securities      | Minimum Settlement Unit       | Security.MinimumSettlementUnit     |
| Securities      | Settlement Unit Multiple      | Security.SettlementUnitMultiple    |
| Securities      | Country Code                  | Security.CountryCode               |
| Securities      | Currency Code                 | Security.CurrencyCode              |
| Securities Name | Valid From                    | SecurityName.ValidFrom             |
| Securities Name | Securities Short Name         | SecurityName.ShortName             |
| Securities Name | Securities Long Name          | SecurityName.LongName              |
| Securities Code | Valid From                    | SecurityCode.ValidFrom             |
| Securities Code | Code Type                     | SecurityCode.CodeType              |



| ENTITY                                   | ATTRIBUTE                      | RETURNED FIELD NAME                                  |
|--|--------------------------------|--|
| Securities Code                          | Securities Mnemonic            | SecurityCode.SecuritiesMnemonic                      |
| Security Restriction                     | Restriction Type               | [restriction type code]/[valid from]/RTP             |
| Security Restriction                     | Valid From Timestamp           | [restriction type code]/[valid from]/VFR             |
| Security Restriction                     | Valid To Timestamp             | [restriction type code]/[valid from]/VTO             |
| Market-Specific Security Attribute Value | Market-Specific Attribute Name | SecurityMSA.Name                                     |
| Market-Specific Security Attribute Value | Value                          | <actual value of the Market-Specific Attribute Name> |
| Deviating Settlement Unit                | Deviating Settlement Unit      | Security.DeviatingSettlementUnit                     |

### 3.1.3.16.2 Schema

#### Outline of the schema

The SecurityActivityAdvice message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

#### Pagination

This building block is mandatory and non-repetitive. It contains the page number of the message (within a statement) and continuation indicator to indicate that the statement is to continue or that the message is the last page of the statement.

#### Security Activity

This building block is mandatory and non repetitive. It contains the date to which the statement refers to and the changes occurred.

#### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.009.001.01>

#### Business rules applicable to the schema

Not applicable (CRDM outgoing message)

### 3.1.3.16.3 The message in business context

**Usage case example:** *SecurityStatement\_example.xml*

In this example a statement is sent to CSD for business date “2011-02-01”.

Security short name changed from “SAMPLE SEC” to “NEW SAMPLE SEC” for security with ISIN “ABCDEFGHIJKL”.

### 3.1.3.17 SecurityQuery (reda.010)

#### 3.1.3.17.1 Overview and scope of the message

This chapter illustrates the SecurityQuery message.

The SecurityQuery is sent by any directly connected CRDM Actor to CRDM to query on securities reference data.

This message is sent to CRDM to make the following type of queries:

- Securities Reference Data Query;
- ISIN List Query;
- Securities CSD Link Query;
- Securities Deviating Nominal Query.

These query types are described in the section “The message in business context”.

In response to the SecurityQuery a reda.012 containing the requested information is returned.

For Securities Reference Data requests (reda.010 “SECR”) the query response (reda.012) could contain an exceptional amount of data. On request to the Service Desk a special procedure can be applied to allow the delivery of the query response (reda.012) for which pagination is applied in any case without any size check.

#### 3.1.3.17.2 Schema

##### **Outline of the schema**

The SecurityQuery message is composed of the following message building blocks:

##### **Identification**

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### **RequestType**

This building block is mandatory and non repetitive. It must contain type of query requested.

##### **SearchCriteria**

This building block is mandatory and non repetitive. It contains detailed information related to the business security query message. It includes the following elements:

- Identification;
- CFI;
- Maturity or expiration date;
- Issue date;

- Issue currency;
- Country of issuance;
- Maintainer CSD;
- Investor CSD;
- Issuer CSD;
- Technical issuer CSD;
- Generic CSD of a security, both investor and issuer CSDs.

### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/Reda.010.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM                              | BUSINESS RULES |
|---|----------------|
| SecurityQuery                             | IOCP001        |
| Document/SctyQry                          |                |
| Identification                            | IIMP042        |
| Document/SctyQry/ReqTp/Id                 | IIMP046        |
|   | IIMP043        |
|   | IIMP047        |
|   | IIMP044        |
|   | IIMP045        |
|   | IIMP048        |
|   | IIMP049        |
| ISIN                                      | IIMP042        |
| Document/SctyQry/SchCrit/FinInstrmId/ISIN | IIMP046        |
|   | IIMP043        |
|   | IIMP047        |
|   | IIMP044        |
|   | IIMP045        |
|   | IIMP048        |
|   | IIMP049        |

| MESSAGE ITEM                               | BUSINESS RULES |
|--|----------------|
| ClassificationFinancialInstrument          | IIMP042        |
| Document/SctyQry/SchCrit/ClssfctnFinInstrm | IIMP046        |
|  | IIMP043        |
|  | IIMP047        |
| MaturityDate                               | IIMP042        |
| Document/SctyQry/SchCrit/MtrtyDt           | IIMP046        |
|  | IIMP043        |
|  | IIMP047        |
| IssueDate                                  | IIMP042        |
| Document/SctyQry/SchCrit/IsseDt            | IIMP046        |
| IssueCurrency                              | IIMP042        |
| Document/SctyQry/SchCrit/IsseCcy           | IIMP046        |
|  | IIMP043        |
|  | IIMP047        |
| CountryOfIssue                             | IIMP042        |
| Document/SctyQry/SchCrit/CtryOfIsse        | IIMP046        |
|  | IIMP043        |
|  | IIMP047        |
| InvestorCSD                                | IIMP044        |
| Document/SctyQry/SchCrit/InvstrCSD         | IIMP048        |
| IssuerCSD                                  | IIMP044        |
| Document/SctyQry/SchCrit/IssrCSD           | IIMP048        |
| TechnicalIssuerCSD                         | IIMP044        |
| Document/SctyQry/SchCrit/TechIssrCSD       | IIMP048        |
| CSD  | IIMP044        |
| Document/SctyQry/SchCrit/CSD               | IIMP048        |

### 3.1.3.17.3 The message in business context

*Usage Case: Securities Reference Data Query*

This message requests reference data about securities.

### Specific message requirements

To query CRDM for securities reference data, the field RequestType must be filled with "SECR" and at least one of the search criteria below must be provided.

| MESSAGE ITEM  | UTILISATION             |
|---|-------------------------|
| Identification<br>Document/SctyQry/ReqTp/Id                                     | Fixed value "SECR"      |
| ISIN<br>Document/SctyQry/SchCrit/FinInstrmId/ISIN                               | Security identifier     |
| ClassificationFinancialInstrument<br>Document/SctyQry/SchCrit/ClssfctnFinInstrm | CFI                     |
| MaturityDate<br>Document/SctyQry/SchCrit/MtrtyDt                                | Maturity or expiry date |
| IssueDate<br>Document/SctyQry/SchCrit/IsseDt                                    | Issue date              |
| IssueCurrency<br>Document/SctyQry/SchCrit/IsseCcy                               | Issue currency          |
| CountryOfIssue<br>Document/SctyQry/SchCrit/CtryOfIsse                           | Country of issuance     |
| MaintainingCSD<br>Document/SctyQry/SchCrit/MntCSD                               | Maintaining CSD         |

### Usage case example: *SecuritiesReferenceDataQuery\_example.xml*

In this example a CSD queries all of the securities issued after "2008-01-01".

### Usage Case: *ISIN List Query*

This message requests a list of ISINs.

### Specific message requirements

To query CRDM for ISIN list, the field RequestType must be filled with "ISIN" and at least one of the search criteria below must be provided.

| MESSAGE ITEM  | UTILISATION             |
|---|-------------------------|
| Identification<br>Document/SctyQry/ReqTp/Id                                     | Fixed value "ISIN"      |
| ISIN<br>Document/SctyQry/SchCrit/FinInstrmId/ISIN                               | Security identifier     |
| ClassificationFinancialInstrument<br>Document/SctyQry/SchCrit/ClssfctnFinInstrm | CFI                     |
| MaturityDate<br>Document/SctyQry/SchCrit/MtrtyDt                                | Maturity or expiry date |
| IssueCurrency<br>Document/SctyQry/SchCrit/IsseCcy                               | Issue currency          |
| CountryOfIssue<br>Document/SctyQry/SchCrit/CtryOfIsse                           | Country of issuance     |

**Usage case example:** *ISINListQuery\_example.xml*

In this example a CSD requests a list of securities issued in Italy.

*Usage Case: Securities CSD Link Query*

This message requests the securities CSD links.

*Specific message requirements*

To query CRDM for securities CSD links, the field RequestType must be filled with "CSDL" and at least one of the search criteria below must be provided.

| MESSAGE ITEM                                      | UTILISATION             |
|---|-------------------------|
| Identification<br>Document/SctyQry/ReqTp/Id       | Fixed value "CSDL"      |
| ISIN<br>Document/SctyQry/SchCrit/FinInstrmId/ISIN | Security identification |
| InvestorCSD<br>Document/SctyQry/SchCrit/InvstrCSD | Investor CSD            |

| MESSAGE ITEM   | UTILISATION          |
|--|----------------------|
| IssuerCSD<br>Document/SctyQry/SchCrit/IssrCSD              | Issuer CSD           |
| TechnicalIssuerCSD<br>Document/SctyQry/SchCrit/TechIssrCSD | Technical issuer CSD |
| CSD<br>Document/SctyQry/SchCrit/CSD                        | CSD                  |

**Usage case example:** *SecuritiesCSDLinksQuery\_example.xml*

In this example a CSD requests the securities CSD links for a security identified with ISIN "XXABCDEFGHJIJ".

*Usage Case: Securities Deviating Nominal Query*

This message requests the securities deviating nominal for one given security.

*Specific message requirements*

To query CRDM for securities deviating nominal, the field RequestType must be filled with "DEVN" and security identifier must be provided.

| MESSAGE ITEM                                      | UTILISATION         |
|---|---------------------|
| Identification<br>Document/SctyQry/ReqTp/Id       | Fixed value "DEVN"  |
| ISIN<br>Document/SctyQry/SchCrit/FinInstrmId/ISIN | Security identifier |

**Usage case example:** *SecuritiesDeviatingNominalQuery\_example.xml*

In this example a CSD requests the securities deviating nominal for a security identified with ISIN "XXABCDEFGHJIJ".

### 3.1.3.18 SecurityReport (reda.012)

#### 3.1.3.18.1 Overview and scope of the message

This chapter illustrates the SecurityReport message.

The SecurityReport is sent by CRDM to all directly connected CRDM Actors and is sent to provide with requested securities information.

In case the size of the message to be sent exceeds the maximum size of 32 MB the message will be split into several messages. This message is sent by CRDM in the following message usages:

- | Securities Reference Data Response;
- | ISIN List Response;
- | Securities CSD Links Response;
- | Securities Deviating Nominal Response.

These message usages are described in the section “The message in business context”.

The section reporting information related to Restrictions only displays those which are active and have a present or future validity period. **{T2S CR0819}**

The SecurityReport is sent in response to a reda.010.001.01 message.

For Securities Reference Data requests (reda.010 “SECR”) the query response (reda.012) could contain an exceptional amount of data. On request to the CRDM Service Desk a special procedure can be applied to allow the delivery of the query response (reda.012) for which pagination is applied in any case without any size check.

### 3.1.3.18.2 Schema

#### **Outline of the schema**

The SecurityReport message is composed of the following message building blocks:

#### **Identification**

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

#### **RequestMessageIdentification**

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the report.

#### **Pagination**

This building block is mandatory and non-repetitive. It contains the page number of the message (within a query response) and continuation indicator to indicate that the query response is to continue or that the message is the last page of the statement.

#### **SecurityReportOrError**

This building block is mandatory and non repetitive. It contains either the information matching the search criteria of the related query or an error indication.

#### **Security**

This building block is mandatory and contains detailed information related to the reported security . It includes the following elements:

- Identification;
- Long and short names with related starting validity date;
- Denomination currency;



- Expiration/maturity date;
- CFI identifier and restriction information.

### **Issuance**

This building block is mandatory and non repetitive. It contains detailed information related to the issuance of the security. It includes the following elements:

- Country of issuance;
- Issue date;
- Starting validity date.

### **SettlementInformation**

This building block is mandatory and non repetitive. It contains detailed settlement information for the related security. It includes the following elements:

- Security quantity type;
- Minimum settlement unit;
- Settlement unit multiple;
- Deviating settlement unit.

### **SupplementaryData**

This building block is optional and non repetitive. It is present only if market-specific attributes have been set for the reported security. It contains detailed information on market-specific attributes for the security.

### **SecurityCSDLink**

This building block is optional and present only if CSD links have been configured for the security. It contains detailed information on CSD links for the securities.

### **BusinessError**

This building block is optional and non repetitive. It is present only if the query has not been performed. It provides the reason why the requested information cannot be given.

### **References/Links**

The schema, the additional schema required to fill the "Supplementary Data" block and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/reda.012.001.01>

### **Business rules applicable to the schema**

Not applicable (CRDM outgoing message)

### 3.1.3.18.3 The message in business context

#### Usage Case: Securities Reference Data Response

This message usage provides the sender with requested information about securities reference data.

#### Specific message requirements

A Securities Reference Data Response contains details on queried securities.

| MESSAGE ITEM   | UTILISATION                      |
|--|----------------------------------|
| ISIN<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmId/ISIN   | Security identifier              |
| ISOShortName<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/FinInstrmNm/ISOShrtnm                             | Short name                       |
| ISOLongName<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/FinInstrmNm/ISOLngNm                               | Long name                        |
| Date<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/FinInstrmNm/VldFr/Dt                                      | Starting validity date for names |
| DenominationCurrency<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/DnmtnCcy                                  | Issue currency                   |
| ExpiryDate<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/XpryDt  | Maturity or expiry date          |
| ClassificationFinancialInstrument<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm | CFI                              |
| CountryOfIssue<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/Issnc/CtryOfIssse                               | Country of issuance              |
| IssueDate<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/Issnc/Issedt   | Issue date                       |
| EffectivePeriod<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/Rstrctn/FctvPrd                                | Restriction validity period      |

| MESSAGE ITEM  | UTILISATION                         |
|---|-------------------------------------|
| <b>Identification</b><br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/Rstrctn/RstrctnTp/PrtryRstrctn/Id | Restriction type                    |
| <b>ISIN</b><br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/FinInstrmIdVldty/FinInstrmId/ISIN           | Security code identifier            |
| <b>ISINValidFrom</b><br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/FinInstrmIdVldty/ISINVldFr         | Starting validity date for ISIN     |
| <b>Code</b><br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SttlmInf/SctiesQtyTp/Cd                     | Settlement type                     |
| <b>MinimumDenomination</b><br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SttlmInf/MinDnmtn            | Minimum settlement unit             |
| <b>MinimumMultipleQuantity</b><br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SttlmInf/MinMltplQty     | Minimum multiple quantity           |
| <b>DeviatingSettlementUnit</b><br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SttlmInf/DevtgSttlmUnit  | Deviating settlement units          |
| <b>SupplementaryData</b><br>Document/SctyRpt/SplmtryData  | Provides market-specific attributes |

The returned business data in case of an error response is listed below:

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| <b>Proprietary</b><br>Document/SctyRpt/SctyRptOrErr/OprlErr/Err/Prtry | Specific error code as specified in the error code table            |
| <b>Description</b><br>Document/SctyRpt/SctyRptOrErr/OprlErr/Desc      | Textual description in addition to the reported specific error code |

**Usage case example:** *SecuritiesReferenceDataResponse\_example.xml*

In this example a CSD queried CRDM about securities issued in Italy. One security with ISIN “XXABCDEFGHIJ” is returned in the response.

*Usage Case: ISIN List Response*

This message usage provides the sender with a list of ISIN codes of the securities matching the query criteria.

*Specific message requirements*

An ISIN List Response contains ISINs and short names for the securities matching the query criteria.

| MESSAGE ITEM   | UTILISATION                     |
|--|---------------------------------|
| ISIN<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmId/ISIN                               | Security identifier             |
| ISOShortName<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/FinInstrmNm/ISOShrtnm | Short name                      |
| Date<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/FinInstrmNm/VldFr/Dt          | Validity starting date for name |

The returned business data in case of an error response is listed below:

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| Proprietary<br>Document/SctyRpt/SctyRptOrErr/OprlErr/Err/Prtry | Specific error code as specified in the error code table            |
| Description<br>Document/SctyRpt/SctyRptOrErr/OprlErr/Desc      | Textual description in addition to the reported specific error code |

**Usage case example:** *ISINListResponse\_example.xml*

In this example a CSD queried a list of the securities issued in Italy. One security with ISIN “XXABCDEFGHIJ” is returned in the response.

*Usage Case: Securities CSD Link Response*

This message usage provides the sender with requested information about securities CSD links.

*Specific message requirements*

A Securities CSD Link Response contains the information about securities CSD links.

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| ISIN<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmId/ISIN  | Security identifier  |
| ValidFrom<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/IdFr  | Starting validity date for<br>CSD Link                           |
| ValidTo<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/IdTo  | End validity date for<br>CSD Link                                |
| SecurityMaintenance<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/SctyMntnc                                 | Maintaining indicator  |
| BIC<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/IssrCSD/OrgId/AnyBIC                                      | Issuer CSD   |
| RelatedPartyIdentification<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/IssrCSD/CmbndId/RltdPtyId          | BIC of the issuer<br>External CSD                                |
| ResponsiblePartyIdentification<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/IssrCSD/CmbndId/RspnsblPtyId   | BIC of the responsible<br>party for the issuer<br>External CSD   |
| BIC<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/InvstrCSD/OrgId/AnyBIC                                    | Investor CSD   |
| RelatedPartyIdentification<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/InvstrCSD/CmbndId/RltdPtyId        | BIC of the investor<br>External CSD                              |
| ResponsiblePartyIdentification<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/InvstrCSD/CmbndId/RspnsblPtyId | BIC of the responsible<br>party for the investor<br>External CSD |

| MESSAGE ITEM  | UTILISATION  |
|---|--|
| BIC<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/TechIssrCSD/OrgId/AnyBIC                                    | Technical issuer CSD   |
| RelatedPartyIdentification<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/TechIssrCSD/CmbndId/RltdPtyId        | BIC of the technical issuer External CSD                           |
| ResponsiblePartyIdentification<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SctyCSDLk<br>/TechIssrCSD/CmbndId/RspnsblPtyId | BIC of the responsible party for the technical issuer External CSD |

The returned business data in case of an error response is listed below:

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| Proprietary<br>Document/SctyRpt/SctyRptOrErr/OprlErr/Err/Prtry | Specific error code as specified in the error code table            |
| Description<br>Document/SctyRpt/SctyRptOrErr/OprlErr/Desc      | Textual description in addition to the reported specific error code |

**Usage case example:** *SecuritiesCSDLinkResponse\_example.xml*

In this example a CSD queried for securities CSD links on security with ISIN “XXABCDEFGHIJ”. Two CSD links valid starting from “2010-01-01” are returned:  
Issuer CSD “CSDAXXYAAA” responsible for maintenance too;

- Investor CSD “CSDBXXYAAA”.

*Usage Case: Securities Deviating Nominal Response*

This message usage provides the sender with requested information about securities deviating nominal.

*Specific message requirements*

A Securities Deviating Nominal Response contains the information about configured settlement deviating nominals for the security.

| MESSAGE ITEM  | UTILISATION               |
|---|---------------------------|
| ISIN<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmId/ISIN  | Security identifier       |
| DeviatingSettlementUnit<br>Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/SttlmInf/DevtgSttlmUnit | Deviating settlement unit |

**Usage case example:** *SecuritiesDeviatingNominalResponse\_example.xml*

In this example a CSD queried for settlement deviating nominal configured for security with ISIN “XXABCDEFGHIJ”.

Two deviating nominal are returned with values of 13 and 17 units.

### 3.1.3.19 SecurityDeletionRequest (reda.013)

#### 3.1.3.19.1 Overview and scope of the message

This chapter illustrates the SecurityDeletionRequest message.

The SecurityDeletionRequest is sent by CSDs or any party authorised by them to CRDM.

It is used for instructing the deletion of a security by providing details about the security to be deleted.

In the response, CRDM sends reda.030 when the deletion of the security has been successfully processed or queued, or has been rejected.

#### 3.1.3.19.2 Schema

##### Outline of the schema

The SecurityDeletionRequest message is composed of the following message building blocks:

##### Identification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### SecurityIdentification

This building block is mandatory and non repetitive. It contains the identification for the security to be deleted.

##### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.013.001.01>

## Business rules applicable to the schema

| MESSAGE ITEM                                   | BUSINESS RULES                |
|--|-------------------------------|
| SecurityDeletionRequest                        | DSD1001                       |
| Document/SctyDeltnReq                          | DSD1030<br>DSD1300<br>DXAA002 |
| ISIN<br>Document/SctyDeltnReq/FinInstrmId/ISIN | DSD1003                       |

### 3.1.3.19.3 The message in business context

**Usage case example:** *DeleteSecurities\_example.xml*

In this example a CSD participating in CRDM requests the deletion of a security with ISIN “XXABCDEGHIJ”.

### 3.1.3.20 SecuritiesAccountCreationRequest (reda.018)

#### 3.1.3.20.1 Overview and scope of the message

This chapter illustrates the SecuritiesAccountCreationRequest message.

The SecuritiesAccountCreationRequest is sent by CSDs or any party authorised by them to CRDM.

It is used for instructing the creation of a securities account by providing details about the securities account to be created.

In the response, CRDM sends reda.020 when the creation of the Securities Account has been successfully processed or has been rejected.

#### 3.1.3.20.2 Schema

##### Outline of the schema

The SecuritiesAccountCreationRequest message is composed of the following message building blocks:

##### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### SecuritiesAccount

This building block is mandatory and non repetitive. It contains detailed information related to the securities account creation message. It includes the following elements:

- Account owner identification;



- Securities account number;
- Type of the account;
- Opening and closing date;
- Hold indicator default value;
- Negative position indicator;
- Market specific attributes;
- Restriction information;
- End investor flag;
- Pricing scheme.

To apply an immediate restriction, the value “1000-01-01T00:01:00” shall be used as the Valid From value for the restriction.

To remove immediately a restriction, the value “9999-12-31T23:59:00” shall be used as the Valid To value for the restriction.

#### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.018.001.01>

#### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES                           |
|--|--|
| SecuritiesAccountCreationRequest<br>Document/SctiesAcctCreReq                                | DAC1001                                  |
| AccountOwner<br>Document/SctiesAcctCreReq/SctiesAcct/AcctOwnr                                | DAC1030<br>DAC1031<br>DAC1032<br>DAC1034 |
| ResponsiblePartyIdentification<br>Document/SctiesAcctCreReq/SctiesAcct/AcctOwnr/RspnsblPtyld | DAC1033                                  |
| Identification<br>Document/SctiesAcctCreReq/SctiesAcct/Id                                    | DAC1023                                  |
| Type<br>Document/SctiesAcctCreReq/SctiesAcct/Tp  | DAC1031<br>DAC1032<br>DAC1033<br>DAC1034 |

| MESSAGE ITEM   | BUSINESS RULES     |
|--|--------------------|
| OpeningDate  | DAC1205            |
| Document/SctiesAcctCreReq/SctiesAcct/OpngDt          | DAC1208            |
| ClosingDate  | DAC1207            |
| Document/SctiesAcctCreReq/SctiesAcct/ClsgDt          | DAC1208<br>DAC1209 |
| MarketSpecificAttribute                              | DAC1252            |
| Document/SctiesAcctCreReq/SctiesAcct/MktSpfcAttr     |                    |
| Value  | DAC1253            |
| Document/SctiesAcctCreReq/SctiesAcct/MktSpfcAttr/Val | DAC1255<br>DAC1256 |
| ValidFrom  | DAC1208            |
| Document/SctiesAcctCreReq/SctiesAcct/Rstrctn/VldFr   | DAC1209<br>DAC1600 |
| ValidTo  | DAC1209            |
| Document/SctiesAcctCreReq/SctiesAcct/Rstrctn/VldTo   |                    |
| Type   | DAC1024            |
| Document/SctiesAcctCreReq/SctiesAcct/Rstrctn/Tp      | DAC1025            |

### 3.1.3.20.3 The message in business context

**Usage case example:** *CreateSecuritiesAccount\_example.xml*

In this example a CSD participating in CRDM and identified with BIC “CSDAXXYAAA” requests the creation of a securities account in CRDM.

The account is valid starting from 2011-01-01 and the account owner is a CSD Participant with BIC “CSDPXXYAAA”.

Account is created with a default Hold status and does not hold negative positions.

### 3.1.3.21 SecuritiesAccountQuery (reda.019)

#### 3.1.3.21.1 Overview and scope of the message

This chapter illustrates the SecuritiesAccountQuery message.

The SecuritiesAccountQuery is sent by CSDs, CSD participants or any party authorised by them to CRDM to query on securities account reference data.

This message is sent to CRDM to make the following type of queries:

- | Securities Account Reference Data Query;
- | Securities Account List Query.

These query types are described in the section “The message in business context”.

### 3.1.3.21.2 Schema

#### **Outline of the schema**

The SecuritiesAccountQuery message is composed of the following message building blocks:

#### **MessageHeader**

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message and the type of query requested.

#### **Pagination**

This building block is mandatory and non-repetitive. It contains the page number of the message (within a query response) and continuation indicator to indicate that the query response is to continue or that the message is the last page of the statement.

#### **SearchCriteria**

This building block is mandatory and non repetitive. It contains detailed information related to the securities account query message. It includes the following elements:

- Identification;
- Account servicer;
- Account owner;
- Party type;
- Opening and closing date;
- Account type;
- End investor flag;
- Pricing scheme.

#### **References/Links**

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.019.001.01>

#### **Business rules applicable to the schema**

| MESSAGE ITEM   | BUSINESS RULES                           |
|--|--|
| SecuritiesAccountQuery<br>Document/SctiesAcctQry                                       | IOCP001                                  |
| Identification<br>Document/SctiesAcctQry/MsgHdr/ReqTp/Prtry/Id                         | IIMP050<br>IIMP051<br>IIMP052<br>IIMP053 |
| AccountIdentification<br>Document/SctiesAcctQry/SchCrit/AcctId                         | IIMP050<br>IIMP052                       |
| AccountServicer<br>Document/SctiesAcctQry/SchCrit/AcctSvcr                             | IIMP050<br>IIMP051<br>IIMP052<br>IIMP053 |
| RelatedPartyIdentification<br>Document/SctiesAcctQry/SchCrit/AcctOwnr/RltdPtyId        | IIMP050<br>IIMP051<br>IIMP052<br>IIMP053 |
| ResponsiblePartyIdentification<br>Document/SctiesAcctQry/SchCrit/AcctOwnr/RspnsblPtyId | IIMP050<br>IIMP051<br>IIMP052<br>IIMP053 |
| PartyType<br>Document/SctiesAcctQry/SchCrit/PtyTp                                      | IIMP050<br>IIMP052                       |
| OpeningDate<br>Document/SctiesAcctQry/SchCrit/OpngDt                                   | IIMP050<br>IIMP052                       |
| ClosingDate<br>Document/SctiesAcctQry/SchCrit/ClsgDt                                   | IIMP050<br>IIMP052                       |

| MESSAGE ITEM                                | BUSINESS RULES |
|---|----------------|
| AccountType                                 | IIMP050        |
| Document/SctiesAcctQry/SchCrit/AcctTp       | IIMP052        |
| EndInvestorFlag                             | IIMP050        |
| Document/SctiesAcctQry/SchCrit/EndInvstrFlg | IIMP052        |
| PricingScheme                               | IIMP050        |
| Document/SctiesAcctQry/SchCrit/PricgSchme   | IIMP052        |

### 3.1.3.21.3 The message in business context

#### *Usage Case: Securities Account Reference Data Query*

This message requests reference data about securities accounts.

#### *Specific message requirements*

To query CRDM for securities account reference data, the field RequestType must be filled with "SARD" and at least one of the search criteria below must be provided.

| MESSAGE ITEM   | UTILISATION        |
|--|--------------------|
| Identification<br>Document/SctiesAcctQry/MsgHdr/ReqTp/Prtry/Id | Fixed value "SARD" |
| AccountIdentification<br>Document/SctiesAcctQry/SchCrit/AcctId | Account identifier |
| AccountServicer<br>Document/SctiesAcctQry/SchCrit/AcctSvcr     | Account servicer   |
| AccountOwner<br>Document/SctiesAcctQry/SchCrit/AcctOwnr        | Account owner      |
| PartyType<br>Document/SctiesAcctQry/SchCrit/PtyTp              | Party Type         |
| OpeningDate<br>Document/SctiesAcctQry/SchCrit/OpngDt           | Opening date       |
| ClosingDate<br>Document/SctiesAcctQry/SchCrit/ClsgDt           | Closing date       |

| MESSAGE ITEM   | UTILISATION       |
|--|-------------------|
| AccountType<br>Document/SctiesAcctQry/SchCrit/AcctTp           | Account type      |
| EndInvestorFlag<br>Document/SctiesAcctQry/SchCrit/EndInvstrFlg | End investor flag |
| PricingScheme<br>Document/SctiesAcctQry/SchCrit/PricgSchme     | Pricing scheme    |

**Usage case example:** *SecuritiesAccountReferenceDataQuery\_example.xml*

In this example a CSD participating in CRDM queries securities accounts for CSD Participants.

*Usage Case: Securities Account List Query*

This query type requests a list of securities accounts.

*Specific message requirements*

To query CRDM for securities account list, the field RequestType must be filled with "SALI" and at least one of the search criteria below must be provided.

| MESSAGE ITEM   | UTILISATION              |
|--|--------------------------|
| Identification<br>Document/SctiesAcctQry/MsgHdr/ReqTp/Prtry/Id                         | Fixed value "SALI"       |
| AccountServicer<br>Document/SctiesAcctQry/SchCrit/AcctSvcr                             | Account servicer         |
| RelatedPartyIdentification<br>Document/SctiesAcctQry/SchCrit/AcctOwnr/RltdPtyId        | Party BIC                |
| ResponsiblePartyIdentification<br>Document/SctiesAcctQry/SchCrit/AcctOwnr/RspnsblPtyId | Responsible party<br>BIC |

**Usage case example:** *SecuritiesAccountListQuery\_example.xml*

In this example, a CSD participating in CRDM with BIC "CSDAXXYAAA" requests a list of the securities account for its participants.

### 3.1.3.22 SecuritiesAccountStatusAdvice (reda.020)

#### 3.1.3.22.1 Overview and scope of the message

This chapter illustrates the SecuritiesAccountStatusAdvice message.

The SecuritiesAccountStatusAdvice is sent by CRDM to inform the CSD or any party authorised by them about the status of a securities account maintenance request (creation, update and delete).

This message is sent by CRDM in the following message usages:

- | Rejected;
- | Queued;
- | Completed.

These message usages are described in the section “The message in business context”.

#### 3.1.3.22.2 Schema

##### Outline of the schema

The SecuritiesAccountStatusAdvice message is composed of the following message building blocks:

##### MessageIdentification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

##### OriginalMessageIdentification

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the status advice.

##### SecuritiesAccountStatus

This building block is mandatory and non repetitive. It contains detailed information related to the status of the original request. It includes the following elements:

- Status;
- Reason;
- Additional reason information;
- In case of a completed request, the securities account identification.

##### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.020.001.01>

##### Business rules applicable to the schema

Not applicable (CRDM outgoing message).

### 3.1.3.22.3 The message in business context

#### *Usage Case: Rejected*

This message usage describes a securities account status advice message sent by CRDM when a maintenance request has been rejected.

#### *Specific message requirements*

Field for Status is filled with rejection code "REJT".

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Status<br>Document/SctiesAcctStsAdvc/SctiesAcctSts/Sts          | Fixed value "REJT" |
| StatusReason<br>Document/SctiesAcctStsAdvc/SctiesAcctSts/StsRsn | Details for reason |

#### **Usage case example:** *SecuritiesAccountUpdateRejected\_example.xml*

In this example processing for a securities account creation request sent with reference "SAMPLET2SCRESAC" has been rejected. Thus the sender originating the request is notified with the status advice.

#### *Usage Case: Queued*

This message usage describes a securities account status advice message sent by CRDM when a maintenance request has been queued.

#### *Specific message requirements*

Field for Status is filled with rejection code "QUED".

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Status<br>Document/SctiesAcctStsAdvc/SctiesAcctSts/Sts          | Fixed value "QUED" |
| StatusReason<br>Document/SctiesAcctStsAdvc/SctiesAcctSts/StsRsn | Details for reason |

#### **Usage case example:** *SecuritiesAccountUpdateQueued\_example.xml*

In this example processing for a securities account update request sent with reference "SAMPLET2SSACUPD" has been queued. Thus the sender originating the request is notified with the status advice.

#### *Usage Case: Completed*



This message usage describes a securities account status advice message sent by CRDM when a maintenance request has been successfully processed.

*Specific message requirements*

Field for Status is filled with rejection code "COMP".

| MESSAGE ITEM   | UTILISATION                       |
|--|-----------------------------------|
| Identification<br>Document/SctiesAcctStsAdvc/SctiesAcctSts/RltdSctiesAcct/Id | Securities account identification |
| Status<br>Document/SctiesAcctStsAdvc/SctiesAcctSts/Sts                       | Fixed value "COMP"                |

**Usage case example:** *SecuritiesAccountUpdateCompleted\_example.xml*

In this example processing for a securities account deletion request sent with reference "SAMPLESACDEL" has been successfully processed. Thus the sender originating the request is notified with the status advice containing the identification of the deleted securities account.

### 3.1.3.23 SecuritiesAccountReport (reda.021)

#### 3.1.3.23.1 Overview and scope of the message

This chapter illustrates the SecuritiesAccountReport message.

The SecuritiesAccountReport is sent by CRDM to all directly connected CRDM Actors and is sent to provide with requested securities account information.

In case the size of the message to be sent exceeds the maximum size of 32 MB the message will be split into several messages.

This message is sent by CRDM in the following message usages:

- | Securities Account Reference Data response;
- | Securities Account List response.

The section reporting information related to Restrictions only displays those which are active and have a present or future validity period. **{T2S CR0819}**

These message usages are described in the section "The message in business context".

The SecuritiesAccountReport is sent in response to the reda.019 message.

#### 3.1.3.23.2 Schema

##### Outline of the schema

The SecuritiesAccountReport message is composed of the following message building blocks:

##### MessageHeader

This building block is mandatory and non repetitive. It contains an identification assigned by the sending party to uniquely and unambiguously identify the message and the identification of the original business query generating the report.

### **ReportOrError**

This building block is mandatory and non repetitive. It contains either the information matching the search criteria of the related query or an error indication.

### **SecuritiesAccountReport**

This building block is optional and present whether records are found processing the originating query. It provides requested information on Securities Account.

It includes the following elements:

- Identification;
- Opening and closing date;
- Hold indicator default value;
- Negative position indicator;
- Account type;
- Account owner;
- Party type;
- Market specific attribute;
- Restriction;
- End investor flag;
- Pricing scheme.

### **OperationalError**

This building block is optional and present if a business error occurs when processing the originating query. It provides the reason why the requested information can not be given.

### **Pagination**

This building block is mandatory and non-repetitive. It contains the page number of the message (within a query response) and continuation indicator to indicate that the query response is to continue or that the message is the last page of the statement.

### **References/Links**

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/roda.021.001.01>

### **Business rules applicable to the schema**

Not applicable (CRDM outgoing message)

### 3.1.3.23.3 The message in business context

#### *Usage Case: Securities Account Reference Data Response*

This message usage provides the sender with requested information about securities account reference data.

#### *Specific message requirements*

A Securities Account Reference Data Response contains the following set of information for queried securities accounts.

| MESSAGE ITEM  | UTILISATION                   |
|---|-------------------------------|
| Identification<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctId/Id                                 | Securities account identifier |
| OpeningDate<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/OpngDt                  | Opening date                  |
| ClosingDate<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/ClsgDt                  | Closing date                  |
| HoldIndicator<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/HldInd                | Hold default indicator        |
| NegativePosition<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/NegPos             | Negative position indicator   |
| Type<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/Tp                             | Account type                  |
| AccountOwner<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/AcctOwnr               | Account owner                 |
| PartyType<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/PtyTp                     | Party type                    |
| MarketSpecificAttribute<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/MktSpfcAttr | Market specific attribute     |

| MESSAGE ITEM  | UTILISATION                    |
|---|--------------------------------|
| Restriction<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/Rstrctn           | Securities account restriction |
| EndInvestorFlag<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/EndInvstr Flg | End investor flag              |
| PricingScheme<br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/PricgSchme      | Pricing scheme                 |

The returned business data in case of an error response is listed below:

| MESSAGE ITEM   | UTILISATION   |
|--|---|
| Proprietary<br>Document/SctiesAcctRpt/RptOrErr/OpriErr/Err/Prtry | Specific error code as specified in the error code table            |
| Description<br>Document/SctiesAcctRpt/RptOrErr/OpriErr/Desc      | Textual description in addition to the reported specific error code |

**Usage case example:** *SecuritiesAccountReferenceDataResponse\_example.xml*

In this example a CSD participating in CRDM and with BIC“CSDAXXYAAA” queried CRDM about securities accounts owned by CSD Participants.

One securities account identified with “12345” and owned by CSD Participant with BIC “CSDPAAXYYY” is returned in the response.

*Usage Case: Securities Account List Response*

This message usage provides the sender with requested information about securities account list.

*Specific message requirements*

A Securities Account List Response contains the information to identify securities accounts according to criteria used to query.

| MESSAGE ITEM  | UTILISATION                   |
|---|-------------------------------|
| <b>Identification</b><br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctId/Id                          | Securities account identifier |
| <b>AccountOwner</b><br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/AcctOwnr        | Account owner                 |
| <b>EndInvestorFlag</b><br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/EndInvstrFlg | End investor flag             |
| <b>PricingScheme</b><br>Document/SctiesAcctRpt/RptOrErr/SctiesAcctRpt/SctiesAcctOrErr/SctiesAcct/PricgScheme    | Pricing scheme                |

The returned business data in case of an error response is listed below:

| MESSAGE ITEM  | UTILISATION   |
|---|---|
| <b>Proprietary</b><br>Document/SctiesAcctRpt/RptOrErr/OprlErr/Err/Prtry | Specific error code as specified in the error code table            |
| <b>Description</b><br>Document/SctiesAcctRpt/RptOrErr/OprlErr/Desc      | Textual description in addition to the reported specific error code |

**Usage case example:** *SecuritiesAccountListResponse\_example.xml*

In this example a CSD participating in CRDM and with BIC “CSDAXXYAAA” queried CRDM about securities accounts list owned by CSD Participants.

One securities account identified with “12345” and owned by CSD Participant with BIC “CSDPAAXYYY” is returned in the response.

### 3.1.3.24 SecuritiesAccountModificationRequest (reda.023)

#### 3.1.3.24.1 Overview and scope of the message

This chapter illustrates the SecuritiesAccountModificationRequest message.

The SecuritiesAccountModificationRequest is sent by CSDs or any party authorised by them to CRDM.

It is used for instructing the update of a securities account by providing details about the securities account to be updated.

In the response, CRDM sends reda.020 when the update of the securities account has been successfully processed or queued, or has been rejected.

### 3.1.3.24.2 Schema

#### Outline of the schema

The SecuritiesAccountModificationRequest message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

#### AccountIdentification

This building block is mandatory and non repetitive. It contains the identification for the securities account to be modified.

#### Modification

This building block is mandatory and contains detailed information related to the securities account modification message. It includes the following elements:

- Closing date;
- Hold default indicator;
- Negative position indicator;
- Restriction information;
- Market specific attributes;
- End investor flag;
- Pricing scheme

To apply an immediate restriction, the value "1000-01-01T00:01:00" shall be used as the Valid From value for the restriction.

To remove immediately a restriction, the value "9999-12-31T23:59:00" shall be used as the Valid To value for the restriction. To update a restriction, the Valid From timestamp (including seconds) of the intraday restriction to be updated must be specified in the reda.023.

Closing date, hold default indicator, negative position indicator, end investor flag and pricing scheme can only be updated.

#### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.023.001.01>

#### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES                                      |
|--|---|
| ScopelIndication<br>/Document/SctiesAcctModReq/Mod/ScpIndctn                   | IIMP136   |
| SecuritiesAccountModificationRequestV01<br>Document/SctiesAcctModReq           | DAU1001   |
| Identification<br>Document/SctiesAcctModReq/AcctId/Id                          | DAU1005   |
| ClosingDate<br>Document/SctiesAcctModReq/Mod/ReqdMod/SysSctiesAcct/ClsgDt      | DAU1030<br>DAU1205<br>IIMP103                       |
| HoldIndicator<br>Document/SctiesAcctModReq/Mod/ReqdMod/SysSctiesAcct/HldInd    | IIMP103   |
| NegativePosition<br>Document/SctiesAcctModReq/Mod/ReqdMod/SysSctiesAcct/NegPos | IIMP103   |
| ValidFrom<br>Document/SctiesAcctModReq/Mod/ReqdMod/SysRstrctn/VldFr            | DAU1208<br>IIMP104<br>DAU1600                       |
| ValidTo<br>Document/SctiesAcctModReq/Mod/ReqdMod/SysRstrctn/VldTo              | DAU1209<br>DAU1600<br>IIMP136                       |
| Type<br>Document/SctiesAcctModReq/Mod/ReqdMod/SysRstrctn/Tp                    | DAU1024<br>DAU1305<br>DAU1241<br>IIMP104<br>DAU1025 |
| Name<br>Document/SctiesAcctModReq/Mod/ReqdMod/MktSpfcAttr/Nm                   | DAU1258<br>IIMP105                                  |
| Value<br>Document/SctiesAcctModReq/Mod/ReqdMod/MktSpfcAttr/Val                 | DAU1252<br>DAU1253<br>DAU1255<br>DAU1256            |

### 3.1.3.24.3 The message in business context

**Usage case example:** *UpdateSecuritiesAccount\_example.xml*

In this example, a CSD participating in CRDM and with BIC “CSDAXXYAAA” requests the update of securities account with identifier “12345”.

New value for holding negative position in the account is set to “true”.

### 3.1.3.25 CollateralValueCreationRequest (reda.024)

#### 3.1.3.25.1 Overview and scope of the message

This chapter illustrates the CollateralValueCreationRequest message.

The CollateralValueCreationRequest is sent to CRDM by CBs, payment banks, external collateral management systems.

It is used for instructing the creation of a securities valuation by providing details about the securities valuation to be created.

In the response, CRDM sends reda.028 when the creation of the securities valuation has been successfully processed, queued or has been rejected.

#### 3.1.3.25.2 Schema

##### Outline of the schema

The CollateralValueCreationRequest message is composed of the following message building blocks:

##### MessageHeader

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### CollateralValue

This building block is mandatory and non repetitive. It contains detailed information related to the collateral value creation message. It includes the following elements: security identifier, valuation date and price for the security, own-use valuation price (in cases where a Close Link exists), related currency.

##### NCBorPaymentBank

This building block is mandatory and non repetitive. It contains the identification of the Central Bank or Payment Bank providing the collateral value.

##### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.024.001.01>

##### Business rules applicable to the schema



| MESSAGE ITEM   | BUSINESS RULES |
|--|----------------|
| CollateralValueCreationRequest                                   | DSC3001        |
| Document/CollValCreReq   |                |
| SecurityIdentification   | DSC3040        |
| Document/CollValCreReq/CollVal/SctyId                            | DSC3050        |
| ValuationDate  | DSC3205        |
| Document/CollValCreReq/CollVal/ValtnDt                           | DSC3050        |
| ValuationCurrency  | DSC3030        |
| Document/CollValCreReq/CollVal/ValtnCcy                          | DSC3050        |
| Amount   | DSC3020        |
| Document/CollValCreReq/CollVal/ValtnPric/Amt                     | DSC3800        |
| Coefficient  | DSC3020        |
| Document/CollValCreReq/CollVal/ValtnPric/Coeff                   |                |
| Valuation Close Link Price – Amount                              | DSC3020        |
| Document/CollValCreReq/CollVal/ValtnClsLkPric/Amt                | DSC3800        |
| Valuation Close Link Price – Coefficient                         | DSC3020        |
| /Document/CollValCreReq/CollVal/ValtnClsLkPric/Coeff             |                |
| NCBIdentification  | DSC3060        |
| Document/CollValCreReq/NCBOrPmtBk/NCBId/Id/AnyBIC                | DSC3050        |
| Identification   | DSC3060        |
| Document/CollValCreReq/NCBOrPmtBk/PmtBkId/Id/Id/AnyBIC           | DSC3050        |
| ResponsiblePartyIdentification                                   | DSC3060        |
| Document/CollValCreReq/NCBOrPmtBk/PmtBkId/RspnsblPtyId/Id/AnyBIC | DSC3050        |

### 3.1.3.25.3 The message in business context

**Usage case example:** *CollateralValueCreation\_example.xml*

In this example Central Bank with BIC “NCBAXXYAAAA” requests the creation of a securities valuation in CRDM.

Valuation is provided for security with ISIN “XXABCDEFGHIJ” and price is 14.65 EUR. It is valid for date “2011-01-01”.

### 3.1.3.26 EligibleSecuritiesCreationRequest (reda.025)

#### 3.1.3.26.1 Overview and scope of the message

This chapter illustrates the EligibleSecuritiesCreationRequest message.

The EligibleSecuritiesCreationRequest is sent by CBs, payment banks or any party authorised by them to CRDM.

It is used for defining a security as eligible for auto-collateralisation or client-collateralisation by providing details about the security to be defined as eligible.

In the response, CRDM sends reda.028 when the definition of the securities as eligible has been successfully processed, queued or has been rejected.

#### 3.1.3.26.2 Schema

##### **Outline of the schema**

The message EligibleSecuritiesCreationRequest is composed of the following message building blocks:

##### **MessageIdentification**

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### **EligibleSecurity**

This building block is mandatory and non repetitive. It contains detailed information related to the eligible securities creation message. It includes the following elements:

- Security identifier;
- Collateralisation currency;
- Identification of the Central Bank or Payment Bank.

##### **References/Links**

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.025.001.01>

##### **Business rules applicable to the schema**

| MESSAGE ITEM                                    | BUSINESS RULES |
|---|----------------|
| SecurityIdentification                          | DSC5002        |
| Document/ElgblSctiesCreReq/ElgblScty/SctyId     | DSC5003        |
| CollateralisationCurrency                       | DSC5003        |
| Document/ElgblSctiesCreReq/ElgblScty/CollstnCcy | DSC5004        |
| PartyIdentification                             | DSC5005        |
| Document/ElgblSctiesCreReq/ElgblScty/PtyId      |                |

### 3.1.3.26.3 The message in business context

**Usage case example:** *CreateEligibleSecuritiesOk\_example.xml*

In this example Central Bank with BIC “NCBAXXYYAAA” requests the definition of a security as eligible in CRDM.

Eligibility is granted for security with ISIN “XXABCDEFGHIJ” and currency EUR.

### 3.1.3.27 EligibleCounterpartCSDCreationRequest (reda.026)

#### 3.1.3.27.1 Overview and scope of the message

This chapter illustrates the EligibleCounterpartCSDCreationRequest message.

The EligibleCounterpartCSDCreationRequest is sent by CSDs or any party authorised by them to CRDM.

It is used for defining a CSD as eligible counterpart CSD by providing details about the CSD to be defined as eligible counterpart CSD.

In the response, CRDM sends reda.044 when the definition of the CSD as eligible counterpart CSD has been successfully processed, queued or has been rejected.

#### 3.1.3.27.2 Schema

##### Outline of the schema

The message EligibleCounterpartCSDCreationRequest is composed of the following message building blocks:

##### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### EligibleCounterpartCSD

This building block is mandatory and non repetitive. It contains detailed information related to the eligible counterpart CSD creation message. It includes the following elements:

- Identification for parties providing information and towards whom eligibility must be established;
- Validity period;
- Eligibility type.

### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.026.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES     |
|---|--------------------|
| EligibleCounterpartCSDCreationRequest<br>Document/ElgblCntrptCSDCreReq                                  | DPC2001            |
| IssuerIdentification<br>Document/ElgblCntrptCSDCreReq/ElgblCntrptCSD/Issrld                             | DPC2070<br>DPC2200 |
| EligibleCounterpartIdentification<br>Document/ElgblCntrptCSDCreReq/ElgblCntrptCSD/ElgblCntrptld         | DPC2070<br>DPC2200 |
| ValidFrom<br>Document/ElgblCntrptCSDCreReq/ElgblCntrptCSD/VldFr   | DPC2120<br>DPC2200 |
| ValidTo<br>Document/ElgblCntrptCSDCreReq/ElgblCntrptCSD/VldTo   | DPC2121<br>DPC2200 |
| Country<br>Document/ElgblCntrptCSDCreReq/ElgblCntrptCSD/Elgbltyld/Ctry                                  | DPC2080<br>DPC2200 |
| FinancialInstrumentIdentification<br>Document/ElgblCntrptCSDCreReq/ElgblCntrptCSD/Elgbltyld/FinInstrmld | DPC2100<br>DPC2200 |
| IssuerCSDIdentification<br>Document/ElgblCntrptCSDCreReq/ElgblCntrptCSD/Elgbltyld/IssrCSDld             | DPC2071<br>DPC2200 |

#### 3.1.3.27.3 The message in business context

**Usage case example:** *CreateEligibleCounterpartCSD\_example.xml*

In this example CSD with BIC “CSDAXXYAAA” requests the creation of an eligible counterpart CSD relationship with CSD with BIC “CSDBXXYBBB”.

Eligibility is valid for all of the securities issued in Germany starting from “2011-01-01”.

### 3.1.3.28 CloseLinkCreationRequest (reda.027)

#### 3.1.3.28.1 Overview and scope of the message

This chapter illustrates the CloseLinkCreationRequest message.

The CloseLinkCreationRequest is sent by CBs, external collateral management systems or payment banks to CRDM.

It is used for instructing the creation of a close link by providing details about the close link to be created.

In the response, CRDM sends reda.028 when the creation of the close link has been successfully processed, queued or has been rejected.

#### 3.1.3.28.2 Schema

##### Outline of the schema

The message CloseLinkCreationRequest is composed of the following message building blocks:

##### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### CloseLink

This building block is mandatory and non repetitive. It contains detailed information related to the close link creation message. It includes the following elements:

- Identification for security;
- Party for which the close link shall be created;
- The Party providing credit.

##### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.027.001.01>

#### Business rules applicable to the schema

| MESSAGE ITEM                      | BUSINESS RULES |
|-----------------------------------|----------------|
| CloseLinkCreationRequest          | DSC2001        |
| Document/ClsLkCreReq              |                |
| SecurityIdentification            | DSC2030        |
| Document/ClsLkCreReq/ClsLk/SctyId | DSC2050        |

| MESSAGE ITEM   | BUSINESS RULES |
|--|----------------|
| PartyIdentification<br>Document/ClsLkCreReq/ClsLk/PtyId                  | DSC2040        |
| AnyBIC<br>Document/ClsLkCreReq/ClsLk/PtyId/OrgId/AnyBIC                  | DSC2050        |
| CombinedIdentification<br>/Document/ClsLkCreReq/ClsLk/CdtPrvdrId/CmbndId | DSC2020        |

### 3.1.3.28.3 The message in business context

**Usage case example:** *CreateCloseLink\_example.xml*

In this example a CB requests the creation of a close link for security with ISIN “XXABCDEFGHIJ” and party “PARXAABBXXX”.

### 3.1.3.29 CollateralDataStatusAdvice (reda.028)

#### 3.1.3.29.1 Overview and scope of the message

This chapter illustrates the CollateralDataStatusAdvice message.

The CollateralDataStatusAdvice is sent by CRDM to inform the sender of the originating request about the status of a collateral data maintenance request.

This message is sent by CRDM in the following message usages:

- | Rejected;
- | Queued;
- | Completed.

These message usages are described in the section “The message in business context”.

#### 3.1.3.29.2 Schema

##### Outline of the schema

The *CollateralDataStatusAdvice* message is composed of the following message building blocks:

##### MessageIdentification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

##### OriginalMessageIdentification

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the status advice.

## StatusReason

This building block is mandatory and non repetitive. It contains detailed information related to the status of the original request. It includes the following elements:

- Status;
- Reason;
- Additional reason information.

## References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.028.001.01>

## Business rules applicable to the schema

Not applicable (CRDM outgoing message)

### 3.1.3.29.3 The message in business context

#### *Usage Case: Rejected*

This message usage describes a collateral data status advice message sent by CRDM when a collateral data maintenance request has been rejected.

#### *Specific message requirements*

Field for Status is filled with rejection code "REJT".

| MESSAGE ITEM                                  | UTILISATION        |
|---|--------------------|
| Status<br>Document/CollDataStsAdvc/StsRsn/Sts | Fixed value "REJT" |
| Reason<br>Document/CollDataStsAdvc/StsRsn/Rsn | Details for reason |

#### **Usage case example:** *CollateralDataUpdateRejected\_example.xml*

In this example processing for a close link creation request sent with reference "SAMPLET2SCLOSELI" has been rejected. Thus the sender originating the request is notified with the status advice.

#### *Usage Case: Queued*

This message usage describes a collateral data status advice message sent by CRDM when a collateral data maintenance request has been queued.

#### *Specific message requirements*

Field for Status is filled with rejection code "QUED".

| MESSAGE ITEM                                  | UTILISATION        |
|---|--------------------|
| Status<br>Document/CollDataStsAdvc/StsRsn/Sts | Fixed value "QUED" |
| Reason<br>Document/CollDataStsAdvc/StsRsn/Rsn | Details for reason |

**Usage case example:** *CollateralDataUpdateQueued\_example.xml*

In this example processing for an eligible securities creation request sent with reference "SAMPLET2SELIGSEC" has been queued. Thus the sender originating the request is notified with the status advice.

*Usage Case: Completed*

This message usage describes a collateral data status advice message sent by CRDM when a collateral data maintenance request has been completed.

*Specific message requirements*

Field for Status is filled with rejection code "COMP".

| MESSAGE ITEM                                       | UTILISATION        |
|--|--------------------|
| Status<br>Document/CollDataStsAdvc/CollDataSts/Sts | Fixed value "COMP" |

**Usage case example:** *CollateralDataUpdateCompleted\_example.xml*

In this example processing for a collateral value creation request sent with reference "SAMPLET2SCOLLVAL" has been successfully processed. Thus the sender originating the request is notified with the status advice.

### 3.1.3.30 SecurityMaintenanceStatusAdvice (reda.029)

#### 3.1.3.30.1 Overview and scope of the message

This chapter illustrates the SecurityMaintenanceStatusAdvice message.

The SecurityMaintenanceStatusAdvice is sent by CRDM to inform the CSD or any party authorised by them about the status of a security maintenance request.

This message is sent by CRDM in the following message usages:

- | Rejected;
- | Queued;
- | Completed.



These message usages are described in the section “The message in business context”.

### 3.1.3.30.2 Schema

#### **Outline of the schema**

The SecurityMaintenanceStatusAdvice message is composed of the following message building blocks:

#### **Identification**

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

#### **RequestMessageIdentification**

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the status advice.

#### **SecurityIdentification**

This building block is optional and non repetitive. It contains the identification of the security whether original request has been successfully processed.

#### **ProcessingStatus**

This building block is mandatory and non repetitive. It contains detailed information related to the status of the original request. It includes the following elements:

- Status;
- Reason;
- Additional reason information.

#### **References/Links**

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.029.001.01>

#### **Business rules applicable to the schema**

Not applicable (CRDM outgoing message)

### 3.1.3.30.3 The message in business context

#### *Usage Case: Rejected*

This message usage describes a security maintenance status advice message sent by CRDM when a maintenance request has been rejected.

#### *Specific message requirements*

Field for Status is filled with rejection code “REJT”.

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Identification<br>Document/SctyMntncStsAdvC/PrcgSts/Prtry/PrtrySts/Id | Fixed value "REJT" |
| ProprietaryReason<br>Document/SctyMntncStsAdvC/PrcgSts/Prtry/PrtryRsn | Details for reason |

**Usage case example:** *SecurityUpdateRejected\_Example.xml*

In this example processing for a security maintenance request sent with reference "SAMPLET2SUPDSEC" has been rejected. Thus the sender originating the request is notified with the status advice.

*Usage Case: Queued*

This message usage describes a security maintenance status advice message sent by CRDM when a maintenance request has been queued.

*Specific message requirements*

Field for Status is filled with status code "QUED".

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Identification<br>Document/SctyMntncStsAdvC/PrcgSts/Prtry/PrtrySts/Id | Fixed value "QUED" |
| ProprietaryReason<br>Document/SctyMntncStsAdvC/PrcgSts/Prtry/PrtryRsn | Details for reason |

**Usage case example:** *SecurityUpdateQueued\_example.xml*

In this example processing for a security maintenance request sent with reference "SAMPLET2SUPDSEC" has been queued. Thus the sender originating the request is notified with the status advice.

*Usage Case: Completed*

This message usage describes a security maintenance status advice message sent by CRDM when a maintenance request has been successfully processed.

*Specific message requirements*

Field for Status is filled with status code "COMP".

| MESSAGE ITEM  | UTILISATION         |
|---|---------------------|
| ISIN<br>Document/SctyMntncStsAdvc/FinInstrmId/ISIN                    | Security identifier |
| Identification<br>Document/SctyMntncStsAdvc/PrcgSts/Prtry/PrtrySts/Id | Fixed value "COMP"  |

**Usage case example:** *SecurityUpdateCompleted\_example.xml*

In this example processing for a security maintenance request sent with reference "SAMPLET2SUPDSEC" has been successfully processed. Thus the sender originating the request is notified with the status advice containing the identification of the maintained security.

### 3.1.3.31 SecurityDeletionStatusAdvice (reda.030)

#### 3.1.3.31.1 Overview and scope of the message

This chapter illustrates the SecurityDeletionStatusAdvice message.

The SecurityDeletionStatusAdvice is sent by CRDM to inform the CSD or any party authorised by them about the status of a security deletion request.

This message is sent by CRDM in the following message usages:

- | Rejected;
- | Queued;
- | Completed.

These message usages are described in the section "The message in business context".

#### 3.1.3.31.2 Schema

##### Outline of the schema

The SecurityDeletionStatusAdvice message is composed of the following message building blocks:

##### Identification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

##### RequestMessageIdentification

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the status advice.

##### SecurityIdentification

This building block is optional and non repetitive. It contains the identification of the security whether original request has been successfully processed.

## ProcessingStatus

This building block is mandatory and non repetitive. It contains detailed information related to the status of the original request. It includes the following elements:

- Status;
- Reason;
- Additional reason information.

## References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.030.001.01>

## Business rules applicable to the schema

Not applicable (CRDM outgoing message)

### 3.1.3.31.3 The message in business context

#### *Usage Case: Rejected*

This message usage describes a security deletion status advice message sent by CRDM when a deletion request has been rejected.

#### *Specific message requirements*

Field for Status is filled with rejection code "REJT".

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Identification<br>Document/SctyDeltnStsAdvC/PrcgSts/Prtry/PrtrySts/Id | Fixed value "REJT" |
| ProprietaryReason<br>Document/SctyDeltnStsAdvC/PrcgSts/Prtry/PrtryRsn | Details for reason |

#### **Usage case example:** *SecurityDeletionRejected\_example.xml*

In this example processing for a security deletion request sent with reference "SAMPLET2SDELSEC" has been rejected. Thus the sender originating the request is notified with the status advice.

#### *Usage Case: Queued*

This message usage describes a security deletion status advice message sent by CRDM when a deletion request has been queued.

#### *Specific message requirements*

Field for Status is filled with rejection code "QUED".

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Identification<br>Document/SctyDeltnStsAdvC/PrCgSts/Prtry/PrtrySts/Id | Fixed value "QUED" |
| ProprietaryReason<br>Document/SctyDeltnStsAdvC/PrCgSts/Prtry/PrtryRsn | Details for reason |

**Usage case example:** *SecurityDeletionQueued\_example.xml*

In this example processing for a security deletion request sent with reference "SAMPLET2SDELSEC" has been queued. Thus the sender originating the request is notified with the status advice.

*Usage Case: Completed*

This message usage describes a security deletion status advice message sent by CRDM when a deletion request has been successfully processed.

*Specific message requirements*

Field for Status is filled with rejection code "COMP".

| MESSAGE ITEM  | UTILISATION         |
|---|---------------------|
| ISIN<br>Document/SctyDeltnStsAdvC/FinInstrmId/ISIN                    | Security identifier |
| Identification<br>Document/SctyDeltnStsAdvC/PrCgSts/Prtry/PrtrySts/Id | Fixed value "COMP"  |

**Usage case example:** *SecurityDeletionCompleted\_example.xml*

In this example processing for a security deletion request sent with reference "SAMPLET2SUPDSEC" has been successfully processed. Thus the sender originating the request is notified with the status advice containing the identification of the maintained security.

### 3.1.3.32 SecuritiesAccountDeletionRequest (reda.032)

#### 3.1.3.32.1 Overview and scope of the message

This chapter illustrates the SecuritiesAccountDeletionRequest message.

The SecuritiesAccountDeletionRequest is sent by CSDs or any party authorised by them to CRDM.

It is used for instructing the deletion of a securities account by providing details about the securities account to be deleted.

In the response, CRDM sends reda.020 when the deletion of the securities account has been successfully processed, queued or has been rejected.

### 3.1.3.32.2 Schema

#### Outline of the schema

The SecuritiesAccountDeletionRequest message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

#### AccountIdentification

This building block is mandatory and non repetitive. It must contain the identification for the securities account to be deleted.

#### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.032.001.01>

#### Business rules applicable to the schema

| MESSAGE ITEM                          | BUSINESS RULES |
|---------------------------------------|----------------|
| SecuritiesAccountDeletionRequestV01   | DAD1001        |
| Document/SctiesAcctDeltnReq           |                |
| Identification                        | DAD1020        |
| Document/SctiesAcctDeltnReq/AcctId/Id | DAD1021        |
|                                       | DAD1030        |
|                                       | DAD1300        |

### 3.1.3.32.3 The message in business context

#### Usage case example: *DeleteSecuritiesAccount\_example.xml*

In this example, a CSD participating in CRDM with BIC “CSDAXXYAAA” requests the deletion of securities account with identifier “12345”.

### 3.1.3.33 SecuritiesAuditTrailQuery (reda.033)

#### 3.1.3.33.1 Overview and scope of the message

This chapter illustrates the SecuritiesAuditTrailQuery message.

The SecuritiesAuditTrailQuery message is sent by CSDs, CBs, CSD participants, payment banks or any party authorised by them to CRDM. It is used to query on audit trail for securities reference data.

In response to the SecuritiesAuditTrailQuery, a reda.034 containing the requested information is returned.

### 3.1.3.33.2 Schema

#### Outline of the schema

The SecuritiesAuditTrailQuery message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

#### Search Criteria Definition

This building block is mandatory and non repetitive. It contains detailed information related to the business securities audit trail query message. It includes the following elements:

- Security identification;
- Date period.

#### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.033.001.01>

#### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES |
|--|----------------|
| ISIN<br>Document/SctiesAudtTrlQry/SchCrit/FinInstrmId/ISIN | IIMP071        |
| DatePeriod<br>Document/SctiesAudtTrlQry/SchCrit/DtPrd      | IIMP071        |

### 3.1.3.33.3 The message in business context

**Usage case example:** *SecuritiesAuditTrailQuery\_example.xml*

In this example CSD participating in CRDM with BIC “CSDAXXYAAA” queries audit trail information for security with ISIN “ABCDEFGHIJKL” and date period from 2011-01-01 to 2011-01-05.

### 3.1.3.34 SecuritiesAuditTrailReport (reda.034)

#### 3.1.3.34.1 Overview and scope of the message

This chapter illustrates the SecuritiesAuditTrailReport message.

The SecuritiesAuditTrailReport is sent by CRDM to CSDs, CSD participants or any party authorised by them and is sent to provide with requested securities audit trail information.

The SecuritiesAuditTrailReport reports changes applied to the following entities:

- Securities;
- Securities Name;
- Securities Code;
- Security Restriction;
- Market Specific Attributes;
- Deviating Settlement Unit.

The SecuritiesAuditTrailReport is sent in response to the reda.033 message.

### 3.1.3.34.2 Schema

#### Outline of the schema

The SecuritiesAuditTrailReport message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

#### OriginalMessageIdentification

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the report.

#### ReportOrError

This building block is mandatory and non repetitive. It contains either the information matching the search criteria of the related query or an error indication:

- | SecuritiesAuditTrailReport This building block is optional. It provides requested information on securities audit trail. It includes the following elements:
  - Identification of the security;
  - Name of the field changed;
  - Value of the field before the change;
  - Value of the field after the change;
  - Timestamp of the change;
  - Name of the user who instructed the change;
  - Name of the user who approved the change in a four eyes scenario.
- | Business Error This building block is optional. It provides the reason why the requested information can not be given.

#### References/Links



The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.034.001.01>

### Business rules applicable to the schema

Not applicable (CRDM outgoing message)

#### 3.1.3.34.3 The message in business context

**Usage case example:** *SecuritiesAuditTrailReport\_example.xml*

In this example a CSD participating in CRDM with BIC “CSDAXXYYAAA” queried audit trail information for security with ISIN “ABCDEFGHIJKL” during the period from 2011-01-01 to 2011-01-05.

One occurrence is returned reporting a change for the security. Final Maturity or Expiry Date has been changed from 2011-12-31 to 2012-12-31.

Modification has been instructed by user “USER1” and confirmed on 2011-01-03 at 17:59 by user “USER2”.

#### 3.1.3.35 SecuritiesAccountActivityAdvice (reda.035)

##### 3.1.3.35.1 Overview and scope of the message

This chapter illustrates the SecuritiesAccountActivityAdvice message.

The SecuritiesAccountActivityAdvice is sent by CRDM to CSDs, CSD Participants or any party authorised by them and is sent according to the related report configuration set up to provide with information on changes occurred for securities accounts in the data scope of the report owner during the business day.

In case the size of the message to be sent exceeds the maximum size of 32 MB the message will be split into several messages.

The SecuritiesAccountActivityAdvice reports changes applied to the following entities:

- | Securities Account;
- | Securites Account Restriction;
- | Market Specific Attribute.

The following table is an exhaustive description of the returned fields for each entity:

| ENTITY             | ATTRIBUTE               | RETURNED FIELD NAME    |
|--------------------|-------------------------|------------------------|
| Securities Account | Opening Date            | SAC.OpeningDate        |
| Securities Account | Closing Date            | SAC.ClosingDate        |
| Securities Account | Securities Account Type | SAC.Type               |
| Securities Account | Hold Release Default    | SAC.HoldReleaseDefault |

| ENTITY   | ATTRIBUTE                      | RETURNED FIELD NAME                                  |
|--|--------------------------------|--|
| Securities Account                                 | Negative Position              | SAC.NegativePosition                                 |
| Securities Account                                 | End Investor Flag              | SAC.EndInvestorFlag                                  |
| Securities Account                                 | Securities Account Number      | SAC.SecuritiesAccountNumber                          |
| Securities Account                                 | Pricing Scheme                 | SAC.PricingScheme                                    |
| Party Securities Account Relationship              | Valid From                     | PartySAC.ValidFrom                                   |
| Party Securities Account Relationship              | Valid To                       | PartySAC.ValidTo                                     |
| Party Securities Account Relationship              | Responsible Party              | PartySAC.ResponsibleParty                            |
| Party Securities Account Relationship              | Party                          | PartySAC.Party                                       |
| Securities Account Restriction                     | Restriction Type               | [restriction type code]/[valid from]/RTP             |
| Securities Account Restriction                     | Valid From Timestamp           | [restriction type code]/[valid from]/VFR             |
| Securities Account Restriction                     | Valid To Timestamp             | [restriction type code]/[valid from]/VTO             |
| Market-Specific Securities Account Attribute Value | Market-Specific Attribute Name | SecuritiesAccountMSA.Name                            |
| Market-Specific Securities Account Attribute Value | Value                          | <actual value of the Market-Specific Attribute Name> |

### 3.1.3.35.2 Schema

#### Outline of the schema

The SecuritiesAccountActivityAdvice message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

#### Pagination

This building block is mandatory and non-repetitive. It contains the page number of the message (within a statement) and continuation indicator to indicate that the statement is to continue or that the message is the last page of the statement.

## SecurityActivity

This building block is mandatory and non repetitive. It contains the date to which the statement refers to and the changes occurred.

## References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.035.001.01>

## Business rules applicable to the schema

Not applicable (CRDM outgoing message)

### 3.1.3.35.3 The message in business context

**Usage case example:** *SecuritiesAccountStatement\_example.xml*

In this example a statement is sent to CSD for business date “2011-02-01”.

Securities Account setting for hold/release default has been set to True for securities account identified with “12345”.

### 3.1.3.36 SecuritiesAccountAuditTrailQuery (reda.036)

#### 3.1.3.36.1 Overview and scope of the message

This chapter illustrates the *SecuritiesAccountAuditTrailQuery* message.

The *SecuritiesAccountAuditTrailQuery* is sent by CSDs, CSD participants or any party authorised by them to CRDM to query on audit trail for securities account reference data.

In response to the *SecuritiesAccountAuditTrailQuery*, a reda.037 containing the requested information is returned.

#### 3.1.3.36.2 Schema

### Outline of the schema

The *SecuritiesAccountAuditTrailQuery* message is composed of the following message building blocks:

### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

### Search Criteria Definition

This building block is mandatory and non repetitive. It contains detailed information related to the business securities account audit trail query message. It includes the following elements:

- Securities account identification;

- Date period.

## References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.036.001.01>

## Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES |
|---|----------------|
| Identification<br>Document/SctiesAcctAudtTrlQry/SchCrit/SctiesAcctId/Id | IIMP072        |
| DatePeriod<br>Document/SctiesAcctAudtTrlQry/SchCrit/DtPrd               | IIMP072        |

### 3.1.3.36.3 The message in business context

**Usage case example:** *SecuritiesAccountAuditTrailQuery\_example.xml*

In this example CSD participating in CRDM with BIC “CSDAXXYAAA” queries audit trail information for securities account identified with “12345” and date period from 2011-01-01 to 2011-01-05.

### 3.1.3.37 SecuritiesAccountAuditTrailReport (reda.037)

#### 3.1.3.37.1 Overview and scope of the message

This chapter illustrates the SecuritiesAccountAuditTrailReport message.

The SecuritiesAccountAuditTrailReport is sent by CRDM to CSDs, CSD participants or any party authorised by them and is sent to provide with requested securities account audit trail information.

The SecuritiesAccountAuditTrailReport reports changes applied to the Securities Account entity.

The SecuritiesAuditTrailReport is sent in response to the reda.036.001.01 message.

#### 3.1.3.37.2 Schema

##### Outline of the schema

The SecuritiesAccountAuditTrailReport message is composed of the following message building blocks:

##### MessageIdentification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

##### OriginalMessageIdentification

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the report.

### ReportOrError

This building block is mandatory and non repetitive. It contains either the information matching the search criteria of the related query or an error indication:

- SecuritiesAccountAuditTrailReport This building block is optional. It provides requested information on securities account audit trail. It includes the following elements:
  - Identification of the securities account;
  - Name of the field changed;
  - Value of the field before the change;
  - Value of the field after the change;
  - Timestamp of the change;
  - Name of the user who instructed the change;
  - Name of the user who approved the change in a four eyes scenario.
- BusinessError This building block is optional. It provides the reason why the requested information can not be given.

### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.037.001.01>

### Business rules applicable to the schema

Not applicable (CRDM outgoing message)

#### 3.1.3.37.3 The message in business context

**Usage case example:** *SecuritiesAccountAuditTrailReport\_example.xml*

In this example a CSD participating in CRDM with BIC “CSDAXXYAAA” queried audit trail information for securities account identified with “12345” during the period from 2011-01-01 to 2011-01-05.

One occurrence is returned reporting a change for the securities account. Negative Position has been set to true.

Modification has been instructed by user “USER1” and confirmed on 2011-01-03 at 17:59 by user “USER2”.

### 3.1.3.38 CashAccountActivityAdvice (reda.038)

#### 3.1.3.38.1 Overview and scope of the message

This chapter illustrates the CashAccountActivityAdvice message.

The CashAccountActivityAdvice is sent by CRDM to CBs, payment banks or any party authorised by them and is sent to provide with information on changes occurred for Cash Account reference data during the business day.

The CashAccountActivityAdvice reports changes applied to the following entities:

- | Cash Account;
- | Cash Account Restriction.

The following table is an exhaustive description of the returned fields for each entity:

| ENTITY                   | ATTRIBUTE                         | RETURNED FIELD NAME                      |
|--------------------------|-----------------------------------|--|
| Cash Account             | Account Type                      | T2SDCA.AccountType                       |
| Cash Account             | Floor Notification Amount         | T2SDCA.FloorNotificationAmount           |
| Cash Account             | Ceiling Notification Amount       | T2SDCA.CeilingNotificationAmount         |
| Cash Account             | Opening Date                      | T2SDCA.OpeningDate                       |
| Cash Account             | Closing Date                      | T2SDCA.ClosingDate                       |
| Cash Account             | Responsible Party                 | T2SDCA.ResponsibleParty                  |
| Cash Account             | Party                             | T2SDCA.Party                             |
| Cash Account             | Currency Code                     | T2SDCA.CurrencyCode                      |
| Cash Account             | External RTGS Account Reference   | T2SDCA.ExternalRTGSAccount               |
| Cash Account             | T2S Dedicated Cash Account Number | T2SDCA.AccountNumber                     |
| Cash Account Restriction | Restriction Type                  | [restriction type code]/[valid from]/RTP |
| Cash Account Restriction | Valid From Timestamp              | [restriction type code]/[valid from]/VFR |
| Cash Account Restriction | Valid To Timestamp                | [restriction type code]/[valid from]/VTO |

#### 3.1.3.38.2 Schema

##### Outline of the schema

The CashAccountActivityAdvice message is composed of the following message building blocks:

##### MessageIdentification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

##### CashAccountActivity

This building block is mandatory and non repetitive. It contains the date to which the statement refers to and the changes occurred.

**References/Links**

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.038.001.01>

**Business rules applicable to the schema**

Not applicable (CRDM outgoing message)

3.1.3.38.3 The message in business context

**Usage case example:** *CashAccountStatement\_Example.xml*

In this example a statement is sent to Central Bank for business date “2011-02-01”.

Floor notification amount for T2S Dedicated Cash Account identified with “5678” has been set to 1.000.000 instead of 500.000.

3.1.3.39 PartyActivityAdvice (reda.041)

3.1.3.39.1 Overview and scope of the message

This chapter illustrates the PartyActivityAdvice message.

The PartyActivityAdvice is sent by CRDM to CBs, CSDs, CSD participants, payment banks or any party authorised by them and is sent to provide with information on changes occurred for party reference data during the business day.

The PartyActivityAdvice reports changes applied to the following entities:

- Party;
- Party Name;
- Party Address;
- Party Code;
- Party Restriction;
- Market Specific Attribute;
- Party Technical Address.

The following table is an exhaustive description of the returned fields for each entity:

| ENTITY | ATTRIBUTE          | RETURNED FIELD NAME |
|--------|--------------------|---------------------|
| Party  | Party Opening Date | Party.OpeningDate   |
| Party  | Party Close Date   | Party.CloseDate     |

| ENTITY                                   | ATTRIBUTE                      | RETURNED FIELD NAME                                     |
|--|--------------------------------|---|
| Party                                    | Party Type                     | Party.Type  |
| Party Name                               | Valid From                     | PartyName.ValidFrom                                     |
| Party Name                               | Party Long Name                | PartyName.LongName                                      |
| Party Name                               | Party Short Name               | PartyName.ShortName                                     |
| Party Address                            | Valid From                     | PartyAddress.ValidFrom                                  |
| Party Address                            | Street                         | PartyAddress.Street                                     |
| Party Address                            | House Number                   | PartyAddress.HouseNumber                                |
| Party Address                            | City                           | PartyAddress.City                                       |
| Party Address                            | Postal Code                    | PartyAddress.PostalCode                                 |
| Party Address                            | State or Province              | PartyAddress.StateorProvince                            |
| Party Address                            | Country Code                   | PartyAddress.CountryCode                                |
| Party Code                               | Valid From                     | PartyCode.ValidFrom                                     |
| Party Code                               | Code Type                      | PartyCode.CodeType                                      |
| Party Code                               | Party Mnemonic                 | PartyCode.PartyMnemonic                                 |
| Party Restriction                        | Restriction Type               | [restriction type code]/[valid from]/RTP                |
| Party Restriction                        | Valid From Timestamp           | [restriction type code]/[valid from]/VFR                |
| Party Restriction                        | Valid To Timestamp             | [restriction type code]/[valid from]/VTO                |
| Market-Specific Party<br>Attribute Value | Market-Specific Attribute Name | PartyMSA.Name   |
| Market-Specific Party<br>Attribute Value | Value                          | <actual value of the Market-Specific<br>Attribute Name> |
| Party Technical Address                  | Technical Address              | Party.TechnicalAddress                                  |

### 3.1.3.39.2 Schema

#### Outline of the schema

The PartyActivityAdvice message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

#### PartyActivity



This building block is mandatory and non repetitive. It contains the date to which the statement refers to and the changes occurred.

### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.041.001.01>

### Business rules applicable to the schema

Not applicable (CRDM outgoing message).

#### 3.1.3.39.3 The message in business context

**Usage case example:** *PartyActivityAdvice\_example.xml*

In this example a statement is sent to Central Bank with BIC “NCBAXXYAAA” for business date “2011-02-01”.

Long name for payment bank with BIC “PAYBXXYYAAA” has changed from “SAMPLE NAME” to “NEW SAMPLE NAME” starting from 2011-02-03.

#### 3.1.3.40 EligibleCounterpartCSDStatusAdvice (reda.044)

##### 3.1.3.40.1 Overview and scope of the message

This chapter illustrates the EligibleCounterpartCSDStatusAdvice message.

The EligibleCounterpartCSDStatusAdvice is sent by CRDM to inform the sender of the originating request about the status of an eligible counterpart CSD maintenance request.

This message is sent by CRDM in the following message usages:

- Rejected;
- Queued;
- Completed.

These message usages are described in the section “The message in business context”.

##### 3.1.3.40.2 Schema

### Outline of the schema

The EligibleCounterpartCSDStatusAdvice message is composed of the following message building blocks:

### MessageIdentification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

### OriginalMessageIdentification

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the status advice.

### StatusReason

This building block is mandatory and non repetitive. It contains detailed information related to the status of the original request. It includes the following elements:

- Status;
- Reason;
- Additional reason information.

### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.044.001.01>

### Business rules applicable to the schema

Not applicable (CRDM outgoing message)

#### 3.1.3.40.3 The message in business context

##### *Usage Case: Rejected*

This message usage describes an eligible counterpart CSD status advice message sent by CRDM when an eligible counterpart CSD maintenance request has been rejected.

##### *Specific message requirements*

Field for Status is filled with rejection code "REJT".

| MESSAGE ITEM                             | UTILISATION        |
|--|--------------------|
| Status                                   | Fixed value "REJT" |
| Document/ElgblCntrptCSDStsAdv/StsRsn/Sts |                    |

##### **Usage case example:** *EligibleCounterpartCSDUpdateRejected\_example.xml*

In this example processing for an eligible counterpart CSD creation request sent with reference "SAMPLET2SELGCSD" has been rejected. Thus the sender originating the request is notified with the status advice.

##### *Usage Case: Queued*

This message usage describes an eligible counterpart CSD status advice message sent by CRDM when an eligible counterpart CSD maintenance request has been queued.

##### *Specific message requirements*

Field for Status is filled with rejection code "QUED".

| MESSAGE ITEM                                   | UTILISATION        |
|--|--------------------|
| Status   | Fixed value "QUED" |
| Document/ElgblCntrptCSDStsAdvc/StsRsn/Sts      |                    |
| Reason   | Details for reason |
| /Document/ElgblCntrptCSDStsAdvc/StsRsn/Rsn/Rsn |                    |

**Usage case example:** *EligibleCounterpartCSDUpdateQueued\_example.xml*

In this example processing for an eligible counterpart CSD creation request sent with reference "SAMPLET2SELGCSD" has been queued. Thus the sender originating the request is notified with the status advice.

*Usage case: Completed*

This message usage describes an eligible counterpart CSD status advice message sent by CRDM when an eligible counterpart CSD maintenance request has been completed.

*Specific message requirements*

Field for Status is filled with rejection code "COMP".

| MESSAGE ITEM                              | UTILISATION        |
|---|--------------------|
| Status                                    | Fixed value "COMP" |
| Document/ElgblCntrptCSDStsAdvc/StsRsn/Sts |                    |

**Usage case example:** *EligibleCounterpartCSDUpdateCompleted\_example.xml*

In this example processing for an eligible counterpart CSD creation request sent with reference "SAMPLET2SELGCSD" has been successfully processed. Thus the sender originating the request is notified with the status advice.

### 3.1.3.41 SecurityCSDLinkCreationRequest (reda.045)

#### 3.1.3.41.1 Overview and scope of the message

This chapter illustrates the SecurityCSDLinkCreationRequest message.

The SecurityCSDLinkCreationRequest is sent by CSDs or any party authorised by them to CRDM. It is used for instructing the creation of a Security CSD Link by providing details about the Security CSD Link to be created.

In the response, CRDM sends reda.047 when the creation of the Security CSD Link has been successfully processed or has been rejected.

### 3.1.3.41.2 Schema

#### Outline of the schema

The SecurityCSDLinkCreationRequest message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

#### SecurityCSDLink

This building block is mandatory and non repetitive. It contains detailed information related to the security CSD link creation message. It includes the following elements:

- Financial instrument identification;
- Issuer or investor CSD identification;
- Technical issuer identification;
- Security maintenance indicator;
- Issuance account identification;
- Starting validity date;
- Ending validity date;

#### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.045.001.01>

#### Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES |
|--|----------------|
| SecurityCSDLinkCreationRequest                           | DSC4001        |
| Document/SctyCSDLkCreReq                                 |                |
| ISIN   | DSC4002        |
| Document/SctyCSDLkCreReq/SctyCSDLk/FinInstrmId/ISIN      | DSC4030        |
|  | DSC4049        |
| IssuerInvestorCSD  | DSC4002        |
| Document/SctyCSDLkCreReq/SctyCSDLk/IssrInvstrCSD         | DSC4040        |
| IssuerCSD  | DSC4047        |
| Document/SctyCSDLkCreReq/SctyCSDLk/IssrInvstrCSD/IssrCSD |                |
| CombinedIdentification                                   | DSC4044        |

| MESSAGE ITEM   | BUSINESS RULES     |
|--|--------------------|
| Document/SctyCSDLkCreReq/SctyCSDLk/IssrInvstrCSD/IssrCSD/Cmbndld   | DSC4046            |
| InvestorCSD  | DSC4045            |
| Document/SctyCSDLkCreReq/SctyCSDLk/IssrInvstrCSD/InvstrCSD         | DSC4046<br>IIMP141 |
| OrganisationIdentification   | DSC4049            |
| Document/SctyCSDLkCreReq/SctyCSDLk/IssrInvstrCSD/InvstrCSD/Orgld   |                    |
| CombinedIdentification   | DSC4048            |
| Document/SctyCSDLkCreReq/SctyCSDLk/IssrInvstrCSD/InvstrCSD/Cmbndld |                    |
| TechnicalIssuerCSD   | DSC4041            |
| Document/SctyCSDLkCreReq/SctyCSDLk/TechIssrCSD                     | IIMP141            |
| SecurityMaintenance  | DSC4043            |
| Document/SctyCSDLkCreReq/SctyCSDLk/SctyMntnc                       | DSC4044            |
| Identification   | DSC4046            |
| Document/SctyCSDLkCreReq/SctyCSDLk/IssncAcct/IssncAcct/ld          | DSC4047<br>DSC4050 |
| PrimaryAccountIndicator  | DSC4050            |
| Document/SctyCSDLkCreReq/SctyCSDLk/IssncAcct/PmryAcctInd           |                    |
| Date   | DSC4002            |
| Document/SctyCSDLkCreReq/SctyCSDLk/VldFr/Dt                        | DSC4020            |
| Date   | DSC4021            |
| Document/SctyCSDLkCreReq/SctyCSDLk/VldTo/Dt                        |                    |

### 3.1.3.41.3 The message in business context

#### Usage case example for Issuer CSD: *Issuer\_example.xml*

In this example a CSD participating in CRDM and identified with BIC “CSDAXXYAAA” requests the creation of an issuer security CSD link for ISIN “XXABCDEFGHIJ” in CRDM, being the security maintainer entity.

Two issuance accounts are specified for the link: “ISSACCT01”, which is also the primary issuance securities account, and “ISSACCT02”.

The link is valid starting from 2015-06-01.

#### Message example for Investor CSD: *Investor\_example.xml*

In this example an external CSD identified with BIC “CSDBXXYYBBB” whose responsible CSD is identified with BIC “CSDCXXYYCCC”, requests the creation of an investor security CSD link for ISIN “XXABCDEFGHJIJ” in CRDM.

Technical issuer for the link would be the CSD identified with BIC “CSDAXXYYAAA”.

The link is valid starting from 2015-06-01.

### 3.1.3.42 SecurityCSDLinkMaintenanceRequest (reda.046)

#### 3.1.3.42.1 Overview and scope of the message

This chapter illustrates the SecurityCSDLinkMaintenanceRequest message.

The SecurityCSDLinkMaintenanceRequest is sent by CSDs or any party authorised by them to CRDM.

It is used for instructing the update of a security CSD link by providing details about the security CSD link to be updated.

In the response, CRDM sends reda.047 when the update of the security CSD link has been successfully processed or queued, or has been rejected.

#### 3.1.3.42.2 Schema

##### **Outline of the schema**

The SecurityCSDLinkMaintenanceRequest message is composed of the following message building blocks:

##### **MessageIdentification**

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### **SecurityCSDLinkIdentification**

This building block is mandatory and non repetitive. It contains the identification for the security CSD link to be modified.

##### **Update**

This building block is mandatory and contains detailed information related to the security CSD link maintenance message.

Only ending validity date can be updated.

##### **References/Links**

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.046.001.01>

##### **Business rules applicable to the schema**

| MESSAGE ITEM  | BUSINESS RULES |
|---|----------------|
| SecurityCSDLinkMaintenanceRequest<br>Document/SctyCSDLkMntncReq           | DSU4001        |
| ISIN<br>Document/SctyCSDLkMntncReq/SctyCSDLkId/FinInstrmId/ISIN           | DSU4003        |
| IssuerInvestorCSD<br>Document/SctyCSDLkMntncReq/SctyCSDLkId/IssrInvstrCSD | DSU4003        |
| Date<br>Document/SctyCSDLkMntncReq/SctyCSDLkId/VldFr/Dt                   | DSU4003        |
| Date<br>Document/SctyCSDLkMntncReq/Upd/VldTo/Dt                           | DSU4021        |

### 3.1.3.42.3 The message in business context

**Usage case example:** *SecurityCSDLinkUpdate\_example.xml*

In this example, a CSD participating in CRDM and with BIC “CSDAXXYAAA” requests the update of investor security CSD link with validity starting date set to “2015-06-01” for ISIN “XXABCDEFGHJIJ”.  
New ending validity date is set to “2015-12-31”.

### 3.1.3.43 SecurityCSDLinkStatusAdvice (reda.047)

#### 3.1.3.43.1 Overview and scope of the message

This chapter illustrates the SecurityCSDLinkStatusAdvice message.

The SecurityCSDLinkStatusAdvice is sent by CRDM to inform the sender of the originating request about the status of a security CSD link maintenance request.

This message is sent by CRDM in the following message usages:

- | Rejected;
- | Queued;
- | Completed.

These message usages are described in the section “The message in business context”.

#### 3.1.3.43.2 Schema

##### Outline of the schema

The SecurityCSDLinkStatusAdvice message is composed of the following message building blocks:

##### Identification

This building block is mandatory and non repetitive. It contains an identification assigned by CRDM to uniquely and unambiguously identify the message.

### **RequestMessageIdentification**

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the status advice.

### **SecurityCSDLinkStatus**

This building block is mandatory and non repetitive. It contains detailed information related to the status of the original request. It includes the following elements:

- Status;
- Reason;
- Additional reason information;
- In case of completed maintenance request, the security CSD link identification.

### **SecurityCSDLinkIdentification**

This building block is optional and non repetitive. It contains the identification of the security CSD link and is returned upon successful completion of the original request. It includes the following elements:

- Financial instrument identification;
- Issuer or investor CSD identification;
- Starting validity date for the security CSD link.

### **References/Links**

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.047.001.01>

### **Business rules applicable to the schema**

Not applicable (CRDM outgoing message)

#### **3.1.3.43.3 The message in business context**

##### *Usage Case: Rejected*

This message usage describes a security CSD link status advice message sent by CRDM when a security CSD link maintenance request has been rejected.

##### *Specific message requirements*

Fields for Status and Reason Code are filled with rejection code "REJT". Error description is provided within Additional Information element.



| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Status<br>Document/SctyCSDLkStsAdvc/SctyCSDLkSts/Sts                            | Fixed value "REJT" |
| Proprietary<br>Document/SctyCSDLkStsAdvc/SctyCSDLkSts/StsRsn/Rsn/Prtry          | Fixed value "REJT" |
| AdditionalInformation<br>Document/SctyCSDLkStsAdvc/SctyCSDLkSts/StsRsn/AddtlInf | Error description  |

**Usage case example:** *SecurityCSDLLinkUpdateRejected\_example.xml*

In this example processing for a security CSD link creation request sent with reference "SECCSDLINCRE" has been rejected. Thus the sender originating the request is notified with the status advice.

*Usage Case: Queued*

This message usage describes a security CSD link status advice message sent by CRDM when a security CSD link maintenance request has been queued.

*Specific message requirements*

Field for Status is filled with rejection code "QUED".

| MESSAGE ITEM   | UTILISATION        |
|--|--------------------|
| Status<br>Document/SctyCSDLkStsAdvc/SctyCSDLkSts/Sts | Fixed value "QUED" |

**Usage case example:** *SecurityCSDLLinkUpdateQueued\_example.xml*

In this example processing for a security CSD link creation request sent with reference "SECCSDLINCRE" has been queued. Thus the sender originating the request is notified with the status advice.

*Usage Case: Completed*

This message usage describes a security CSD link status advice message sent by CRDM when a security CSD link maintenance request has been completed.

*Specific message requirements*

Field for Status is filled with rejection code "COMP".

| MESSAGE ITEM                               | UTILISATION                      |
|--|----------------------------------|
| Status                                     | Fixed value "COMP"               |
| Document/SctyCSDLkStsAdvc/SctyCSDLkSts/Sts |                                  |
| SecurityCSDLkIdentification                | Security CSD link identification |
| Document/SctyCSDLkStsAdvc/SctyCSDLkId      |                                  |

**Usage case example:** *SecurityCSDLkUpdateCompleted\_example.xml*

In this example processing for a security CSD link creation request sent with reference "SECCSDINVLINKREQ" has been successfully processed. Thus the sender originating the request is notified with the status advice including identification for the processed security CSD link.

### 3.1.3.44 AccountLinkCreationRequest (reda.049)

#### 3.1.3.44.1 Overview and scope of the message

This chapter illustrates the AccountLinkCreationRequest message.

The AccountLinkCreationRequest is sent by CSDs, CSD participants, external CSDs or any party authorised by them to CRDM.

It is used for instructing the creation of an account link by providing details about the account link to be created.

In the response, CRDM sends reda.051 when the creation of the account link has been successfully processed or has been rejected.

#### 3.1.3.44.2 Schema

##### Outline of the schema

The AccountLinkCreationRequest message is composed of the following message building blocks:

##### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### AccountLink

This building block is mandatory and non repetitive. It contains detailed information related to the account link creation message. It includes the following elements:

- Securities account identification;
- Dedicated cash account identification;
- Starting validity date;
- Ending validity date;
- Indicator for settlement default;

- Indicator for auto-collateralisation usage;
- Indicator for settlement of cash legs.

### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandard/CoCo/reda.049.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES                                      |
|---|---|
| AccountLinkCreationRequest<br>Document/AcctLkCreReq                 | DAC3001   |
| Identification<br>Document/AcctLkCreReq/AcctLk/SctiesAcct/Id        | DAC3030<br>DAC3040<br>DAC3100                       |
| Identification<br>/Document/AcctLkCreReq/AcctLk/CshAcct/Id/Othr/Id  | DAC3100   |
| Date<br>Document/AcctLkCreReq/AcctLk/VldFr/Dt                       | DAC3100<br>DAC3205<br>DAC3206<br>DAC3207<br>DAC3208 |
| Date<br>Document/AcctLkCreReq/AcctLk/VldTo/Dt                       | DAC3100<br>DAC3207<br>DAC3209                       |
| DefaultIndicator<br>Document/AcctLkCreReq/AcctLk/DfitInd            | DAC3050<br>DAC3051<br>DAC3052                       |
| CashSettlementIndicator<br>Document/AcctLkCreReq/AcctLk/CshSttlmInd | DAC3052   |
| Other<br>Document/AcctLkCreReq/AcctLk/CshAcct/Id/Othr               | DAC3024   |

#### 3.1.3.44.3 The message in business context

**Usage case example:** *SecuritiesAccountLinkCreation\_example.xml*

In this example a CSD participating in CRDM and identified with BIC “CSDAXXYAAA” requests the creation of an account link between the securities account identified with number “SACCCSDA” and dedicated cash account identified with number “CASHACCOUNT”.

Link is set to be the default for settlement.

The link is valid starting from 2015-06-01.

### 3.1.3.45 AccountLinkMaintenanceRequest (reda.050)

#### 3.1.3.45.1 Overview and scope of the message

This chapter illustrates the AccountLinkMaintenanceRequest message.

The AccountLinkMaintenanceRequest is sent by CSDs, CSD participants, external CSDs or any party authorised by them to CRDM.

It is used for instructing the update of an account link by providing details about the account link to be updated.

In the response, CRDM sends reda.051 when the update of the account link has been successfully processed or queued, or has been rejected.

#### 3.1.3.45.2 Schema

##### **Outline of the schema**

The AccountLinkMaintenanceRequest message is composed of the following message building blocks:

##### **MessageIdentification**

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### **AccountLinkIdentification**

This building block is mandatory and non repetitive. It contains the identification for the account link to be modified

##### **Update**

This building block is mandatory and contains detailed information related to the account link maintenance message.

Only ending validity date can be updated.

##### **References/Links**

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.050.001.01>

##### **Business rules applicable to the schema**

| MESSAGE ITEM  | BUSINESS RULES                           |
|---|--|
| AccountLinkMaintenanceRequest<br>Document/AcctLkMntncReq              | DAU3001                                  |
| Identification<br>Document/AcctLkMntncReq/AcctLkId/SciesAcct/Id       | DAU3005<br>DAU3100                       |
| Identification<br>Document/AcctLkMntncReq/AcctLkId/CshAcct/Id/Othr/Id | DAU3005<br>DAU3100                       |
| Date<br>Document/AcctLkMntncReq/AcctLkId/VldFr/Dt                     | DAU3005<br>DAU3100                       |
| Date<br>Document/AcctLkMntncReq/Upd/VldTo/Dt                          | DAU3050<br>DAU3207<br>DAU3100<br>DAU3208 |

### 3.1.3.45.3 The message in business context

**Usage case example:** *SecuritiesAccountLinkUpdate\_example.xml*

In this example a CSD participating in CRDM and identified with BIC “CSDAXXYAAA” requests the update of the account link between the securities account identified with number “SACCCSDA” and cash account identified with number “CASHACCOUNT” created with validity date “2015-06-01”.

The link is closed on 2015-07-01.

### 3.1.3.46 AccountLinkStatusAdvice (reda.051)

#### 3.1.3.46.1 Overview and scope of the message

This chapter illustrates the AccountLinkStatusAdvice message.

The AccountLinkStatusAdvice is sent by CRDM to inform the sender of the originating request about the status of an account link maintenance request.

This message is sent by CRDM in the following message usages:

- | Rejected;
- | Queued;
- | Completed.

These message usages are described in the section “The message in business context”.

### 3.1.3.46.2 Schema

#### Outline of the schema

The AccountLinkStatusAdvice message is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by CRDM to uniquely and unambiguously identify the message.

#### RequestMessageIdentification

This building block is mandatory and non repetitive. It contains the identification assigned by the sending party to uniquely and unambiguously identify the original message generating the status advice.

#### AccountLinkStatus

This building block is mandatory and non repetitive. It contains detailed information related to the status of the original request. It includes the following elements:

- Status;
- Reason;
- Additional reason information;
- In case of completed maintenance request, the account link identification.

#### AccountLinkIdentification

This building block is optional and non repetitive. It contains the identification of the account link and is returned upon successful completion of the original request. It includes the following elements:

- Securities account identification;
- Dedicated cash account identification;
- Starting validity date for the account link.

#### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.051.001.01>

#### Business rules applicable to the schema

Not applicable (CRDM outgoing message)

### 3.1.3.46.3 The message in business context

#### *Usage case: Rejected*

This message usage describes an account link status advice message sent by CRDM when an account link maintenance request has been rejected.

#### *Specific message requirements*

Fields for Status and Reason Code are filled with rejection code “REJT”. Error description is provided within Additional Information element.

| MESSAGE ITEM  | UTILISATION        |
|---|--------------------|
| Status<br>Document/AcctLkStsAdvc/AcctLkSts/Sts                            | Fixed value "REJT" |
| Proprietary<br>Document/AcctLkStsAdvc/AcctLkSts/StsRsn/Rsn/Prtry          | Fixed value "REJT" |
| AdditionalInformation<br>Document/AcctLkStsAdvc/AcctLkSts/StsRsn/AddtlInf | Error description  |

**Usage case example:** *SecuritiesAccountLinkUpdateRejected\_example.xml*

In this example processing for an account link creation request sent with reference “ACCLINKCREAT” has been rejected. Thus the sender originating the request is notified with the status advice.

*Usage Case: Queued*

This message usage describes an account link status advice message sent by CRDM when an account link maintenance request has been queued.

*Specific message requirements*

Field for Status is filled with rejection code “QUED”.

| MESSAGE ITEM                                   | UTILISATION        |
|--|--------------------|
| Status<br>Document/AcctLkStsAdvc/AcctLkSts/Sts | Fixed value "QUED" |

**Usage case example:** *SecuritiesAccountLinkUpdateQueued\_example.xml*

In this example processing for an account link creation request sent with reference “ACCLINKCREAT” has been queued. Thus the sender originating the request is notified with the status advice.

*Usage Case: Completed*

This message usage describes an account link status advice message sent by CRDM when an account link maintenance request has been completed.

*Specific message requirements*

Field for Status is filled with code “COMP”.

| MESSAGE ITEM                         | UTILISATION                 |
|--------------------------------------|-----------------------------|
| Status                               | Fixed value "COMP"          |
| Document/AcctLkStsAdvc/AcctLkSts/Sts |                             |
| AccountLinkIdentification            | Account link identification |
| Document/AcctLkStsAdvc/AcctLkId      |                             |

**Usage case example:** *SecuritiesAccountLinkUpdateCompleted\_example.xml*

In this example processing for an account link creation request sent with reference "ACCLINKCREAT" has been successfully processed. Thus the sender originating the request is notified with the status advice including identification for the processed account link.

### 3.1.3.47 EligibleSecuritiesDeletionRequest (reda.075)

#### 3.1.3.47.1 Overview and scope of the message

This chapter illustrates the EligibleSecuritiesDeletionRequest message.

The EligibleSecuritiesDeletionRequest is sent by CBs, payment banks or any party authorised by them to CRDM.

It is used to remove the eligibility of a security that has lost its eligibility status for auto-collateralisation or client-collateralisation by providing details about the security to be defined as no longer eligible.

In the response, CRDM sends reda.028 when the definition of the securities as no longer eligible has been successfully processed, queued or has been rejected.

#### 3.1.3.47.2 Schema

##### Outline of the schema

The message EligibleSecuritiesDeletionRequest is composed of the following message building blocks:

##### MessageHeader

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

##### EligibleSecurity

This building block is mandatory and non repetitive. It contains detailed information related to the no longer eligible security. It includes the following elements:

- Security identifier;
- Collateralisation currency;
- Identification of the Central Bank or Payment Bank.

##### References/Links



The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.075.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM  | BUSINESS RULES |
|---|----------------|
| Elegible Security<br>Document/ElgblSctiesDeltnReq/ElgblScty | DSD5002        |

#### 3.1.3.47.3 The message in business context

**Usage case example:** *DeleteEligibleSecurities\_example.xml*

In this example Central Bank with BIC “NCBAXXYYAAA” requests the definition of a security as no longer eligible in CRDM.

Eligibility is deleted for security with ISIN “XXABCDEFGH11” and currency EUR.

#### 3.1.3.48 CloseLinkDeletionRequest (reda.077)

##### 3.1.3.48.1 Overview and scope of the message

This chapter illustrates the CloseLinkDeletionRequest message.

The CloseLinkDeletionRequest is sent by CBs, external collateral management systems or payment banks to CRDM.

It is used for instructing the deletion of a close link by providing details about the close link to be deleted.

In the response, CRDM sends reda.028 when the deletion of the close link has been successfully processed, queued or has been rejected.

##### 3.1.3.48.2 Schema

#### Outline of the schema

The message CloseLinkDeletionRequest is composed of the following message building blocks:

#### MessageIdentification

This building block is mandatory and non repetitive. It must contain an identification assigned by the sending party to uniquely and unambiguously identify the message.

#### CloseLink

This building block is mandatory and non repetitive. It contains detailed information related to the close link deletion message. It includes the following elements:

- Identification for security;

- Party for which the close link to be deleted has been formerly created;
- The Party providing credit.

### References/Links

The schema and documentation in HTML/PDF format as well as the message examples are provided outside of this document under the following link:

<https://www.swift.com/mystandards/CoCo/reda.077.001.01>

### Business rules applicable to the schema

| MESSAGE ITEM                         | BUSINESS RULES |
|--------------------------------------|----------------|
| CloseLink                            | DSD2001        |
| /Document/ClsLkDeltnReq/ClsLk        | DSD2003        |
| SecurityIdentification               | DSD2014        |
| /Document/ClsLkDeltnReq/ClsLk/Sctyld |                |

#### 3.1.3.48.3 The message in business context

**Usage case example:** *DeleteCloseLink\_example.xml*

In this example a CB requests the deletion of a close link for security with ISIN “XXABCDEFGHIJ” and party “PARXAABBXXX”.

### 3.1.4 Headers (head)

#### 3.1.4.1 BusinessApplicationHeader (head.001)

##### 3.1.4.1.1 Overview and scope of the message

The BusinessApplicationHeader message (BAH) facilitates the message processing as it stores the information necessary for the processing at one central place. Without BAH this information would be either inside the message instance or in the “GroupHeader” (or equivalent) of the ISO 20022 message. A uniform appearance (structure) of relevant information in the BAH improves the routing of the message once it arrives at the addressee’s interface.

An ISO 20022 Message together with its Business Application Header forms a Business Message.

The ReceiptAcknowledgement is in general sent without BAH.

##### 3.1.4.1.2 Schema

###### Outline of the schema

The BusinessApplicationHeader message is composed of the following message building blocks:

###### From

This building block is mandatory. It contains the sending MessagingEndpoint that has created the Business Message for the receiving MessagingEndpoint that processes the Business Message.

###### To

This building block is mandatory. It contains the MessagingEndpoint designated by the sending MessagingEndpoint to be the recipient who ultimately processes the Business Message

###### BusinessMessageIdentifier

This building block is mandatory. It unambiguously identifies the Business Message to the MessagingEndpoint that has created the Business Message.

In all cases, this value is in place of any Message Id value which may be provided within the business message of the payload.

###### CreationDate

This building block is mandatory. It contains the date and time when this message (header) was created.

###### CopyDuplicate

This building block is optional. It indicates whether the message is a copy, a duplicate or a copy of a duplicate of a previously sent ISO 20022 message.

###### PossibleDuplicate

This building block is optional. It contains the MessageIdentifier that defines the message. It must contain a valid ISO 20022 MessageIdentifier supported by CRDM.

###### Priority

This building block is optional. It provides a relative indication of the processing precedence of the message over a (set of) Business Messages with assigned priorities.

## Signature

This building block is optional. It contains the digital signature of the Business Entity authorised to sign this Business Message.

## Related

This building block is optional. It specifies the Business Application Header of the Business Message to which this Business Message relates.

## References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/head.001.001.01>

## Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES   |
|--|--|
| BusinessApplicationHeader<br>Document/AppHdr                                 | ICSA004<br>IICP001<br>IICP002<br>ICSA005<br>IIMP097<br>IIMP098<br>IIMP099<br>IIMP066<br>IIMS001<br>IIMS002 |
| BICFI<br>Document/AppHdr/Fr/FIId/FinInstnId/BICFI                            | IIMP120  |
| MemberIdentification<br>Document/AppHdr/Fr/FIId/FinInstnId/ClrSysMmbld/Mmbld | ICSA002<br>ICSA003<br>ICSA012<br>ICSA013<br>ICSA009  |
| Identification<br>Document/AppHdr/Fr/FIId/FinInstnId/Othr/Id                 | IIMP120  |
| BusinessMessageIdentifier<br>Document/AppHdr/BizMsgldr                       | ICSA009  |
| MessageDefinitionIdentifier<br>Document/AppHdr/MsgDefldr                     | IIMP089  |
| Signature<br>Document/AppHdr/Sgntr/  | ICSA011  |

### 3.1.4.1.3 The message in business context

The BAH includes the following main information:

- document routing (e.g. sender, receiver, information about the message);

- document identification (e.g. MessageDefinitionIdentifier, creation date and time);
- document processing information (e.g. sender, service, COPY, possible duplicate).

**Usage case example:** *head.001\_IncomingMessage\_example.xml*

In this example the BAH is used for an incoming message. It is sent from a CB ("BITAITRRXXX"). The BAH is filled with the corresponding digital signature.

### 3.1.4.2 BusinessFileHeader (head.002)

#### 3.1.4.2.1 Overview and scope of the message

This chapter illustrates the BusinessFileHeader message.

The BusinessFileHeader is used to receive several business messages within one file.

Under a single BusinessFileHeader, every message within the file has to be an ISO 20022 (or ISO compliant) message together with its BAH (business message). A file can contain one or several business messages.

The use of files is foreseen in both directions from the customer to CRDM and vice versa.

Within RTGS, the BusinessFileHeader information is used for consistency and completeness checks.

In response to an incoming file which fails validation, a ReceiptAcknowledgement (admi.007) message is sent, containing information on negative validation.

Results from validation which is performed at file level, are sent without BAH information.

#### 3.1.4.2.2 Schema

##### Outline of the schema

The BusinessFileHeader message is composed of the following message building blocks:

##### PayloadDescription

The PayloadDescription is a mandatory block and contains the following information tags:

- PayloadDetails: with PayloadIdentifier; CreationDateAndTime and PossibleDuplicateFlag;
- ApplicationSpecificInformation: which contains information about the total number of instances (messages) within the file;
- PayloadTypeDetails: which declares the payload content (describes the type of business document being exchanged);
- ManifestDetails: with information to each DocumentType and the number of instances (messages) for each declared type.

##### Payload

The Payload is a mandatory block and contains the set of business messages, each built of an ISO 20022 message together with its BAH and contained within a head.003 wrapper.

## References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/head.002.001.01>

The head.003 file is used as a technical wrapper to structure the Payload for head.002: the specific schema is provided under the same link.

## Business rules applicable to the schema

| MESSAGE ITEM   | BUSINESS RULES  |
|--|---|
| BusinessFileHeader<br>Document/Xchg                          | IIFV001<br><br>IIFV008<br>ICSA004<br>ICSA005<br>ICSA012 |
| PayloadIdentifier<br>Document/Xchg/PyldDesc/PyldDtIs/Pyldldr | IIFV007   |
| SystemUser<br>Document/Xchg/PyldDesc/ApplSpfcInf/SysUsr      | ICSA013<br>ICSA002<br>ICSA003                           |
| XMLSignatures<br>Document/Xchg/PyldDesc/ApplSpfcInf/Sgntr    | ICSA013<br>ICSA011<br>ICSA008                           |

### 3.1.4.2.3 The message in business context

#### **Message example:** *head.002\_IncomingMessageFile\_example.xml*

In this example the BusinessFileHeader is used for an incoming file. File payload is sent by the NCB (NCBAXXYAAA) and contains a AccountQueryList (acmt.025) performing a cash account reference data Query. The File envelope includes a System user (SystemUserX1) and the corresponding Digital Signature (user signature1).

#### **Message example:** *head.002\_OutgoingFile\_example.xml*

In this example the BusinessFileHeader is used for an outgoing file (file bundling functionality). The File includes two reda.016 messages. The File envelope includes Digital Signature (user signature2).

## 3.1.5 Administration (admi)

### 3.1.5.1 ReceiptAcknowledgement (admi.007.001.01)

This chapter illustrates the ReceiptAcknowledgement message.

The ReceiptAcknowledgement message is sent by CRDM to the sender of a previous inbound. It is used to inform the sender that their previously sent message has been rejected and is not processed further. CRDM generates this message after a negative validation process.

The ReceiptAcknowledgement is in sent by CRDM without BAH.

#### 3.1.5.1.1 Schema

##### Outline of the schema

The ReceiptAcknowledgement message is composed of the following message building blocks:

##### MessageIdentification

This building block is mandatory and it contains the message identification ("NONREF" value is used)

##### RelatedReference

This building block is mandatory and non-repetitive. It provides a reference of the request message to which this ReceiptAcknowledgement message is responding.

##### Report

This building block is mandatory and repetitive. Each block contains the Message identification of the request message and information related to a single validation issue.

##### RequestHandling

This building block is mandatory. It gives the status of the request. It may contain:

- status code;
- description.

##### References/links

The schema and the related documentation in XSD/EXCEL/PDF format as well as the message examples are provided within the MyStandards repository under the following link:

<https://www.swift.com/mystandards/CoCo/admi.007.001.01>

##### Business rules applicable to the schema

Not applicable (outgoing message).

#### 3.1.5.1.2 The message in business context

*Usage Case: Negative Receipt Acknowledgement (file or message)*

In this usage case, the recipient is being informed that a message previously received by CRDM does not comply with the message technical rules and is not processable in CRDM.

*Specific message content*

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Related Reference<br>Document/RctAck/Rpt/RltdRef/Ref | Copy of BAH BizMSglDr of incoming message If the BAH BizMsgldr of the incoming message cannot be identified, this field will contain "NONREF". |
| Status Code<br>Document/RctAck/Rpt/ReqHdlg/StsCd     | Status Code specifying the error.  |
| Description<br>Document/RctAck/Rpt/ReqHdlg/Desc      | Description of the status  |

**Usage case example:** *admi.007SchemaValidationExample\_example.xml*

In this example describe a rejection due to the fact that the format of one field of the input message does not comply with the XSD schema.

*Usage Case: Query Queuing Information*

The ReceiptAcknowledgement message is used to inform about the queuing of a query due maintenance window.

*Specific message content*

| MESSAGE ITEM   | UTILISATION  |
|--|--|
| Related Reference<br>Document/RctAck/Rpt/RltdRef/Ref | Copy of BAH BizMSglDr of incoming message If the BAH BizMsgldr of the incoming message cannot be identified, this field will contain "NONREF". |
| Status Code<br>Document/RctAck/Rpt/ReqHdlg/StsCd     | Status code "I001"   |
| Description<br>Document/RctAck/Rpt/ReqHdlg/Desc      | Description of the status: "The Query is queued due to maintenance window"   |

**Usage case example:** *admi.007QueryQueuing\_example.xml*



---

In this example a Receipt Acknowledgement “Query Queuing Information” message to the corresponding party is sent, because the Maintenance window is running and the query has to be queued.

## 4 Data Migration Tool Files

### 4.1 Introduction

The Data Migration Tool (DMT) offers Central Banks the opportunity to load related reference data into Common Reference Data Management shareable component.

The data can be produced in Excel or flat file format by the user and submitted to CRDM via a web application.

### 4.2 Technical Specification

#### 4.2.1 Data Record Definition

This chapter refers to Excel and the flat file in the same manner.

##### 4.2.1.1 Rows and Columns

A spreadsheet consists of horizontal rows and vertical columns. Columns identify the attributes and are restricted to a specific data type. There is no mix-up of different attributes and data types in one column.

##### 4.2.1.2 Header

The names of the columns appear in the first row. The names support the user to fill out the form but have no further functionality. Data Migration Tool identifies the attributes based on the location of the column and does not interpret the column names.

##### 4.2.1.3 Records

A record is a data structure that contains all parameters for a certain business function. A record spans over several rows as it may contain attributes that are repeatable. The repeated attributes are placed in a separate row just below the initial row in the same column.

##### 4.2.1.4 Record Type

The record type describes the business function of the record. A file may contain several records of the same record type. A mixture of different record types in one file is not possible.

The record type is indicated with a key word in the upper left corner of the file. Since there is only one record type per file the indication occurs only once. For example:

| Record Type | Record Id | An Attribute |
|-------------|-----------|--------------|
| Party       | 1         | aaa          |
|             | 2         | bbb          |

#### 4.2.1.5 Record Identification

A record is identified with a unique record identifier. The identifier must be unique within the file. It is recommended that the record identifier starts with 1 and is consecutively numbered.

In case the record contains repeatable attributes and spans over several rows the record identifier is repeated in each row of the record. Rows with the same record identifier are located one after the other. These connected rows must not be interrupted by rows with another record identifier. For example:

| Record Type | Record Id | A repeatable Attribute | A non-repeatable Attribute |
|-------------|-----------|------------------------|----------------------------|
| Party       | 1         | a1                     | c1                         |
|             | 1         | b1                     |                            |
|             | 2         | a2                     | c2                         |
|             | 2         | b2                     |                            |

#### 4.2.1.6 Default Values

Default values are not used. When a field has no value the Excel field remains empty. For example:

|     |  |     |
|-----|--|-----|
| aaa |  | ccc |
|-----|--|-----|

In a flat file the length of a field with no value is 0. For example:

aaa, ,ccc

Data Migration Tool does not provide default values for empty fields. Any input parameter must be stated within the files.

#### 4.2.1.7 Format Types

The values appear in the format as in the table below:

| Format Type | Excel   | CSV <sup>100</sup>   |
|-------------|---|--|
| DATE        | The format depends on the country and location of the user. | The format is « dd/mm/yyyy » with no timezone indication. Example: "30/06/2015"                          |
| TIME        | The format depends on the country and location of the user. | The format is « hh:mm:ss » with no timezone indication. Times are in 24 hour format. Example: "15:30:59" |
| CHAR (n)    | String with exactly n characters.                           | Same format as Excel.  |
| VARCHAR (n) | String with n characters maximum.                           | Same format as Excel.  |

<sup>100</sup> The CSV format matches to the Excel format when the regional settings of a Windows PC are „English (Great Britain)“

|             |  |   |
|-------------|--|---|
| DEC (p,s)   | Floating-point number with maximum p integer places and s decimal places. A dot '.' is used as decimal separator. Due to Excel restriction, cell must be treated as text | Floating-point number with maximum p integer places and s decimal places. A dot '.' is used as decimal separator. |
| NUMERIC (p) | Number with maximum p integer places and no decimal places.  | Same format as Excel.   |
| BOOLEAN     | Possible values: <ul style="list-style-type: none"> <li>• true</li> <li>• false</li> </ul>   | Same format as Excel.   |

#### 4.2.1.8 EPC SCT Inst Charset Interoperability

In order to ensure compliance to ISO20022 message implementation, the character set of all fields is restricted to the SWIFT X Character Set (see below).

Exceptions might occur if special chars are required. Character set restrictions will not apply on these fields which are not used in supported message payloads (e.g. Distinguish Name in Party Technical Address for Party) and will not hamper interoperability.

Exceptions are highlighted in the definition of the related fields.

#### 4.2.1.9 Timezones

Timezones have to appear in the data. The timezone is considered the timezone of Frankfurt. This is either **CET** (GMT+01:00) or, when a daylight saving hour is applied, **CEST** (GMT+02:00).

#### 4.2.1.10 Character Set

All characters belong to the SWIFT X Character Set. The character set is as follows:

```

a b c d e f g h i j k l m n o p q r s t u v w x y z
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
0 1 2 3 4 5 6 7 8 9
/ - ? : ( ) . , ' +
CR LF Space

```

#### 4.2.1.11 Filenames

Any filename is permitted.

#### Remark:

Users are recommended to include the record type, e.g. "TIPS.DMT.CRDM.Party.100", in the file name. This helps the Operator to identify the content of the uploaded file. This is not required by Data Migration Tool as only the record type is checked.

## 4.3 Technical Specification of the Excel File

### 4.3.1 Excel Version

The Excel files adhere to one single distinct version of Microsoft Office.

Detailed information:

- Version: Microsoft® Office Excel® 2007
- File Extension: xlsx

### 4.3.2 Restrictions

#### 4.3.2.1 Worksheets

The option that one Excel file may contain several worksheets is not supported. DMT uses only the very first worksheet.

#### 4.3.2.2 Number of Rows

Due to technical limitations the number of rows is restricted.

Detailed information:

- Maximum number of rows: 50.000

#### 4.3.2.3 Size limits

In addition to the number of rows, the uploaded file cannot exceed 9 MB.

## 4.4 Technical Specification of the Flat File

### 4.4.1.1 Compliancy to RFC 4180

The flat file has a CSV format that follows closely [RFC 4180](#). The RFC specifies a format that is widely used by many implementations and eases the development of an upload process.

Detailed information:

- File Extension: csv

### 4.4.1.2 Definition of the CSV Format (RFC 4180)

1. Each row is located on a separate line, delimited by a line break (CRLF). For example:

```
aaa,bbb,ccc CRLF
zzz,yyy,xxx CRLF
```

1. The last row in the file has no ending line break. For example:

```
aaa,bbb,ccc CRLF
zzz,yyy,xxx
```

2. Within each row, there are one or more fields, separated by commas. Each row contains the same number of fields throughout the file. Spaces are considered part of a field and are not ignored. The last field in the record is not followed by a comma. For example:

```
aaa,bbb,ccc
```

3. Each field may or may not be enclosed in double quotes. If fields are not enclosed with double quotes, then double quotes do not appear inside the fields. For example:

```
aaa,"bbb","ccc" CRLF
zzz,yyy,"xxx"
```

4. Fields containing line breaks (CRLF), double quotes, and commas are enclosed in double-quotes. For example:

```
aaa,"b CRLF bb",ccc CRLF
zzz,yyy,xxx
```

5. A double-quote appearing inside a field is escaped by preceding it with another double quote<sup>101</sup>. For example:

```
"aaa","b""bb","ccc"
```

The escaping with double-quotes ensures that all data can appear. Quotes, commas and line breaks may be included into the business data.

### 4.4.1.3 Control Characters

In order to structure the data in the flat file the following control characters are used:

|                      |      |
|----------------------|------|
| Carriage Return (CR) | 0x0d |
|----------------------|------|

<sup>101</sup> Currently, character « quote » is not allowed. See chapter [4.2.1.10](#) for details. Please note that the CSV format definition is independent from the character set.

---

|                |      |
|----------------|------|
| Line Feed (LF) | 0x0a |
|----------------|------|

#### 4.4.1.4 Encoding

The encoding of the flat file is UTF-8 with no Byte Order Mark (BOM).

#### 4.4.1.5 Number of Rows

The number of rows is restricted.

Detailed information:

- Maximum number of rows: 50.000

#### 4.4.1.6 Size limits

In addition to the number of rows, the uploaded file cannot exceed 9 MB.

## 4.5 Format of Structured Files

### 4.5.1 Format of Excel and Flat Files

See chapter 0 for the specification and details of the format types.

### 4.5.2 Technical Prerequisites

#### 4.5.2.1 Record Type Identifier

Prior to the static and dynamic data appears the record type identifier.

| Flat file | Excel Column | Column Name | Format       | Description  | Rules                                   | Occurs per File |
|-----------|--------------|-------------|--------------|--|---|-----------------|
| 1         | A            | Record Type | VARCHAR (50) | Indicates the business function. The required value can be found in the first line of the chapters 4.5.3.1 Party Reference Data - New - 4.5.3.38 DN-BIC Routing. | Occurs in the 2 <sup>nd</sup> row only. | 1..1            |



## 4.5.3 Common Reference Data

### 4.5.3.1 Party Reference Data - New

- Record Type: "Party"

The record is used to create party reference data.

| Flat file       | Excel Column | Column Name             | Format  | Description  | Rules   | Occurs per Record | Occurs per Group |
|-----------------|--------------|-------------------------|---|--|---|-------------------|------------------|
| 2               | B            | Record Id               | NUMERIC (10)  | Unique identifier of the record.   | Must occur in each line of the record.          | 1..n              |                  |
| Group "Party"   |              |                         |   |  |   | 1..1              |                  |
| 3               | C            | Parent BIC              | CHAR (11)   |  |   |                   | 1..1             |
| 4               | D            | Type                    | Possible values: <ul style="list-style-type: none"> <li>PMBK</li> <li>ANSY</li> </ul> | Classification of the party: <ul style="list-style-type: none"> <li>PMBK = Payment bank</li> <li>ANSY = Ancillary System</li> <li>CSDP = CSD Participant</li> <li>ECSD = External CSD</li> </ul> |   |                   | 1..1             |
| 5               | E            | Opening Date            | DATE  | Activation date of a party.  | Must be equal or greater than the current date. |                   | 1..1             |
| 6               | F            | Closing Date            | DATE  | Closing date of the party.   | Must be greater than the Opening Date.          |                   | 0..1             |
| 7               | G            | BIC                     | CHAR (11)   | Party BIC.   |   |                   | 1..1             |
| 8               | H            | Legal Entity Identifier | CHAR(20)  | LEI Code   |   |                   | 0..1             |
| Group "Name"    |              |                         |   |  |   | 1..1              |                  |
| 9               | I            | Long Name               | VARCHAR (350)   | Long name.   |   |                   | 1..1             |
| 10              | J            | Short Name              | VARCHAR (35)  | Short name.  |   |                   | 1..1             |
| Group "Address" |              |                         |   |  |   | 1..1              |                  |
| 1<br>1          | K            | Street                  | VARCHAR (70)  | Name of the street for the address.  |   |                   | 1..1             |
| 1<br>2          | L            | House Number            | VARCHAR (16)  | House number for the address.  |   |                   | 1..1             |
| 1<br>3          | M            | Postal Code             | VARCHAR (16)  | Postal code for the address.   |   |                   | 1..1             |
| 1<br>4          | N            | City                    | VARCHAR (35)  | City for the address.  |   |                   | 1..1             |

|                                     |   |                                       |                           |   |  |       |  |
|-------------------------------------|---|---------------------------------------|---------------------------|---|--|-------|--|
| 15                                  | O | State or Province                     | VARCHAR (35)              | State or the province for the address.  |  |       | 0..1   |
| 16                                  | P | Country Code                          | CHAR (2)                  | Country code of the address.  |  |       | 1..1   |
| Group "Party Technical Address"     |   |                                       |                           |   |  | 1..10 |  |
| 17                                  | Q | Technical Address                     | VARCHAR (256)             | Unique technical address of the party (distinguished name).                   | EPC SCT Instinteroperability character set restriction does not apply                      |       | 1..1   |
| Group "Auto-Collateralisation Rule" |   |                                       |                           |   |  | 0..1  | This group is defined for keeping backward compatibility with T2S. It is not used in TIPS. |
| 18                                  | R | Collateralisation Procedure           | Possible value:<br>• REPO | Type of collateralisation procedure application.<br>Possible value:<br>• REPO | When Type is 'PMBK' the value must be 'REPO'   |       | 1..1   |
| Group "Market-Specific Attributes"  |   |                                       |                           |   |  | 0..10 |  |
| 19                                  | S | Market-Specific Party Attribute Name  | VARCHAR (35)              | Name of the market specific attribute.  | This field is defined for keeping backward compatibility with T2S. It is not used in TIPS. |       | 1..1   |
| 20                                  | T | Market-Specific Party Attribute Value | VARCHAR (350)             | Value of the market specific attribute.                                       | This field is defined for keeping backward compatibility with T2S. It is not used in TIPS. |       | 1..1   |
| Group "Party Restriction List"      |   |                                       |                           |   |  | 0..10 |  |
| 21                                  | U | Restriction Type                      | CHAR (4)                  | List of blocking restrictions.  |  |       | 1..1   |
| 22                                  | V | Restriction Valid From Date           | DATE                      | Valid from date and time of the restriction.                                  | Must be equal or greater than the current date and time.                                   |       | 1..1   |
| 23                                  | W | Restriction Valid From Time           | TIME                      |   |  |       | 1..1   |
| 24                                  | X | Restriction Valid To Date             | DATE                      | Valid to date and time of the restriction.                                    | Date and time must occur together.   |       | 0..1   |
| 25                                  | Y | Restriction Valid To Time             | TIME                      |   |  |       | Must be greater than the Valid From date and time.   |

| Group "Party Contact" |        |                          |               |  |   | 0..10 |      |
|-----------------------|--------|--------------------------|---------------|--|---|-------|------|
| 26                    | Z      | Contact Name             | VARCHAR(140)  | Name of the contact.   |   |       | 1..1 |
| 27                    | A<br>A | Contact Position         | VARCHAR(35)   | Position of the contact.   |   |       | 1..1 |
| 28                    | A<br>B | Valid From               | DATE          | Starting validity date of a contact.                                 | Must be equal or greater than the current date        |       | 1..1 |
| 29                    | A<br>C | Valid To                 | DATE          | Ending validity date of a contact                                    | Must be equal or greater than the Valid From.         |       | 0..1 |
| 30                    | A<br>D | Office Telephone Number  | VARCHAR(35)   | Office telephone number of a contact.                                |   |       | 0..1 |
| 31                    | A<br>E | Mobile Number            | VARCHAR(35)   | Mobile number of a contact.  |   |       | 0..1 |
| 32                    | A<br>F | E-mail address           | VARCHAR(2048) | E-mail address of a contact.   |   |       | 0..1 |
| 33                    | A<br>G | TIPS E2E Checker contact | BOOLEAN       | Flag to identify contacts to be informed of TIPS E2E Checker results | If TRUE, a value must be provided for E-mail address. |       | 1..1 |

#### 4.5.3.2 T2S Party Reference Data - New

- Record Type: "Party"

The record is used to create a T2S party reference data in the proprietary T2S format.

| Flat file                       | Excel Column | Column Name       | Format  | Description   | Rules   | Occurs per Record | Occurs per Group |
|---------------------------------|--------------|-------------------|---|---|---|-------------------|------------------|
| 2                               | B            | Record Id         | NUMERIC (10)  | Unique identifier of the record.  | Must occur in each line of the record.          | 1..n              |                  |
| Group "Party"                   |              |                   |   |   |   | 1..1              |                  |
| 3                               | C            | Parent BIC        | CHAR (11)   |   |   |                   | 1..1             |
| 4                               | D            | Type              | Possible values: <ul style="list-style-type: none"> <li>PMBK</li> <li>CSDP</li> <li>ECSD</li> </ul> | Classification of the party: <ul style="list-style-type: none"> <li>PMBK = Payment bank</li> <li>CSDP = CSD Participant</li> <li>ECSD = External CSD</li> </ul> |   |                   | 1..1             |
| 5                               | E            | Opening Date      | DATE  | Activation date of a party.   | Must be equal or greater than the current date. |                   | 1..1             |
| 6                               | F            | Closing Date      | DATE  | Closing date of the party.  | Must be greater than the Opening Date.          |                   | 0..1             |
| 7                               | G            | BIC               | CHAR (11)   | Party BIC.  |   |                   | 1..1             |
| Group "Name"                    |              |                   |   |   |   | 1..1              |                  |
| 8                               | H            | Long Name         | VARCHAR (350)   | Long name.  |   |                   | 1..1             |
| 9                               | I            | Short Name        | VARCHAR (35)  | Short name.   |   |                   | 1..1             |
| Group "Address"                 |              |                   |   |   |   | 1..1              |                  |
| 10                              | J            | Street            | VARCHAR (70)  | Name of the street for the address.   |   |                   | 1..1             |
| 11                              | K            | House Number      | VARCHAR (16)  | House number for the address.   |   |                   | 1..1             |
| 12                              | L            | Postal Code       | VARCHAR (16)  | Postal code for the address.  |   |                   | 1..1             |
| 13                              | M            | City              | VARCHAR (35)  | City for the address.   |   |                   | 1..1             |
| 14                              | N            | State or Province | VARCHAR (35)  | State or the province for the address.  |   |                   | 0..1             |
| 15                              | O            | Country Code      | CHAR (2)  | Country code of the address.  |   |                   | 1..1             |
| Group "Party Technical Address" |              |                   |   |   |   | 1..10             |                  |

|                                     |   |                                       |                           |   |  |       |      |
|-------------------------------------|---|---------------------------------------|---------------------------|---|--|-------|------|
| 16                                  | P | Technical Address                     | VARCHAR (256)             | Unique technical address of the party (distinguished name).                   | EPC SCT Instinteroperability character set restriction does not apply  |       | 1..1 |
| Group "Auto-Collateralisation Rule" |   |                                       |                           |   | May occur only when Type is 'PMBK'. It is used to provide client-collateralisation service. This group may only be used by NCBS. | 0..1  |      |
| 17                                  | Q | Collateralisation Procedure           | Possible value:<br>• REPO | Type of collateralisation procedure application.<br>Possible value:<br>• REPO | When Type is 'PMBK' the value must be 'REPO'   |       | 1..1 |
| Group "Market-Specific Attributes"  |   |                                       |                           |   |  | 0..10 |      |
| 18                                  | R | Market-Specific Party Attribute Name  | VARCHAR (35)              | Name of the market specific attribute.  | This field is defined for keeping backward compatibility with T2S. It is not used in TIPS.                                       |       | 1..1 |
| 19                                  | S | Market-Specific Party Attribute Value | VARCHAR (350)             | Value of the market specific attribute.                                       | This field is defined for keeping backward compatibility with T2S. It is not used in TIPS.                                       |       | 1..1 |
| Group "Party Restriction List"      |   |                                       |                           |   |  | 0..10 |      |
| 20                                  | T | Restriction Type                      | CHAR (4)                  | List of blocking restrictions.  |  |       | 1..1 |
| 21                                  | U | Restriction Valid From Date           | DATE                      | Valid from date and time of the restriction.                                  | Must be equal or greater than the current date and time.   |       | 1..1 |
| 22                                  | V | Restriction Valid From Time           | TIME                      |   |  |       | 1..1 |
| 23                                  | W | Restriction Valid To Date             | DATE                      | Valid to date and time of the restriction.                                    | Date and time must occur together.   |       | 0..1 |
| 24                                  | X | Restriction Valid To Time             | TIME                      |   |  |       | 0..1 |

#### 4.5.3.3 Technical Address Network Service Link - New

- Record Type: "Technical Address Network Service Link"

The record is used to create a link between a technical address and a network service.

| Flat file                                 | Excel Column | Column Name       | Format        | Description  | Rules  | Occurs per Record | Occurs per Group |
|---|--------------|-------------------|---------------|--|--|-------------------|------------------|
| 2   | B            | Record Id         | NUMERIC (10)  | Unique identifier of the record.                   | Must occur in each line of the record.   | 1..n              |                  |
| Group "Party Identification"              |              |                   |               |  |  | 1..1              |                  |
| 3   | C            | Parent BIC        | CHAR (11)     | BIC of the System Entity responsible for the party |  |                   | 1..1             |
| 4   | D            | Party BIC         | CHAR (11)     | BIC of the party                                   |  |                   | 1..1             |
| Group "Technical Address Network Service" |              |                   |               |  |  | 1..1              |                  |
| 5   | E            | Technical Address | VARCHAR (256) |  | EPC SCT Inst and ISO15022 interoperability character set restrictions do not apply | 1..1              |                  |
| 6   | F            | Network Service   | VARCHAR (35)  |  |  | 1..1              |                  |

#### 4.5.3.4 Additional Party Market Specific Attributes - New

- Record Type: "Party Market Specific Attribute"

The record is used to create additional market specific attributes for an existing party.

Related activities covered:

| Flat file                    | Column Name | Format       | Description  | Rules                                  | Occurs per Record | Occurs per Group |
|------------------------------|-------------|--------------|--|--|-------------------|------------------|
| 2                            | Record Id   | NUMERIC (10) | Unique identifier of the record.                   | Must occur in each line of the record. | 1..n              |                  |
| Group "Party Identification" |             |              |  |  | 1..1              |                  |
| 3                            | Parent BIC  | CHAR (11)    | BIC of the System Entity responsible for the party |  |                   | 1..1             |
| 4                            | Party BIC   | CHAR (11)    | BIC of the party                                   |  |                   | 1..1             |

| Flat file                          |   | Column Name                           | Format        | Description                             | Rules | Occurs per Record | Occurs per Group |
|------------------------------------|---|---------------------------------------|---------------|---|-------|-------------------|------------------|
| Group "Market-Specific Attributes" |   |                                       |               |   |       | 1..10             |                  |
| 5                                  | E | Market-Specific Party Attribute Name  | VARCHAR (35)  | Name of the market specific attribute.  |       |                   | 1..1             |
| 6                                  | F | Market-Specific Party Attribute Value | VARCHAR (350) | Value of the market specific attribute. |       |                   | 1..1             |

#### 4.5.3.5 Securities Account - New

##### I Record Type: "Securities Account"

The record is used to create a securities account.

Related activities covered:

| Flat file                  | Excel | Column Name               | Format  | Description  | Rules                                  | Occurs per Record | Occurs per Group |
|----------------------------|-------|---------------------------|---|--|--|-------------------|------------------|
| 2                          | B     | Record Id                 | NUMERIC (10)  | Unique identifier of the record.   | Must occur in each line of the record. | 1..n              |                  |
| Group "Securities Account" |       |                           |   |  |  | 1..1              |                  |
| 3                          | C     | Securities Account Number | VARCHAR (35)  | Unique securities account number.  |  |                   | 1..1             |
| 4                          | D     | Securities Account Type   | Possible values: <ul style="list-style-type: none"> <li>I CSDM</li> <li>I CSDP</li> <li>I ICSA</li> <li>I TOFF</li> <li>I CSDO</li> <li>I ISSA</li> </ul> | Classification of the securities account: <ul style="list-style-type: none"> <li>I CSDM = CSD mirror account</li> <li>I CSDP = CSD participant account</li> <li>I ICSA = Inter-CSD account</li> <li>I TOFF = T2S technical offset account</li> </ul> |  |                   | 1..1             |

| Flat file              | Excel | Column Name               | Format  | Description  | Rules   | Occurs per Record | Occurs per Group |
|------------------------|-------|---------------------------|---|--|---|-------------------|------------------|
|                        |       |                           |   | <ul style="list-style-type: none"> <li>  CSDO = CSD omnibus account</li> <li>  ISSA = Issuance account</li> </ul>  |   |                   |                  |
| 5                      | E     | Opening Date              | DATE  | Opening date of the securities account.  | Must be equal or greater than the current date. |                   | 1..1             |
| 6                      | F     | Closing Date              | DATE  | Closing date of the securities account.  | Must be greater than the Opening Date.          |                   | 0..1             |
| 7                      | G     | Hold/Release              | Possible values: <ul style="list-style-type: none"> <li>  HOLD</li> <li>  RELE</li> </ul>                 | Default setting for specific settlement instruction related to the securities account: <ul style="list-style-type: none"> <li>  HOLD = Hold</li> <li>  RELE = Release</li> </ul>                   |   |                   | 1..1             |
| 8                      | H     | Negative Position         | BOOLEAN   | <ul style="list-style-type: none"> <li>  true = The securities account can hold a negative position</li> </ul>   |   |                   | 1..1             |
| 9                      | I     | End Investor Account Flag | Possible values: <ul style="list-style-type: none"> <li>  NONE</li> <li>  FOPA</li> <li>  DVFO</li> </ul> | Additional flags for the securities account: <ul style="list-style-type: none"> <li>  NONE = No account allocations</li> <li>  FOPA = FOP account allocations</li> <li>  DVFO = DVP/FOP</li> </ul> |   |                   | 1..1             |
| 10                     | J     | Pricing Scheme            | Possible values: <ul style="list-style-type: none"> <li>  SACC</li> <li>  ISIN</li> </ul>                 | Pricing scheme of the customer: <ul style="list-style-type: none"> <li>  SACC = Securities account</li> <li>  ISIN = Security</li> </ul>   |   |                   | 1..1             |
| Group "Account Holder" |       |                           |   |  |   | 1..1              |                  |



| Flat file  | Excel | Column Name  | Format        | Description   | Rules  | Occurs per Record | Occurs per Group |
|--|-------|--|---------------|---|--|-------------------|------------------|
| 11   | K     | Parent BIC   | CHAR (11)     | Represents the party.                               |  |                   | 1..1             |
| 12   | L     | BIC  | CHAR (11)     | Represents the party.                               |  |                   | 1..1             |
| Group "Market Specific Securities Account Attribute" |       |  |               |   |  | 0..10             |                  |
| 13   | M     | Market-Specific Securities Account Attribute Name  | VARCHAR (35)  | Name of the market specific attribute.              |  |                   | 1..1             |
| 14   | N     | Market-Specific Securities Account Attribute Value | VARCHAR (350) | Value of the market specific attribute.             |  |                   | 1..1             |
| Group "Securities Account Restriction"               |       |  |               |   |  | 0..10             |                  |
| 15   | O     | Restriction Type                                   | CHAR (4)      | Code to identify the restriction.                   |  |                   | 1..1             |
| 16   | P     | Valid From Date                                    | DATE          | Valid from date and time of the securities account. | Must be equal or greater than the current date and time. |                   | 1..1             |
| 17   | Q     | Valid From Time                                    | TIME          |   |  |                   |                  |
| 18   | R     | Valid To Date                                      | DATE          | Valid to date and time of the securities account.   | Must be greater than the Valid From date and time.       |                   | 0..1             |
| 19   | S     | Valid To Time                                      | TIME          |   |  |                   |                  |

#### 4.5.3.5.1 Additional Securities Account Market Specific Attributes - New

##### I Record Type: "Securities Account Market Specific Attribute"

The record is used to create additional market specific attributes for an existing securities account.

Related activities covered:

| Flat file                                 | Excel | Column Name  | Format        | Description                             | Rules                                  | Occurs per Record | Occurs per Group |
|---|-------|--|---------------|---|--|-------------------|------------------|
| 2   | B     | Record Id  | NUMERIC (10)  | Unique identifier of the record.        | Must occur in each line of the record. | 1..n              |                  |
| Group "Securities Account Identification" |       |  |               |   |  | 1..1              |                  |
| 3   | C     | Securities Account Number                          | VARCHAR (35)  |   |  |                   | 1..1             |
| Group "Market-Specific Attributes"        |       |  |               |   |  | 1..10             |                  |
| 4   | D     | Market-Specific Securities Account Attribute Name  | VARCHAR (35)  | Name of the market specific attribute.  |  |                   | 1..1             |
| 5   | E     | Market-Specific Securities Account Attribute Value | VARCHAR (350) | Value of the market specific attribute. |  |                   | 1..1             |

#### 4.5.3.6 Securities - New

##### I Record Type: "Security"

The record is used to create a security.

Related activities covered:

| Flat file          | Excel | Column Name | Format       | Description  | Rules                                  | Occurs per Record | Occurs per Group |
|--------------------|-------|-------------|--------------|--|--|-------------------|------------------|
| 2                  | B     | Record Id   | NUMERIC (10) | Unique identifier of the record.                                   | Must occur in each line of the record. | 1..n              |                  |
| Group "Securities" |       |             |              |  |  | 1..1              |                  |
| 3                  | C     | ISIN        | CHAR (12)    | Actual value for the securities code, (the ISIN for the security). |  |                   | 1..1             |
| 4                  | D     | CFI Code    | CHAR (6)     | Classification of the security according to                        |  |                   | 1..1             |

| Flat file                        | Excel | Column Name                   | Format                               | Description   | Rules   | Occurs per Record | Occurs per Group |
|----------------------------------|-------|-------------------------------|--------------------------------------|---|---|-------------------|------------------|
|                                  |       |                               |                                      | ISO/DIS 10962:2015(E) standard.   |   |                   |                  |
| 5                                | E     | Issue Date                    | DATE                                 | Date from which the settlement is allowed for the security.                         |   |                   | 1..1             |
| 6                                | F     | Maturity Date                 | DATE                                 | Final maturity or expiry date of the security.                                      | Must be equal or greater than the current date. |                   | 0..1             |
| 7                                | G     | Issue Currency                | CHAR (3)                             | Issue currency of a security in the system using ISO 4217 standard.                 |   |                   | 1..1             |
| 8                                | H     | Country of Issuance           | CHAR (2)                             | Country in which the security is issued.  |   |                   | 1..1             |
| Group "Security Name"            |       |                               |                                      |   |   | 1..1              |                  |
| 9                                | I     | Long Name                     | VARCHAR (350)                        | Long description of the security according to ISO 18774 standard Part 1 and Part 2. |   |                   | 1..1             |
| 10                               | J     | Short Name                    | VARCHAR (35)                         | Short description of the security (FIDS) according to ISO 18774 standard.           |   |                   | 1..1             |
| Group "Security Settlement Data" |       |                               |                                      |   |   | 1..1              |                  |
| 11                               | K     | Settlement Type               | Possible values:<br>  UNIT<br>  FAMT | Type of settlement foreseen for the security:<br>  UNIT = Units<br>  FAMT = Nominal |   |                   | 1..1             |
| 12                               | L     | Minimum Settlement Unit       | DEC (14,14)                          | Minimum settlement unit for a security.   |   |                   | 1..1             |
| 13                               | M     | Settlement Multiple for Units | DEC (14,14)                          | Settlement multiple for units.  |   |                   | 1..1             |

| Flat file                          | Excel | Column Name                              | Format        | Description                                | Rules   | Occurs per Record | Occurs per Group |
|------------------------------------|-------|--|---------------|--|---|-------------------|------------------|
| Group "Deviating Settlement Unit"  |       |  |               |  |   | 0..10             |                  |
| 14                                 | N     | Deviating Settlement Unit                | DEC (14,14)   | Deviating settlement unit for a security.  |   |                   | 1..1             |
| Group "Market Specific Attributes" |       |  |               |  |   | 0..10             |                  |
| 15                                 | O     | Market-Specific Security Attribute Name  | VARCHAR (35)  | Name of the market specific attribute.     |   |                   | 1..1             |
| 16                                 | P     | Market-Specific Security Attribute Value | VARCHAR (350) | Value of the market specific attribute.    |   |                   | 1..1             |
| Group "Security Restriction"       |       |  |               |  |   | 0..10             |                  |
| 17                                 | Q     | Restriction Type                         | CHAR (4)      | Reason type applied to the security.       |   |                   | 1..1             |
| 18                                 | R     | Restriction Valid From Date              | DATE          | Valid from date and time of the security.  | Must be equal or greater than the current date and time.    |                   | 1..1             |
| 19                                 | S     | Restriction Valid From Time              | TIME          |  |   |                   |                  |
| 20                                 | T     | Restriction Valid To Date                | DATE          | Valid to date and time of the restriction. | Must be equal or greater than the valid from date and time. |                   | 0..1             |
| 21                                 | U     | Restriction Valid To Time                | TIME          |  |   |                   |                  |

#### 4.5.3.7 Securities Market Specific Attributes - New

Record Type: "Securities Market Specific Attribute"

The record is used for two purposes:

1. to let Security Maintenance Entity create additional market specific attributes for an existing security
2. to let Investor CSDs create their own set of market specific attributes for an existing security

Related activities covered:

| Flat file                          | Excel | Column Name                           | Format        | Description  | Rules                                  | Occurs per Record | Occurs per Group |
|------------------------------------|-------|---------------------------------------|---------------|--|--|-------------------|------------------|
| 2                                  | B     | Record Id                             | NUMERIC (10)  | Unique identifier of the record.                                   | Must occur in each line of the record. | 1..n              |                  |
| Group "Security Identification"    |       |                                       |               |  |  | 1..1              |                  |
| 3                                  | C     | ISIN                                  | CHAR (12)     | Actual value for the securities code, (the ISIN for the security). |  |                   | 1..1             |
| Group "Market-Specific Attributes" |       |                                       |               |  |  | 1..10             |                  |
| 4                                  | D     | Market-Specific Party Attribute Name  | VARCHAR (35)  | Name of the market specific attribute.                             |  |                   | 1..1             |
| 5                                  | E     | Market-Specific Party Attribute Value | VARCHAR (350) | Value of the market specific attribute.                            |  |                   | 1..1             |

#### 4.5.3.8 Investor CSD Security Restrictions - New

##### I Record Type: "Investor CSD Security Restrictions"

The record is used by Investor CSDs to apply restrictions on securities.

Related activities covered:

| Flat file                    | Excel | Column Name      | Format       | Description  | Rules                                  | Occurs per Record | Occurs per Group |
|------------------------------|-------|------------------|--------------|--|--|-------------------|------------------|
| 2                            | B     | Record Id        | NUMERIC (10) | Unique identifier of the record.                                   | Must occur in each line of the record. | 1..n              |                  |
| Group "Securities"           |       |                  |              |  |  |                   |                  |
| 3                            | C     | ISIN             | CHAR (12)    | Actual value for the securities code, (the ISIN for the security). |  |                   | 1..1             |
| Group "Security Restriction" |       |                  |              |  |  | 1..10             |                  |
| 4                            | D     | Restriction Type | CHAR (4)     | List of blocking restrictions.                                     |  |                   | 1..1             |

| Flat file | Excel | Column Name                 | Format | Description                                  | Rules   | Occurs per Record | Occurs per Group |
|-----------|-------|-----------------------------|--------|--|---|-------------------|------------------|
| 5         | E     | Restriction Valid From Date | DATE   | Valid from date and time of the restriction. | Must be equal or greater than the current date and time.    |                   | 1..1             |
| 6         | G     | Restriction Valid From Time | TIME   |  |   |                   | 1..1             |
| 7         | G     | Restriction Valid To Date   | DATE   | Valid to date and time of the restriction.   | Must be equal or greater than the valid from date and time. |                   | 0..1             |
| 8         | H     | Restriction Valid To Time   | TIME   |  |   |                   |                  |

#### 4.5.3.9 CSD Account Link - New

##### I Record Type: "CSD Account Link"

The record is used to create a link between a technical issuer and a CSD account

Related activities covered:

| Flat file                | Excel | Column Name         | Format       | Description                                 | Rules                                  | Occurs per Record | Occurs per Group |
|--------------------------|-------|---------------------|--------------|---|--|-------------------|------------------|
| 2                        | B     | Record Id           | NUMERIC (10) | Unique identifier of the record.            | Must occur in each line of the record. | 1..n              |                  |
| Group "Investor"         |       |                     |              |   |  | 1..1              |                  |
| 3                        | C     | Investor Parent BIC | CHAR (11)    | Parent BIC related to the investor.         |  |                   | 1..1             |
| 4                        | D     | Investor BIC        | CHAR (11)    | BIC related to investor.                    |  |                   | 1..1             |
| Group "Technical Issuer" |       |                     |              |   |  | 1..1              |                  |
| 5                        | E     | Issuer Parent BIC   | CHAR (11)    | Parent BIC related to the technical issuer. |  |                   | 1..1             |
| 6                        | F     | Issuer BIC          | CHAR (11)    | BIC related to the technical issuer.        |  |                   | 1..1             |
| Group "CSD Account Link" |       |                     |              |   |  | 1..1              |                  |

| Flat file | Excel | Column Name                      | Format       | Description                             | Rules   | Occurs per Record | Occurs per Group |
|-----------|-------|----------------------------------|--------------|---|---|-------------------|------------------|
| 7         | G     | Valid From                       | DATE         | Valid from date of the link.            | Must be equal or greater than the current date.                 |                   | 1..1             |
| 8         | H     | Valid To                         | DATE         | Valid to date of the link.              | Must be greater than the Valid From date.                       |                   | 0..1             |
| 9         | I     | CSD Participant Account          | VARCHAR (35) | CSD participant account number.         | Not allowed if "External CSD Participant Account" is specified. |                   | 0..1             |
| 10        | J     | Mirror Account                   | VARCHAR (35) | Mirror account number.                  |   |                   | 0..1             |
| 11        | K     | Inter-CSD Account                | VARCHAR (35) | Inter-CSD account number.               |   |                   | 0..1             |
| 12        | L     | Omnibus Account                  | VARCHAR (35) | Omnibus account number.                 |   |                   | 0..1             |
| 13        | M     | External CSD Participant Account | VARCHAR (35) | External CSD participant account number | Not allowed if "CSD Participant Account" is specified.          |                   | 0..1             |

#### 4.5.3.10 Securities CSD Link - New

##### I Record Type: "Securities CSD Link"

The record is used to create a securities CSD link.

Related activities covered:

| Flat file        | Excel | Column Name | Format       | Description                      | Rules                                 | Occurs per Record | Occurs per Group |
|------------------|-------|-------------|--------------|----------------------------------|---------------------------------------|-------------------|------------------|
| 2                | B     | Record Id   | NUMERIC (10) | Unique identifier of the record. | Must occur in each line of the record | 1..n              |                  |
| Group "CSD Link" |       |             |              |                                  |                                       | 1..1              |                  |
| 3                | C     | ISIN        | CHAR (12)    | ISIN of the security.            |                                       |                   | 1..1             |

| Flat file                | Excel | Column Name                 | Format                               | Description   | Rules   | Occurs per Record | Occurs per Group |
|--------------------------|-------|-----------------------------|--------------------------------------|---|---|-------------------|------------------|
| 4                        | D     | Link Type                   | Possible values:<br>  NVST<br>  ISSR | Possible values:<br>  NVST = Investor<br>  ISSR = Issuer  |   |                   | 1..1             |
| 5                        | E     | Valid From                  | DATE                                 | Valid from date of the securities CSD link.   | Must be equal or greater than the current date.             |                   | 1..1             |
| 6                        | F     | Valid To                    | DATE                                 | Valid to date of the securities CSD link.   | Must be greater than the Valid From date.                   |                   | 0..1             |
| 7                        | G     | Issuer/Investor Parent BIC  | CHAR (11)                            | Issuer / investor parent BIC.   |   |                   | 1..1             |
| 8                        | H     | Issuer/Investor BIC         | CHAR (11)                            | Issuer / investor BIC.  |   |                   | 1..1             |
| 9                        | I     | Security Maintenance        | BOOLEAN                              | 'true' = the involved CSD (issuer / technical issuer / investor) is also the maintainer of the related reference data |   |                   | 1..1             |
| 10                       | J     | Technical Issuer Parent BIC | CHAR (11)                            | Technical issuer parent BIC.  | Both values must occur together.                            |                   | 0..1             |
| 11                       | K     | Technical Issuer BIC        | CHAR (11)                            | Technical issuer BIC.   |   |                   | 0..1             |
| Group "Issuance Account" |       |                             |                                      |   |   | 0..10             |                  |
| 12                       | L     | Issuance Account            | VARCHAR (35)                         | Issuance account number.  |   |                   | 1..1             |
| 13                       | M     | Primary                     | BOOLEAN                              | true = The account is the primary issuance account (the one used for  | At least one and only one issuance account must be primary. |                   | 1..1             |



| Flat file | Excel | Column Name | Format | Description        | Rules | Occurs per Record | Occurs per Group |
|-----------|-------|-------------|--------|--------------------|-------|-------------------|------------------|
|           |       |             |        | realignment chain) |       |                   |                  |

#### 4.5.3.11 CMB Securities Account Links - New

Record Type: "CMB Securities Account Link"

The record is used to create a CMB securities account link.

Related activities covered:

| Flat file            | Excel | Column Name                       | Format       | Description   | Rules   | Occurs per Record | Occurs per Group |
|----------------------|-------|-----------------------------------|--------------|---|---|-------------------|------------------|
| 2                    | B     | Record Id                         | NUMERIC (10) | Unique identifier of the record.                              | Must occur in each line of the record.          | 1..n              |                  |
| Group "Account Link" |       |                                   |              |   |   | 1..1              |                  |
| 3                    | C     | Securities Account Number         | VARCHAR (35) | Number of the related securities account.                     |   |                   | 1..1             |
| 4                    | D     | T2S Dedicated Cash Account Number | VARCHAR (34) | DCA of the CMB the securities account number is linked to     |   |                   | 1..1             |
| 5                    | E     | Valid From                        | DATE         | Valid from date and time of the CMB securities accounts link. | Must be equal or greater than the current date. |                   | 1..1             |
| 6                    | F     | Valid To                          | DATE         | Valid to date and time of the CMB securities accounts link.   | Must be greater than the Valid From date.       |                   | 0..1             |

| Flat file | Excel | Column Name            | Format  | Description   | Rules | Occurs per Record | Occurs per Group |
|-----------|-------|------------------------|---------|---|-------|-------------------|------------------|
| 7         | G     | Default Link           | BOOLEAN | <ul style="list-style-type: none"> <li>true = The T2S dedicated cash account is the default link for the securities account.</li> </ul>   |       |                   | 1..1             |
| 8         | H     | Collateralisation Link | BOOLEAN | <ul style="list-style-type: none"> <li>true = T2S can use the securities, earmarked as collateral and held on the securities account, for auto-collateralisation operations on the T2S dedicated cash account it is linked to.</li> </ul> |       |                   | 1..1             |
| 9         | I     | Cash Settlement Link   | BOOLEAN | <ul style="list-style-type: none"> <li>true = T2S can use the link between the securities account and the T2S dedicated cash account for the settlement of the cash leg of a settlement instruction.</li> </ul>                           |       |                   | 1..1             |

#### 4.5.3.12 User - New

- Record Type: "User"

The record is used to create a user.

| Flat file     | Excel Column | Column Name           | Format        | Description  | Rules  | Occurs per Record | Occurs per Group |
|---------------|--------------|-----------------------|---------------|--|--|-------------------|------------------|
| 2             | B            | Record Id             | NUMERIC (10)  | Unique identifier of the record.   | Must occur in each line of the record.   | 1..n              |                  |
| Group "User"  |              |                       |               |  |  | 1..1              |                  |
| 3             | C            | Login Name            | VARCHAR (35)  | Login name.  |  |                   | 1..1             |
| 4             | D            | Name                  | VARCHAR (127) | Name of the user.  |  |                   | 1..1             |
| 5             | E            | System User Reference | VARCHAR (35)  | System reference of the user.  |  |                   | 1..1             |
| 6             | F            | Lockout From Date     | DATE          | Date and time when the user is locked out from the system.   | Must be equal or greater than the current date and time.<br>Date and time cannot be specified when "Lockout" = false.<br>Date and time are mandatory when "Lockout" = true |                   | 0..1             |
| 7             | G            | Lockout From Time     | TIME          |  |  |                   | 0..1             |
| 8             | H            | Lockout               | BOOLEAN       | <ul style="list-style-type: none"> <li>true = The user cannot enter the system after the Lockout From Date and Time</li> </ul> |  |                   | 1..1             |
| Group "Party" |              |                       |               |  |  | 1..1              |                  |
| 9             | I            | Parent BIC            | CHAR (11)     | Party parent BIC.  |  |                   |                  |
| 10            | J            | BIC                   | CHAR (11)     | Party BIC.   |  |                   | 1..1             |

#### 4.5.3.13 Roles - New

- Record Type: "Role"

The record is used to create a role.

| Flat file    | Excel Column | Column Name      | Format        | Description                      | Rules                                  | Occurs per Record | Occurs per Group |
|--------------|--------------|------------------|---------------|----------------------------------|--|-------------------|------------------|
| 2            | B            | Record Id        | NUMERIC (10)  | Unique identifier of the record. | Must occur in each line of the record. | 1..n              |                  |
| Group "Role" |              |                  |               |                                  |  | 1..1              |                  |
| 3            | C            | Role Name        | VARCHAR (35)  | Name of the role.                |  |                   | 1..1             |
| 4            | D            | Role Description | VARCHAR (127) | Description of the role.         |  |                   | 1..1             |

#### 4.5.3.14 T2S Secured Group - New

- Record Type: "Secured Group"

The record is used to create a T2S secured group in the proprietary T2S format.

Related activities covered:

| Flat file             | Excel Column | Column Name        | Format  | Description   | Rules                                 | Occurs per Record | Occurs per Group |
|-----------------------|--------------|--------------------|---|---|---------------------------------------|-------------------|------------------|
| 2                     | B            | Record Id          | NUMERIC (10)  | Unique identifier of the record.  | Must occur in each line of the record | 1..n              |                  |
| Group "Secured Group" |              |                    |   |   |                                       | 1..1              |                  |
| 3                     | C            | Secured Group Type | Possible values: <ul style="list-style-type: none"> <li>PART</li> <li>SECU</li> <li>SACC</li> <li>CASH</li> </ul> | Classification for the secured group: <ul style="list-style-type: none"> <li>PART = Parties</li> <li>SECU = Securities</li> <li>SACC = Securities Accounts</li> <li>CASH = T2S Dedicated Cash Accounts</li> </ul> |                                       |                   | 1..1             |

| Flat file   | Excel | Column Name                       | Format       | Description  | Rules   | Occurs per Record | Occurs per Group |
|---|-------|-----------------------------------|--------------|--|---|-------------------|------------------|
| Group "Secured Object: Parties"                     |       |                                   |              |  | Occurs only when Secured Group Type is 'Parties'.                     | 0..10             |                  |
| 4   | D     | Parent BIC                        | CHAR (11)    | Parent BIC of the secured party objects.                             |   |                   | 1..1             |
| 5   | E     | BIC                               | CHAR (11)    | BIC of the secured party objects.                                    |   |                   | 1..1             |
| Group "Secured Object: Securities"                  |       |                                   |              |  | Occurs only when Secured Group Type is 'Securities'.                  | 0..10             |                  |
| 6   | F     | ISIN                              | CHAR (12)    | ISIN of the secured security objects.                                |   |                   | 1..1             |
| Group "Secured Object: Securities Accounts"         |       |                                   |              |  | Occurs only when Secured Group Type is 'Securities Accounts'.         | 0..10             |                  |
| 7   | G     | Securities Account Number         | VARCHAR (35) | Securities account number of the secured securities accounts object. |   |                   | 1..1             |
| Group "Secured Object: T2S Dedicated Cash Accounts" |       |                                   |              |  | Occurs only when Secured Group Type is 'T2S Dedicated Cash Accounts'. | 0..10             |                  |
| 8   | H     | T2S Dedicated Cash Account Number | VARCHAR (34) | T2S dedicated cash account number of the secured security objects.   |   |                   | 1..1             |

#### 4.5.3.15 Grant Roles - New

- Record Type: "Grant Role"

The record is used to grant a role to a party and/or a user.

| Flat file  | Excel Column | Column Name | Format       | Description                      | Rules                                  | Occurs per Record | Occurs per Group |
|--|--------------|-------------|--------------|----------------------------------|--|-------------------|------------------|
| 2  | B            | Record Id   | NUMERIC (10) | Unique identifier of the record. | Must occur in each line of the record. | 1..n              |                  |
| Group "Role"   |              |             |              |                                  |  | 1..1              |                  |
| 3  | C            | Role Name   | VARCHAR (35) | Name of the role to be granted.  |  |                   | 1..1             |
| Group "User"   |              |             |              |                                  |  | 0..1              |                  |
| Mandatory if group "Party" is not specified,<br>Not allowed otherwise. |              |             |              |                                  |  |                   |                  |
| 4  | D            | User        | VARCHAR (35) | Login name of the user.          |  |                   | 1..1             |
| Group "Party"  |              |             |              |                                  |  | 0..1              |                  |
| Mandatory if group "User" is not specified.<br>Not allowed otherwise.  |              |             |              |                                  |  |                   |                  |
| 5  | E            | Parent BIC  | CHAR (11)    | Parent BIC of the party.         |  |                   | 1..1             |
| 6  | F            | BIC         | CHAR (11)    | BIC of the party.                |  |                   | 1..1             |

#### 4.5.3.16 Grant System Privilege - New

- Record Type: "Grant System Privilege"

The record is used to grant a system privilege to a role.

| Flat file         | Excel Column | Column Name    | Format       | Description                      | Rules   | Occurs per Record | Occurs per Group |
|-------------------|--------------|----------------|--------------|----------------------------------|---|-------------------|------------------|
| 2                 | B            | Record Id      | NUMERIC (10) | Unique identifier of the record. | Must occur in each line of the record.  | 1..n              |                  |
| Group "Role"      |              |                |              |                                  | One and only one of the groups "Role", "Party" or "User" must occur.<br>If service is not T2S, it is mandatory. | 1                 |                  |
| 3                 | C            | Role Name      | VARCHAR (35) | Name of the role.                |   |                   | 1..1             |
| Group "Party"     |              |                |              |                                  | One and only one of the groups "Role", "Party" or "User" must occur.<br>Usage is reserved for T2S only.         | 0..1              |                  |
| 4                 | D            | Parent BIC     | CHAR (11)    | Parent BIC of the party.         |   |                   | 1..1             |
| 5                 | E            | BIC            | CHAR (11)    | BIC of the party.                |   |                   | 1..1             |
| Group "User"      |              |                |              |                                  | One and only one of the groups "Role", "Party" or "User" must occur.<br>Usage is reserved for T2S only.         | 0..1              |                  |
| 6                 | F            | User           | VARCHAR (35) | Login name of the user.          |   |                   | 1..1             |
| Group "Privilege" |              |                |              |                                  |   | 1..1              |                  |
| 7                 | G            | Privilege Name | VARCHAR (35) | Name of the system privilege.    | EPC SCT Inst and ISO15022 interoperability character set restrictions do not apply                              |                   | 1..1             |

|    |   |                       |         |   |  |  |      |
|----|---|-----------------------|---------|---|--|--|------|
| 8  | H | Deny Option           | BOOLEAN | <ul style="list-style-type: none"> <li>true = The system privilege is explicitly denied</li> <li>false = The system privilege is explicitly assigned</li> </ul>   |  |  | 1..1 |
| 9  | I | 4-Eyes Option         | BOOLEAN | <ul style="list-style-type: none"> <li>true = The 4-eyes principle is required to perform the activity linked to the system privilege</li> <li>false = The 2-eyes principle is required to perform the activity linked to the system privilege</li> </ul>   |  |  | 1..1 |
| 10 | J | Administration Option | BOOLEAN | <ul style="list-style-type: none"> <li>true = If the grantee of the privilege is a user or a role the grantee is allowed to grant the same privilege to another user or role of the same party. If the grantee of the privilege is a party, the party administrators of the grantee party are allowed to grant the same privilege also to other parties.</li> <li>false = If the grantee of the privilege is a user or a role the grantee is not allowed to grant the same privilege to another user or role of the same party. If the grantee of the privilege is a party, the party administrators of the grantee party are allowed to grant the same privilege only to users and roles of the same party.</li> </ul> |  |  | 1..1 |

#### 4.5.3.17 Grant Object Privilege - New

Record Type: "Grant Object Privilege"

The record is used to grant an object privilege to a party, user or role. Except "Secured Group" all secured element types are covered.



The function is available for T2S only.

| Flat file         | Excel | Column Name          | Format   | Description   | Rules  | Occurs per Record | Occurs per Group |
|-------------------|-------|----------------------|--|---|--|-------------------|------------------|
| 2                 | B     | Record Id            | NUMERIC (10)   | Unique identifier of the record.  | Must occur in each line of the record.                               | 1..n              |                  |
| Group "Role"      |       |                      |  |   | One and only one of the groups "Role", "Party" or "User" must occur. | 0..1              |                  |
| 3                 | C     | Role Name            | VARCHAR (35)   | Name of the role.   |  |                   | 1..1             |
| Group "Party"     |       |                      |  |   | One and only one of the groups "Role", "Party" or "User" must occur. | 0..1              |                  |
| 4                 | D     | Parent BIC           | CHAR (11)  | Parent BIC of the party.  |  |                   | 1..1             |
| 5                 | E     | BIC                  | CHAR (11)  | BIC of the party.   |  |                   | 1..1             |
| Group "User"      |       |                      |  |   | One and only one of the groups "Role", "Party" or "User" must occur. | 0..1              |                  |
| 6                 | F     | User                 | VARCHAR (35)   | Login name of the user.   |  |                   | 1..1             |
| Group "Privilege" |       |                      |  |   |  | 1..1              |                  |
| 7                 | G     | Secured Element Type | Possible values:<br>  SYSE<br>  PART<br>  SECU<br>  PAACSACC<br>  CASH | Possible values:<br>  SYSE = System Entity<br>  PART = Party<br>  SECU = Security<br>  PAAC = Party and its accounts<br>  SACC = Securities Account |  |                   | 1..1             |

| Flat file                              | Excel | Column Name                       | Format       | Description                               | Rules   | Occurs per Record | Occurs per Group |
|--|-------|-----------------------------------|--------------|---|---|-------------------|------------------|
|  |       |                                   |              | I CASH = T2S Dedicated Cash Account       |   |                   |                  |
| Group "Party"/"Party and its accounts" |       |                                   |              |   | Occurs only when Secured Element Type is PART (Party) or PAAC (Party and its accounts). | 0..1              |                  |
| 8                                      | H     | Parent BIC                        | CHAR (11)    | Parent BIC of the party.                  |   |                   | 1..1             |
| 9                                      | I     | BIC                               | CHAR (11)    | BIC of the party.                         |   |                   | 1..1             |
| Group "Security"                       |       |                                   |              |   | Occurs only when Secured Element Type is 'Security'.                                    | 0..1              |                  |
| 10                                     | J     | ISIN                              | CHAR (12)    | ISIN of the security.                     |   |                   | 1..1             |
| Group "Securities Account"             |       |                                   |              |   | Occurs only when Secured Element Type is 'Securities Account'.                          | 0..1              |                  |
| 11                                     | K     | Security Account Number           | VARCHAR (35) | Number of the security account.           |   |                   | 1..1             |
| Group "T2S Dedicated Cash Account"     |       |                                   |              |   | Occurs only when Secured Element Type is 'T2S Dedicated Cash Account'.                  | 0..1              |                  |
| 12                                     | L     | T2S Dedicated Cash Account Number | VARCHAR (34) | Number of the T2S dedicated cash account. |   |                   | 1..1             |

| Flat file              | Excel | Column Name           | Format       | Description   | Rules  | Occurs per Record | Occurs per Group |
|------------------------|-------|-----------------------|--------------|---|--|-------------------|------------------|
| Group "System Entity"  |       |                       |              |   | Occurs only when Secured Element Type is SYSE (System Entity)      | 0..1              |                  |
| 13                     | M     | BIC                   | CHAR (11)    | BIC.  |  |                   | 1..1             |
| Group "Administration" |       |                       |              |   |  | 1..1              |                  |
| 15                     | N     | Privilege Name        | VARCHAR (35) | Name of the object privilege.   | ISO15022 interoperability character set restriction does not apply |                   | 1..1             |
| 16                     | O     | Deny Option           | BOOLEAN      | <ul style="list-style-type: none"> <li>  true = The object privilege is explicitly denied</li> <li>  false = The object privilege is explicitly assigned</li> </ul>   |  |                   | 1..1             |
| 17                     | P     | 4-Eyes Option         | BOOLEAN      | <ul style="list-style-type: none"> <li>  true = The 4-eyes principle is required to perform the activity linked to the object privilege</li> <li>  false = The 2-eyes principle is required to perform the activity linked to the object privilege</li> </ul> |  |                   | 1..1             |
| 18                     | Q     | Administration Option | BOOLEAN      | <ul style="list-style-type: none"> <li>  true = If the grantee of the privilege is a user or a role the grantee is allowed to grant the same privilege to another</li> </ul>  |  |                   | 1..1             |

| Flat file | Excel | Column Name | Format | Description   | Rules | Occurs per Record | Occurs per Group |
|-----------|-------|-------------|--------|---|-------|-------------------|------------------|
|           |       |             |        | <p>user or role of the same party. If the grantee of the privilege is a party, the party administrators of the grantee party are allowed to grant the same privilege also to other parties.</p> <p>  false = If the grantee of the privilege is a user or a role the grantee is not allowed to grant the same privilege to another user or role of the same party. If the grantee of the privilege is a party, the party administrators of the grantee party are allowed to grant the same privilege only to users and roles of the same party.</p> |       |                   |                  |

#### 4.5.3.18 Grant Object Privilege (Secured Group) - New

- | Record Type: "Grant Object Privilege (Secured Group)"

The record is used to grant an object privilege to a party, user or role. As secured element type only "Secured Group" is covered. The record does not refer to an existing secured group. Instead, a new secured group is created.

The function is available for T2S only.

| Flat file              | Excel | Column Name              | Format       | Description   | Rules  | Occurs per Record | Occurs per Group |
|------------------------|-------|--------------------------|--------------|---|--|-------------------|------------------|
| 2                      | B     | Record Id                | NUMERIC (10) | Unique identifier of the record.                                | Must occur in each line of the record.                               | 1..n              |                  |
| Group "Role"           |       |                          |              |   | One and only one of the groups "Role", "Party" or "User" must occur. | 0..1              |                  |
| 3                      | C     | Role Name                | VARCHAR (35) | Name of the role.   |  |                   | 1..1             |
| Group "Party"          |       |                          |              |   | One and only one of the groups "Role", "Party" or "User" must occur. | 0..1              |                  |
| 4                      | D     | Parent BIC               | CHAR (11)    | Parent BIC of the party.  |  |                   | 1..1             |
| 5                      | E     | BIC                      | CHAR (11)    | BIC of the party.   |  |                   | 1..1             |
| Group "User"           |       |                          |              |   | One and only one of the groups "Role", "Party" or "User" must occur. | 0..1              |                  |
| 6                      | F     | User                     | VARCHAR (35) | Login name of the user.   |  |                   | 1..1             |
| Group "Secured Group"  |       |                          |              |   |  | 1..1              |                  |
| 7                      | G     | Secured Group Identifier | NUMERIC (9)  | Identifier of the secured group as get from related U2A screen. |  |                   | 1..1             |
| Group "Administration" |       |                          |              |   |  | 1..1              |                  |
| 8                      | H     | Privilege Name           | VARCHAR (35) | Name of the object privilege.                                   | ISO15022 interoperability character set restriction does not apply   |                   | 1..1             |

| Flat file | Excel | Column Name           | Format  | Description   | Rules | Occurs per Record | Occurs per Group |
|-----------|-------|-----------------------|---------|---|-------|-------------------|------------------|
| 9         | I     | Deny Option           | BOOLEAN | <ul style="list-style-type: none"> <li>true = The object privilege is explicitly denied</li> <li>false = The object privilege is explicitly assigned</li> </ul>   |       |                   | 1..1             |
| 10        | J     | 4-Eyes Option         | BOOLEAN | <ul style="list-style-type: none"> <li>true = The 4-eyes principle is required to perform the activity linked to the object privilege</li> <li>false = The 2-eyes principle is required to perform the activity linked to the object privilege</li> </ul>   |       |                   | 1..1             |
| 11        | K     | Administration Option | BOOLEAN | <ul style="list-style-type: none"> <li>true = If the grantee of the privilege is a user or a role the grantee is allowed to grant the same privilege to another user or role of the same party. If the grantee of the privilege is a party, the party administrators of the grantee party are allowed to grant the same privilege also to other parties.</li> <li>false = If the grantee of the privilege is a user or a role the grantee is not allowed to grant the same</li> </ul> |       |                   | 1..1             |

| Flat file | Excel | Column Name | Format | Description   | Rules | Occurs per Record | Occurs per Group |
|-----------|-------|-------------|--------|---|-------|-------------------|------------------|
|           |       |             |        | privilege to another user or role of the same party. If the grantee of the privilege is a party, the party administrators of the grantee party are allowed to grant the same privilege only to users and roles of the same party. |       |                   |                  |

#### 4.5.3.19 Message Subscription Rule Set – New

- Record Type: “Message Subscription Rule Set”

The record is used to create message subscription rule sets and the relationship among the rule set and a list of parties.

| Flat file                             | Excel Column | Column Name                     | Format        | Description   | Rules   | Occurs per Record | Occurs per Group |
|---------------------------------------|--------------|---------------------------------|---------------|---|---|-------------------|------------------|
| 2                                     | B            | Record Id                       | NUMERIC (10)  | Unique identifier of the record.  | Must occur in each line of the record.          | 1..n              |                  |
| Group “Message Subscription Rule Set” |              |                                 |               |   |   | 1..1              |                  |
| 3                                     | C            | Name                            | VARCHAR (35)  | Name of the message subscription rule set.  |   |                   | 1..1             |
| 4                                     | D            | Description                     | VARCHAR (350) | Description of the message subscription rule set.   |   |                   | 1..1             |
| 5                                     | E            | Valid From                      | DATE          | Valid from date of the message subscription rule set.   | Must be equal or greater than the current date. |                   | 1..1             |
| 6                                     | F            | Valid To                        | DATE          | Valid to date of the message subscription rule set.   | Must be greater than the Valid From date.       |                   | 0..1             |
| 7                                     | G            | Positive/Negative Parameter Set | BOOLEAN       | <ul style="list-style-type: none"> <li>true = The message subscription rule set must be used in positive way</li> <li>false = The message subscription rule set must be used in negative way</li> </ul> |   |                   | 1..1             |
| 8                                     | H            | Service Identifier              | CHAR(4)       | Identifier of the Service for which the rule set is active.   |   | 0..1              |                  |
| Group “Interested Party”              |              |                                 |               |   |   | 0..10             |                  |
| 9                                     | I            | Parent BIC                      | CHAR (11)     | Parent BIC of the interested party.   |   |                   | 1..1             |
| 10                                    | J            | Party BIC                       | CHAR (11)     | BIC of the interested party.  |   |                   | 1..1             |

#### 4.5.3.20 T2S Message Subscription Rule Set – New

- Record Type: “Message Subscription Rule Set”

The record is used to create message subscription rule sets and the relationship among the rule set and a list of parties in T2S Proprietary format.



| Flat file                             | Excel Column | Column Name                     | Format        | Description   | Rules   | Occurs per Record | Occurs per Group |
|---------------------------------------|--------------|---------------------------------|---------------|---|---|-------------------|------------------|
| 2                                     | B            | Record Id                       | NUMERIC (10)  | Unique identifier of the record.  | Must occur in each line of the record.          | 1..n              |                  |
| Group "Message Subscription Rule Set" |              |                                 |               |   |   | 1..1              |                  |
| 3                                     | C            | Name                            | VARCHAR (35)  | Name of the message subscription rule set.  |   |                   | 1..1             |
| 4                                     | D            | Description                     | VARCHAR (350) | Description of the message subscription rule set.   |   |                   | 1..1             |
| 5                                     | E            | Valid From                      | DATE          | Valid from date of the message subscription rule set.   | Must be equal or greater than the current date. |                   | 1..1             |
| 6                                     | F            | Valid To                        | DATE          | Valid to date of the message subscription rule set.   | Must be greater than the Valid From date.       |                   | 0..1             |
| 7                                     | G            | Positive/Negative Parameter Set | BOOLEAN       | <ul style="list-style-type: none"> <li>true = The message subscription rule set must be used in positive way</li> <li>false = The message subscription rule set must be used in negative way</li> </ul> |   |                   | 1..1             |
| Group "Interested Party"              |              |                                 |               |   |   | 0..10             |                  |
| 8                                     | H            | Parent BIC                      | CHAR (11)     | Parent BIC of the interested party.   |   |                   | 1..1             |
| 9                                     | I            | Party BIC                       | CHAR (11)     | BIC of the interested party.  |   |                   | 1..1             |

#### 4.5.3.21 Message Subscription Rule - New

- Record Type: "Message Subscription Rule"

The record is used to create message subscription rules connected to an existing message subscription rule set.

| Flat file | Excel Column | Column Name | Format       | Description                      | Rules                                  | Occurs per Record | Occurs per Group |
|-----------|--------------|-------------|--------------|----------------------------------|--|-------------------|------------------|
| 2         | B            | Record Id   | NUMERIC (10) | Unique identifier of the record. | Must occur in each line of the record. | 1..n              |                  |

|   |   |                     |  |   |  |       |      |
|---|---|---------------------|--|---|--|-------|------|
| Group "Message Subscription Rule Set"       |   |                     |  |   |  | 1..1  |      |
| 3   | C | Name                | VARCHAR (35)   | Name of the message subscription rule set.        |  |       | 1..1 |
| Group "Message Subscription Rule"           |   |                     |  |   |  | 1..1  |      |
| 4   | D | Sequence Number     | NUMERIC (9)  | Sequence related to the rule.                     |  |       | 1..1 |
| 5   | E | Valid From          | DATE   | Valid from date of the message subscription rule. | Must be equal or greater than the current date.  |       | 1..1 |
| 6   | F | Valid To            | DATE   | Valid to date of the message subscription rule.   | Must be equal or greater than the valid from date.                                     |       | 0..1 |
| Group "Message Subscription Rule Parameter" |   |                     |  |   | Each Message Subscription Rule may have up to 10 Message Subscription Rule Parameters. | 1..10 |      |
| 7   | G | Group               | VARCHAR (35)   |   |  |       | 1..1 |
| 8   | H | Parameter Type Name | Name of the parameter type to be set for the rule.<br><br>Allowed values for T2S are: <ul style="list-style-type: none"> <li>• INTP (Instruction Type)</li> <li>• MXST (Message Status)</li> <li>• PART (PARTY )</li> <li>• SACC (Securities Account)</li> <li>• ISIN</li> <li>• CASH (T2S DCA)</li> <li>• INST (Instruction Status)</li> <li>• TRCD (Transaction Code)</li> <li>• CURR (Currency)</li> <li>• AMFL (Already</li> </ul> |   |  |       | 1..1 |

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  | <p>Matched Flag)</p> <ul style="list-style-type: none"> <li>• MXID (Message Type)</li> <li>• SECO (Settlement Transaction Condition Code)</li> <li>• BUPA (Business Sending Party)</li> <li>• BUSE (System User Reference)</li> <li>• INPA (Instructing Party)</li> </ul> <p>Allowed values for CLM/RTGS are:</p> <ul style="list-style-type: none"> <li>• MXID (Message Type)</li> <li>• INTP (Instruction Type)</li> <li>• CASH (Cash Account)</li> <li>• CRDB (Debit/Credit Indicator)</li> <li>• MABI (Multi-addressee BIC)</li> <li>• BUCA (Business Case)</li> <li>• PRTY (Priority)</li> <li>• UMTD (Underlying Message Type)</li> </ul> <p>Allowed values for TIPS are:</p> <ul style="list-style-type: none"> <li>• MXID (Message Type)</li> <li>• INTP (Instruction Type)</li> </ul> |  |  |  |  |
|--|--|--|--|--|--|--|--|

|    |   |   |  |                              |  |      |
|----|---|---|--|------------------------------|--|------|
|    |   |   | <ul style="list-style-type: none"> <li>CASH (TIPS Account)</li> <li>CRDB (Debit/Credit Indicator)</li> </ul> |                              |  |      |
| 9  | I | Parameter Type Value                    | VARCHAR (35)   | Value for the parameter type | <p>Mandatory when Parameter Type Name is:</p> <p>INTP, MXST, INST, TRCD, CURR, AMFL, MXID, SECO, BUSE, CRDB, MA BI, BUCA, PRTY, UMTD;</p> <p>not allowed otherwise</p> <p>When Parameter Type Name is "CRDB", possible values are:</p> <p>CRDT – Credit<br/>DBIT – Debit</p> | 0..1 |
| 10 | J | Parameter Parent BIC Identifier         | CHAR(11)   |                              | <p>Mandatory when Parameter Type Name is: PART</p> <p>Not allowed otherwise.</p>   | 0..1 |
| 11 | K | Parameter Party BIC Identifier          | CHAR(11)   |                              | <p>Mandatory when Parameter Type Name is: PART</p> <p>Not allowed otherwise.</p>   | 0..1 |
| 12 | L | Parameter Securities Account Identifier | VARCHAR(35)  |                              | <p>Mandatory when Parameter Type Name is:</p> <p>SACC</p> <p>Not allowed otherwise.</p>  | 0..1 |
| 13 | M | Parameter Securities Identifier         | CHAR(12)   |                              | <p>Mandatory when Parameter Type Name is:</p> <p>ISIN</p> <p>Not allowed otherwise.</p>  | 0..1 |
| 14 | N | Parameter Cash Account Identifier       | VARCHAR(34)  |                              | <p>Mandatory when Parameter Type Name is:</p>  | 0..1 |

|        |   |   |          |  |  |      |
|--------|---|---|----------|--|--|------|
|        |   |   |          |  | CASH<br>Not allowed<br>otherwise.  |      |
| 1<br>5 | O | Parameter<br>Business<br>Sending<br>Parent BIC<br>Identifier  | CHAR(11) |  | Mandatory<br>when<br>Parameter Type<br>Name is:<br>BUPA<br>Not allowed<br>otherwise. | 0..1 |
| 1<br>6 | P | Parameter<br>Business<br>Sending<br>Party BIC<br>Identifier   | CHAR(11) |  | Mandatory<br>when<br>Parameter Type<br>Name is:<br>BUPA<br>Not allowed<br>otherwise. | 0..1 |
| 1<br>7 | Q | Parameter<br>Instructing<br>Party<br>Parent BIC<br>Identifier | CHAR(11) |  | Mandatory<br>when<br>Parameter Type<br>Name is:<br>INPA<br>Not allowed<br>otherwise. | 0..1 |
| 1<br>8 | R | Parameter<br>Instructing<br>Party Party<br>BIC<br>Identifier  | CHAR(11) |  | Mandatory<br>when<br>Parameter Type<br>Name is:<br>INPA<br>Not allowed<br>otherwise. | 0..1 |

#### 4.5.3.22 Restriction Type - New

Record Type: "Restriction Type"

The record is used to create a restriction type.

The function is available for T2S only.

| Flat file                | Excel | Column Name             | Format  | Description   | Rules   | Occurs per Record | Occurs per Group |
|--------------------------|-------|-------------------------|---|---|---|-------------------|------------------|
| 2                        | B     | Record Id               | NUMERIC (10)  | Unique identifier of the record.  | Must occur in each line of the record.          | 1..n              |                  |
| Group "Restriction Type" |       |                         |   |   |   | 1..1              |                  |
| 3                        | C     | Restriction Type        | CHAR(4)   | Restriction type code.  |   |                   | 1..1             |
| 4                        | D     | Description             | VARCHAR (350)   | Description of the restriction type.  |   |                   | 1..1             |
| 5                        | E     | Valid From              | DATE  | Valid from date of the restriction type.  | Must be equal or greater than the current date. |                   | 1..1             |
| 6                        | F     | Valid To                | DATE  | Valid to date of the restriction type.  | Must be greater than the Valid From date.       |                   | 0..1             |
| 7                        | G     | Object Restriction Type | Possible values:<br>  CBAL<br>  XACC<br>  PART<br>  SECU<br>  SACCSPPOS<br>  SETT<br>  INPM<br>  INBM<br>  SYSE<br>  CASH | Possible values:<br>  CBAL = Cash balance<br>  XACC = External RTGS account<br>  PART = Party<br>  SECU = Security<br>  SACC = Securities account<br>  SPOS = Securities position |   |                   | 1..1             |

| Flat file | Excel | Column Name | Format | Description   | Rules | Occurs per Record | Occurs per Group |
|-----------|-------|-------------|--------|---|-------|-------------------|------------------|
|           |       |             |        | <ul style="list-style-type: none"> <li>  SETT = Settlement instruction</li> <li>  INPM = Intra-Position Movement Instructions</li> <li>  INBM = Intra-balance Movement Instructions</li> <li>  SYSE = System entity</li> <li>  CASH = T2S Dedicated cash account</li> </ul> |       |                   |                  |

| Flat file | Excel | Column Name                       | Format   | Description  | Rules   | Occurs per Record | Occurs per Group |
|-----------|-------|-----------------------------------|--|--|---|-------------------|------------------|
| 8         | H     | Restriction Processing Type       | Possible values:<br>  BALA<br>  BLCK<br>  COLL<br>  COSD<br>  VAHO<br>  DELI<br>  REJE<br>  RESE | Possible values:<br>  BALA = Balance Type / Earmarking<br>  BLCK = Blocking<br>  COLL = Collateralized<br>  COSD = CoSD Blocking<br>  VAHO = CSD Validation Hold<br>  DELI = Deliverable<br>  REJE = Rejection<br>  RESE = Reservation |   |                   | 1..1             |
| 9         | I     | Currency                          | CHAR (3)   |  | Must occur when the Restriction Processing Type is 'Earmarking for Auto-collateralization'. |                   | 0..1             |
| 10        | J     | Positive / Negative Parameter Set | BOOLEAN  | true = the restriction is applied if the rules are satisfied..   |   |                   | 1..1             |

#### 4.5.3.23 Restriction Type Rule - New

- | Record Type: "Restriction Type Rule"

The record is used to create a restriction type rule.



The function is available for T2S only.

| Flat file                                | Excel | Column Name                          | Format  | Description                                 | Rules  | Occurs per Record | Occurs per Group |
|--|-------|--------------------------------------|---|---|--|-------------------|------------------|
| 2  | B     | Record Id                            | NUMERIC (10)  | Unique identifier of the record.            | Must occur in each line of the record.   | 1..n              |                  |
| Group "Restriction Type"                 |       |                                      |   |   |  | 1..1              |                  |
| 3  | C     | Restriction Type                     | CHAR(4)   | Restriction type code.                      |  |                   | 1..1             |
| Group "Restriction Type Rule"            |       |                                      |   |   |  | 1..1              |                  |
| 4  | D     | Sequence Number                      | NUMERIC (9)   | Sequence number.                            |  |                   | 1..1             |
| 5  | E     | Valid From                           | DATE  | Valid from date of restriction type rule.   | Must be equal or greater than the current date.  |                   | 1..1             |
| 6  | F     | Valid To                             | DATE  | Valid to date of the restriction type rule. | Must be greater than the Valid From date.  |                   | 0..1             |
| Group " Restriction Type Rule Parameter" |       |                                      |   |   |  | 0..10             |                  |
| 7  | G     | Group                                | VARCHAR (35)  |   |  |                   | 1..1             |
| 8  | H     | Restriction Type Rule Parameter Name | Name of the parameter type to be set for the rule.<br><br>Allowed values are:<br><ul style="list-style-type: none"> <li>  'SMOV' Securities Movement Type</li> <li>  'PMNT' Payment</li> <li>  'TRID' Transaction Identification</li> <li>  'AOPT' Party Type (of the Account Owner)</li> </ul> |   | Mandatory if Market Specific Attribute Name is not used.<br><br>Not allowed otherwise. |                   | 0..1             |

| Flat file | Excel | Column Name                    | Format   | Description                            | Rules  | Occurs per Record | Occurs per Group |
|-----------|-------|--------------------------------|--|--|--|-------------------|------------------|
|           |       |                                | <ul style="list-style-type: none"> <li>  'OBPT' Party Type (of the instr. Party)</li> <li>  'PART' Party</li> <li>  'SECU' Security Identifier</li> <li>  'CNIS' Country of Issuance</li> <li>  'CRDB' Credit Debit Indicator</li> <li>  'BLFR' Balance From</li> <li>  'BLTO' Balance To</li> <li>  'MTST' Matching Status</li> <li>  'SACT' Securities Account</li> <li>  'SETC' Settlement Currency</li> <li>  'CACT' T2S Dedicated Cash Account</li> <li>  'CATP' T2S Dedicated Cash Account Type</li> </ul> |  |  |                   |                  |
| 9         | I     | Market-Specific Attribute Name | VARCHAR (35)   | Name of the market specific attribute. | Mandatory if Restriction Type Rule Parameter Name is not used.<br><br>Not allowed otherwise. |                   | 0..1             |

| Flat file | Excel | Column Name                           | Format       | Description | Rules  | Occurs per Record | Occurs per Group |
|-----------|-------|---------------------------------------|--------------|-------------|--|-------------------|------------------|
| 10        | J     | Restriction Type Rule Parameter Value | VARCHAR (35) |             | Mandatory when Market-Specific Attribute Name is specified or Restriction Type Rule Parameter Name is:<br>SMOV<br>PMNT<br>AOPT<br>OBPT<br>CNIS<br>CRDB<br>BLFR<br>BLTO<br>MTST<br>TRID<br>SETC<br>CATP<br>Not allowed otherwise. |                   | 0..1             |
| 11        | K     | Party Parent BIC Parameter Value      | CHAR(11)     |             | Mandatory when Restriction Type Rule Parameter Name is:<br>PART<br>Not allowed otherwise.  |                   | 0..1             |
| 12        | L     | Party BIC Parameter Value             | CHAR(11)     |             | Mandatory when Restriction Type Rule Parameter Name is:<br>PART  |                   | 0..1             |

| Flat file | Excel | Column Name                            | Format      | Description   | Rules  | Occurs per Record | Occurs per Group |
|-----------|-------|--|-------------|---|--|-------------------|------------------|
|           |       |  |             |   | Not allowed otherwise.   |                   |                  |
| 13        | M     | Securities Parameter Value             | CHAR(12)    |   | Mandatory when Restriction Type Rule Parameter Name is: SECU<br>Not allowed otherwise. |                   | 0..1             |
| 14        | N     | Securities Account Parameter Value     | VARCHAR(35) |   | Mandatory when Restriction Type Rule Parameter Name is: SACT<br>Not allowed otherwise. |                   | 0..1             |
| 15        | O     | Dedicated Cash Account Parameter Value | VARCHAR(34) |   | Mandatory when Restriction Type Rule Parameter Name is: CACT<br>Not allowed otherwise. |                   | 0..1             |
| 16        | P     | Debit                                  | BOOLEAN     | Specifies if the rule applies on the debit leg of the settlement instruction  | Include only if Market-Specific Attribute Name is used                                 |                   | 0..1             |
| 17        | Q     | Credit                                 | BOOLEAN     | Specifies if the rule applies on the credit leg of the settlement instruction | Include only if Market-Specific Attribute Name is used                                 |                   | 0..1             |

#### 4.5.3.24 Conditional Securities Delivery Rule Set - New

Record Type: "CoSD Rule Set"

The record is used to create a conditional securities delivery rule set.

The function is available for T2S only.

| Flat file | Excel | Column Name              | Format        | Description  | Rules   | Occurs per Record | Occurs per Group |
|-----------|-------|--------------------------|---------------|--|---|-------------------|------------------|
| 2         | B     | Record Id                | NUMERIC (10)  | Unique identifier of the record.                                 | Must occur in each line of the record.          | 1..n              |                  |
|           |       |                          |               |  |   | 1..1              |                  |
| 3         | C     | Name                     | VARCHAR (35)  | Name of the conditional securities delivery rule set.            |   |                   | 1..1             |
| 4         | D     | Description              | VARCHAR (350) | Description of the conditional securities delivery rule set.     |   |                   | 1..1             |
| 5         | E     | Administering Parent BIC | CHAR (11)     | BIC of the parent of the administering party.                    |   |                   | 1..1             |
| 6         | F     | Administering Party BIC  | CHAR (11)     | BIC of the administering party                                   |   |                   | 1..1             |
| 7         | G     | Valid From               | DATE          | Valid from date of the conditional securities delivery rule set. | Must be equal or greater than the current date. |                   | 1..1             |

| Flat file | Excel | Column Name              | Format  | Description  | Rules                                     | Occurs per Record | Occurs per Group |
|-----------|-------|--------------------------|---------|--|---|-------------------|------------------|
|           |       |                          |         |  |   |                   |                  |
| 8         | H     | Valid To                 | DATE    | Valid to date of the conditional securities delivery rule set.   | Must be greater than the Valid From date. |                   | 0..1             |
| 9         | I     | Block on Cash Side       | BOOLEAN | <ul style="list-style-type: none"> <li>true = T2S shall block cash when an instruction is marked for conditional delivery</li> </ul>       |   |                   | 1..1             |
| 10        | J     | Block on Securities Side | BOOLEAN | <ul style="list-style-type: none"> <li>true = T2S shall block securities when an instruction is marked for conditional delivery</li> </ul> |   |                   | 1..1             |

#### 4.5.3.25 Conditional Securities Delivery Rule - New

Record Type: "CoSD Rule"

The record is used to create a conditional securities delivery rule.

The function is available for T2S only.

| Flat file  | Excel | Column Name        | Format       | Description                      | Rules                                  | Occurs per Record | Occurs per Group |
|--|-------|--------------------|--------------|----------------------------------|--|-------------------|------------------|
|  |       |                    |              |                                  |  |                   |                  |
| 2  | B     | Record Id          | NUMERIC (10) | Unique identifier of the record. | Must occur in each line of the record. | 1..n              |                  |
| Group "Conditional Securities Delivery Rule Set" |       |                    |              |                                  |  | 1..1              |                  |
| 3  | C     | CoSD Rule Set Name | VARCHAR (35) | Name of the conditional          |  |                   | 1..1             |

| Flat file   | Excel | Column Name   | Format  | Description   | Rules   | Occurs per Record | Occurs per Group |
|---|-------|---|---|---|---|-------------------|------------------|
|   |       |   |   | securities delivery rule set.   |   |                   |                  |
| Group "Conditional Securities Delivery Rule"            |       |   |   |   |   | 1..1              |                  |
| 4   | D     | Sequence Number                                     | NUMERIC (9)   | Sequence related to the rule.   |   |                   | 1..1             |
| 5   | E     | Valid From  | DATE  | Valid from date of the conditional securities delivery rule.  | Must be equal or greater than the current date. |                   | 1..1             |
| 6   | F     | Valid To  | DATE  | Valid to date of the conditional securities delivery rule.  | Must be greater than the Valid From date.       |                   | 0..1             |
| 7   | G     | CoSD Processing                                     | BOOLEAN   | <ul style="list-style-type: none"> <li>  true = The settlement instruction that matches with the rule is to settle conditionally</li> </ul> |   |                   | 1..1             |
| Group "Conditional Securities Delivery Rule Parameters" |       |   |   |   |   | 1..10             |                  |
| 8   | H     | Group   | VARCHAR (35)  |   |   |                   | 1..1             |
| 9   | I     | Conditional Securities Delivery Rule Parameter Name | Name of the parameter type to be set for the rule.<br><br>Allowed values are: <ul style="list-style-type: none"> <li>  ISIN</li> <li>  STCR (Settlement Currency)</li> <li>  CSD</li> </ul> |   |   |                   | 1..1             |

| Flat file | Excel | Column Name | Format  | Description | Rules | Occurs per Record | Occurs per Group |
|-----------|-------|-------------|---|-------------|-------|-------------------|------------------|
|           |       |             | <ul style="list-style-type: none"> <li>  SACC (Securities Account)</li> <li>  COIS (Country of Issuance)</li> <li>  PLSE (Place of Settlement)</li> <li>  ISSU (Issuer CSD in T2S)</li> <li>  DELI (Delivering CSD in T2S)</li> <li>  RECE (Receiving CSD in T2S)</li> <li>  IBIC (BIC of Issuer CSD in T2S)</li> <li>  DBIC (BIC of Delivering CSD in T2S)</li> <li>  RBIC (BIC of Receiving CSD in T2S)</li> <li>  TRCD (ISO transaction code)</li> <li>  SMTP (Securities movement type)</li> <li>  PTPC (Payment type code)</li> <li>  CDND (Credit Debit indicator)</li> </ul> |             |       |                   |                  |



| Flat file | Excel | Column Name  | Format  | Description | Rules  | Occurs per Record | Occurs per Group |
|-----------|-------|--|---|-------------|--|-------------------|------------------|
|           |       |  | I STCC(Settlement transaction condition code) |             |  |                   |                  |
| 10        | J     | Conditional Securities Delivery Rule Parameter Value | VARCHAR (35)                                  |             | Mandatory when Conditional Securities Delivery Rule Parameter Name is:<br>STCR<br>COIS<br>TRCD<br>SMTP<br>PTPC<br>CDND<br>STCC<br>Not allowed otherwise. | 0..1              |                  |
| 11        | K     | Parameter parent BIC Identifier                      | CHAR(11)                                      |             | Mandatory when Conditional Securities Delivery Rule Parameter Name is:<br>CSD<br>PLSE<br>Not allowed otherwise.  | 0..1              |                  |
| 12        | L     | Parameter Party BIC Identifier                       | CHAR(11)                                      |             | Mandatory when Conditional Securities Delivery Rule Parameter Name is:<br>CSD<br>PLSE  | 0..1              |                  |

| Flat file | Excel | Column Name                             | Format      | Description | Rules  | Occurs per Record | Occurs per Group |
|-----------|-------|---|-------------|-------------|--|-------------------|------------------|
|           |       |   |             |             | IBIC<br>DBIC<br>RBIC<br>Not allowed otherwise.   |                   |                  |
| 13        | M     | Parameter Securities Identifier         | CHAR(12)    |             | Mandatory when Conditional Securities Delivery Rule Parameter Name is:<br>ISIN<br>Not allowed otherwise.                 |                   | 0..1             |
| 14        | N     | Parameter Securities Account Identifier | VARCHAR(35) |             | Mandatory when Conditional Securities Delivery Rule Parameter Name is:<br>SACC<br>Not allowed otherwise.                 |                   | 0..1             |
| 15        | O     | Parameter CSD Flag Value                | BOOLEAN     |             | Mandatory when Conditional Securities Delivery Rule Parameter Name is:<br>ISSU<br>DELI<br>RECE<br>Not allowed otherwise. |                   | 0..1             |

#### 4.5.3.26 Report Configuration - New

- Record Type: "Report Configuration"

The record is used to create a report configuration.

| Flat file                    | Excel Column | Column Name               | Format  | Description  | Rules                                  | Occurs per Record | Occurs per Group |
|------------------------------|--------------|---------------------------|---|--|--|-------------------|------------------|
| 2                            | B            | Record Id                 | NUMERIC (10)  | Unique identifier of the record.   | Must occur in each line of the record. | 1..n              |                  |
| Group "Report Configuration" |              |                           |   |  |  | 1..1              |                  |
| 3                            | C            | Configuration Name        | VARCHAR (35)  | Name of the report configuration.  |  |                   | 1..1             |
| 4                            | D            | Configuration Description | VARCHAR (350)   | Description of the report configuration.   |  |                   | 1..1             |
| 5                            | E            | Delta Mode                | BOOLEAN   | <ul style="list-style-type: none"> <li>true = The recipient gets the report in delta mode</li> <li>false = The recipient gets the report in full mode</li> </ul> |  |                   | 1..1             |
| 6                            | F            | Report Name               | Possible values:<br>T2S Report Types <ul style="list-style-type: none"> <li>Statement of Holdings</li> <li>Statement of Transactions</li> <li>Statement of Pending Instructions</li> <li>Statement of Settlement Allegements</li> <li>Statement of Accounts</li> <li>SD Party Statement</li> <li>SD Securities Statement</li> <li>SD Securities Accounts Statement</li> <li>SD T2S DCA Statement</li> <li>Current Business Day Cash Forecast</li> <li>Next Business Day Cash Forecast</li> <li>Executed AI on Cash</li> </ul> | Name of the report type.   |  |                   | 1..1             |

|   |   |                                   |  |   |                                   |  |      |
|---|---|-----------------------------------|--|---|-----------------------------------|--|------|
|   |   |                                   | <ul style="list-style-type: none"> <li>• Executed AI on Securities</li> <li>• Executed CI on Cash</li> <li>• Executed CI on Securities</li> <li>• Pending AI on Cash</li> <li>• Pending AI on Securities</li> <li>• Pending CI on Cash</li> <li>• Pending CI on Securities</li> <li>• Pending Restrictions on Cash</li> <li>• Pending Restrictions on Securities</li> <li>• Settled Restrictions on Cash</li> <li>• Settled Restrictions on Securities</li> </ul> <p>TIPS Report Types:</p> <ul style="list-style-type: none"> <li>• TIPS Statement of Accounts</li> <li>• TIPS Statement of Account Turnover</li> <li>• TIPS Directory</li> <li>• TIPS Directory Update</li> <li>• MPL Repository Maintenance Report</li> </ul> <p>CLM Report Types:</p> <ul style="list-style-type: none"> <li>• CLM Statement of Accounts</li> <li>• CLM Repository</li> <li>• CLM Repository Update</li> </ul> <p>RTGS Report Types:</p> <ul style="list-style-type: none"> <li>• RTGS Statement of Accounts</li> <li>• RTGS Directory</li> <li>• RTGS Directory Update</li> </ul> |   |                                   |  |      |
| 7 | G | System Entity Wide Reporting Flag | BOOLEAN  | <ul style="list-style-type: none"> <li>• true = System entity wide reporting</li> </ul> |                                   |  | 1..1 |
| 8 | H | Frequency                         | DECIMAL (2,0)  | Frequency in hours for the generation of the delta reports                              | Mandatory when Delta Mode = true. |  | 0..1 |

|   |   |                     |             |   |  |       |      |
|---|---|---------------------|-------------|---|--|-------|------|
|   |   |                     |             |   | Not allowed otherwise.   |       |      |
| 9                                       | I | Cash Account Number | VARCHAR(34) | Number of the Cash Account linked to the Report Configuration.  | Only allowed for T2 RTGS and T2 CLM Reports.<br><br>Not allowed otherwise.<br><br>Field is used by DMT to retrieve the account identifier for backend processing .                           |       | 0..1 |
| Group "Report Configuration Party Link" |   |                     |             |   |  | 0..10 |      |
| 10                                      | J | Parent BIC          | CHAR (11)   | Parent BIC of the linked party.   |  |       | 1..1 |
| 11                                      | K | Party BIC           | CHAR (11)   | Party BIC of the linked party.  |  |       | 1..1 |
| 12                                      | L | Push Mode           | BOOLEAN     | <ul style="list-style-type: none"> <li>true = The recipient gets the report in push mode</li> <li>false = The recipient gets the report in pull mode</li> </ul> | Only allowed value in TIPS is "true".  |       | 1..1 |
| 13                                      | M | Execution Time      | TIME        | Time of the execution of the report.  | Not allowed for TIPS Reports, CLM Repository , CLM Repository update, RTGS Directory and RTGS Directory update, RTGS Statement of Accounts or CLM Statement of Accounts. Mandatory otherwise |       | 0..1 |

|    |   |            |          |  |   |  |      |
|----|---|------------|----------|--|---|--|------|
|    |   |            |          |  | unless Event Type is used.  |  |      |
| 14 | N | Event Type | CHAR (4) | Code of the event type that triggers the report. | Not allowed for TIPS Reports, CLM Repository, CLM Repository update, RTGS Directory and RTGS Directory update. Mandatory otherwise unless Execution Time is used. |  | 0..1 |
| 15 | O | Valid From | DATE     | Starting date for the validity period.           | Must be equal or greater than the current date.   |  | 1..1 |
| 16 | P | Valid To   | DATE     | Ending date for the validity period.             | Must be greater than the Valid From date.   |  | 0..1 |
| 17 | Q | Currency   | CHAR(3)  | Currency linked to the Report Configuration      | Not allowed if Event Type is not filled in.   |  | 0..1 |

#### 4.5.3.27 T2S Report Configuration - New

- Record Type: "Report Configuration"

The record is used to create a report configuration in the proprietary T2S format.

| Flat file                    | Excel Column | Column Name | Format       | Description                      | Rules                                  | Occurs per Record | Occurs per Group |
|------------------------------|--------------|-------------|--------------|----------------------------------|--|-------------------|------------------|
| 2                            | B            | Record Id   | NUMERIC (10) | Unique identifier of the record. | Must occur in each line of the record. | 1..n              |                  |
| Group "Report Configuration" |              |             |              |                                  |  | 1..1              |                  |

|   |   |                           |  |  |  |  |      |
|---|---|---------------------------|--|--|--|--|------|
| 3 | C | Configuration Name        | VARCHAR (35)   | Name of the report configuration.  |  |  | 1..1 |
| 4 | D | Configuration Description | VARCHAR (350)  | Description of the report configuration.   |  |  | 1..1 |
| 5 | E | Delta Mode                | BOOLEAN  | <ul style="list-style-type: none"> <li>true = The recipient gets the report in delta mode</li> <li>false = The recipient gets the report in full mode</li> </ul> |  |  | 1..1 |
| 6 | F | Report Name               | Possible values: <ul style="list-style-type: none"> <li>Statement of Holdings</li> <li>Statement of Transactions</li> <li>Statement of Pending Instructions</li> <li>Statement of Settlement Allegements</li> <li>Statement of Accounts</li> <li>SD Party Statement</li> <li>SD Securities Statement</li> <li>SD Securities Accounts Statement</li> <li>SD T2S DCA Statement</li> <li>Current Business Day Cash Forecast</li> <li>Next Business Day Cash Forecast</li> <li>Executed AI on Cash</li> <li>Executed AI on Securities</li> <li>Executed CI on Cash</li> <li>Executed CI on Securities</li> <li>Pending AI on Cash</li> <li>Pending AI on Securities</li> <li>Pending CI on Cash</li> <li>Pending CI on Securities</li> <li>Pending Restrictions on Cash</li> <li>Pending Restrictions on Securities</li> <li>Settled Restrictions on Cash</li> </ul> | Name of the report type.   |  |  | 1..1 |

|   |   |                                   |                                      |   |  |       |      |
|---|---|-----------------------------------|--------------------------------------|---|--|-------|------|
|   |   |                                   | • Settled Restrictions on Securities |   |  |       |      |
| 7                                       | G | System Entity Wide Reporting Flag | BOOLEAN                              | <ul style="list-style-type: none"> <li>true = System entity wide reporting</li> </ul>   |  |       | 1..1 |
| Group "Report Configuration Party Link" |   |                                   |                                      |   |  | 0..10 |      |
| 8                                       | H | Parent BIC                        | CHAR (11)                            | Parent BIC of the linked party.   |  |       | 1..1 |
| 9                                       | I | Party BIC                         | CHAR (11)                            | Party BIC of the linked party.  |  |       | 1..1 |
| 10                                      | J | Push Mode                         | BOOLEAN                              | <ul style="list-style-type: none"> <li>true = The recipient gets the report in push mode</li> <li>false = The recipient gets the report in pull mode</li> </ul> |  |       | 1..1 |
| 11                                      | K | Execution Time                    | TIME                                 | Time of the execution of the report.  | Mandatory if Event Type is not specified. Not allowed otherwise.     |       | 0..1 |
| 12                                      | L | Event Type                        | CHAR (4)                             | Code of the event type that triggers the report.  | Mandatory if Execution Time is not specified. Not allowed otherwise. |       | 0..1 |
| 13                                      | M | Valid From                        | DATE                                 | Starting date for the validity period.  | Must be equal or greater than the current date.                      |       | 1..1 |
| 14                                      | N | Valid To                          | DATE                                 | Ending date for the validity period.  | Must be greater than the Valid From date.                            |       | 0..1 |
| 15                                      | O | Currency                          | CHAR(3)                              | Currency linked to the Report Configuration   | Not allowed if Event Type is not filled in.                          |       | 0..1 |

#### 4.5.3.28 Eligible Counterpart CSD - New

Record Type: "Eligible Counterpart CSD"



The record is used to create an eligible counterpart CSD.

The function is available for T2S only.

| Flat file                        | Excel | Column Name                         | Format                     | Description                                 | Rules   | Occurs per Record | Occurs per Group |
|----------------------------------|-------|-------------------------------------|----------------------------|---|---|-------------------|------------------|
| 2                                | B     | Record Id                           | NUMERIC (10)               | Unique identifier of the record.            | Must occur in each line of the record.          | 1..n              |                  |
| 3                                | C     | Valid From                          | DATE                       | Valid from date.                            | Must be equal or greater than the current date. |                   | 1..1             |
| 4                                | D     | Valid To                            | DATE                       | Valid to date.                              | Must be greater than the Valid From date.       |                   | 0..1             |
| Group "Investor"                 |       |                                     |                            |   |   | 1..1              |                  |
| 5                                | E     | Investor Parent BIC                 | CHAR (11)                  | Parent BIC of the investor.                 |   |                   | 1..1             |
| 6                                | F     | Investor BIC                        | CHAR (11)                  |   |   |                   | 1..1             |
| Group "Eligible Counterpart CSD" |       |                                     |                            |   |   | 1..1              |                  |
| 7                                | G     | Eligible counterpart CSD Parent BIC | CHAR (11)                  | Parent BIC of the eligible counterpart CSD. |   |                   | 1..1             |
| 8                                | H     | Eligible counterpart CSD BIC        | CHAR (11)                  |   |   |                   | 1..1             |
| Group "Eligibility Type"         |       |                                     |                            |   |   | 1..1              |                  |
| 9                                | I     | Eligibility Type                    | Possible values:<br>  SECU | Possible values:<br>  SECU = Securities     |   |                   | 1..1             |

| Flat file | Excel | Column Name       | Format   | Description   | Rules   | Occurs per Record | Occurs per Group |
|-----------|-------|-------------------|--|---|---|-------------------|------------------|
|           |       |                   | <ul style="list-style-type: none"> <li>  CTRY</li> <li>  ISCS</li> </ul> | <ul style="list-style-type: none"> <li>  CTRY = Country</li> <li>  ISCS = Issuer CSD</li> </ul> |   |                   |                  |
| 10        | J     | ISIN              | CHAR (12)  | Security identification.  | Must occur if Eligibility Type is 'Securities'. Otherwise the cell must be empty. |                   | 0..1             |
| 11        | K     | Country code      | CHAR (2)   |   | Must occur if Eligibility Type is 'Country'. Otherwise the cell must be empty.    |                   | 0..1             |
| 12        | L     | Issuer Parent BIC | CHAR (11)  | External issuer.  | Must occur if Eligibility Type is 'Issuer CSD'. Otherwise the cell must be empty. |                   | 0..1             |
| 13        | M     | Issuer BIC        | CHAR (11)  |   |   |                   |                  |

#### 4.5.3.29 Certificate Distinguished Name

- Record Type: "Certificate DN"

The record is used to create a certificate distinguished name.

| Flat file | Excel Column | Column Name                    | Format        | Description                      | Rules  | Occurs per Record | Occurs per Group |
|-----------|--------------|--------------------------------|---------------|----------------------------------|--|-------------------|------------------|
| 2         | B            | Record Id                      | NUMERIC (10)  | Unique identifier of the record. |  | 1..1              |                  |
| 3         | C            | Certificate Distinguished Name | VARCHAR (256) |                                  | EPC SCT Inst and ISO15022 interoperability character set restrictions do not apply | 1..1              |                  |

#### 4.5.3.30 User Certificate Distinguished Name Link

- Record Type: "User Certificate DN Link"

The record is used to create a link between a Certificate DN and a User.

| Flat file | Excel Column | Column Name                    | Format        | Description                      | Rules  | Occurs per Record | Occurs per Group |
|-----------|--------------|--------------------------------|---------------|----------------------------------|--|-------------------|------------------|
| 2         | B            | Record Id                      | NUMERIC (10)  | Unique identifier of the record. |  | 1..1              |                  |
| 3         | C            | Certificate Distinguished Name | VARCHAR (256) |                                  | EPC SCT Inst and ISO15022 Interoperability character set restrictions do not apply | 1..1              |                  |
| 4         | D            | Login Name                     | VARCHAR (35)  | User's login name.               |  | 1..1              |                  |
| 5         | E            | Default                        | BOOLEAN       |                                  |  | 1..1              |                  |
| 6         | F            | Main User                      | BOOLEAN       | Link for enabling user in TIPS   | Field not available for T2S function.  | 0..1              |                  |

#### 4.5.3.31 Restrictions on Securities Account – New

The function is available for T2S only.

|  | Excel Column | Column Name                 | Format       | Description                                  | Rules   | Occurs per Record | Occurs per Group |
|--|--------------|-----------------------------|--------------|--|---|-------------------|------------------|
| 2                                      | B            | Record Id                   | NUMERIC (10) | Unique identifier of the record.             | Must occur in each line of the record.  | 1..n              |                  |
| Group "Securities Account"             |              |                             |              |  |   | 1..1              |                  |
| 3                                      | C            | Securities Account Number   | VARCHAR (35) | Unique securities account number.            |   |                   | 1..1             |
| Group "Securities Account Restriction" |              |                             |              |  |   | 1..10             |                  |
| 4                                      | D            | Restriction Type            | CHAR (4)     | Code of the restriction to be applied.       |   |                   | 1..1             |
| 5                                      | E            | Restriction Valid From Date | DATE         | Valid from date and time of the restriction. | It is optional in case of immediate removal of restrictions.<br>Must be equal to or greater than the current date and time, except for the immediate setup of restrictions.<br>In this case the value is "1000-01-01 00:01:00". |                   | 0..1             |
| 6                                      | G            | Restriction Valid From Time | TIME         |  |   |                   | 0..1             |
| 7                                      | G            | Restriction Valid To Date   | DATE         | Valid to date and time of the restriction.   | Must be equal to or greater than the valid from date and time, except for the immediate removal of restrictions. In this case the   |                   | 0..1             |
| 8                                      | H            | Restriction Valid To Time   | TIME         |  |   |                   | 0..1             |

|  | Excel Column | Column Name | Format | Description | Rules                           | Occurs per Record | Occurs per Group |
|--|--------------|-------------|--------|-------------|---------------------------------|-------------------|------------------|
|  |              |             |        |             | value is "9999-12-31 23:59:00". |                   |                  |

#### 4.5.3.32 Restrictions on T2S Dedicated Cash Accounts – New

|  | Excel Column | Column Name                       | Format       | Description                                  | Rules                                  | Occurs per Record | Occurs per Group |
|--|--------------|-----------------------------------|--------------|--|--|-------------------|------------------|
| 2  | B            | Record Id                         | NUMERIC (10) | Unique identifier of the record.             | Must occur in each line of the record. | 1..n              |                  |
| Group "T2S Dedicated Cash Account"             |              |                                   |              |  |  | 1..1              |                  |
| 3  | C            | T2S Dedicated Cash Account Number | VARCHAR (34) | Unique T2S Dedicated Cash Account number.    |  |                   | 1..1             |
| Group "T2S Dedicated Cash Account Restriction" |              |                                   |              |  |  | 1..10             |                  |
| 4  | D            | Restriction Type                  | CHAR (4)     | Code of the restriction to be applied.       |  |                   | 1..1             |
| 5  | E            | Restriction Valid From Date       | DATE         | Valid from date and time of the restriction. | It is optional in case of immediate    |                   | 0..1             |

|   | Excel Column | Column Name                 | Format | Description                                | Rules   | Occurs per Record | Occurs per Group |
|---|--------------|-----------------------------|--------|--|---|-------------------|------------------|
| 6 | G            | Restriction Valid From Time | TIME   |  | removal of restrictions.<br><br>Must be equal to or greater than the current date and time, except for the immediate setup of restrictions.<br><br>In this case the value is "1000-01-01 00:01:00". |                   | 0..1             |
| 7 | G            | Restriction Valid To Date   | DATE   | Valid to date and time of the restriction. | Must be equal to or greater than the valid from date and time, except for the immediate removal of restrictions. In this case the value is "9999-12-31 23:59:00".                                   |                   | 0..1             |
| 8 | H            | Restriction Valid To Time   | TIME   |  |   |                   | 0..1             |

#### 4.5.3.33 Euro Foreign Exchange Reference Rate – New

Record Type: "Euro Foreign Exchange Reference Rate"

This record is used to create a Euro Foreign Exchange Reference Rate used to perform the daily computation of cash penalties.

The function is available for T2S only.

| Flat file                                    | Excel | Column Name         | Format       | Description                              | Rules                                  | Occurs per Record | Occurs per Group |
|--|-------|---------------------|--------------|--|--|-------------------|------------------|
| 2  | B     | Record Id           | NUMERIC (10) | Unique identifier of the record.         | Must occur in each line of the record. | 1..1              |                  |
| Group "Euro Foreign Exchange Reference Rate" |       |                     |              |  |  | 1..1              |                  |
| 3  | C     | Currency Code       | CHAR(3)      | Currency for which the rate is provided. |  |                   | 1..1             |
| 4  | D     | Daily Exchange Rate | DEC(14,5)    | Actual rate.                             |  |                   | 1..1             |
| 5  | E     | Exchange Rate Date  | DATE         | Date for which the rate is provided      |  |                   | 1..1             |

#### 4.5.3.34 Cash Account

- Record Type: "Cash Account"

The record is used to create a Cash Account.

| Flat file | Excel Column | Column Name         | Format   | Description   | Rules  | Occurs per Record | Occurs per Group |
|-----------|--------------|---------------------|--|---|--|-------------------|------------------|
| 2         | B            | Record Id           | NUMERIC (10)   | Unique identifier of the record.  |  | 1..1              |                  |
| 3         | C            | Cash Account Number | VARCHAR (34)   | Unique number of the Cash Account   | No leading and trailing space char allowed   | 1..1              |                  |
| 4         | D            | Currency Code       | CHAR (3)   | Currency of the Cash Account  | This field is not allowed if the Account Type is "TIPS Credit Memorandum Balance".<br><br>It is mandatory otherwise. | 0..1              |                  |
| 5         | E            | Account Type        | Possible values:<br><ul style="list-style-type: none"> <li>CSHA</li> <li>NCBA</li> <li>RTGS</li> <li>TACC</li> </ul> | Possible values:<br><br>T2S Account Types:<br>CSHA : T2S Dedicated Cash Account |  | 1..1              |                  |

|  |  |  |  |   |  |  |  |
|--|--|--|--|---|--|--|--|
|  |  |  | <ul style="list-style-type: none"> <li>• TCMB</li> <li>• TTAC</li> <li>• TAST</li> <li>• RDCA</li> <li>• RSAA</li> <li>• RCBA</li> <li>• RTAC</li> <li>• AGAC</li> <li>• ATEC</li> <li>• CMCA</li> <li>• ONDP</li> <li>• MGLD</li> <li>• CCAC</li> <li>• CECB</li> <li>• CEMA</li> <li>• CTTS</li> <li>• CTTI</li> <li>• CTRT</li> <li>• CTEC</li> <li>• ECCB</li> <li>• ECCA</li> <li>• ECTA</li> <li>• ECTR</li> </ul> | <p>NCBA : T2S Central Bank Account</p> <p>RTGS ; T2S Dedicatd Transit Account</p> <p>TIPS Account Types:</p> <p>TACC : TIPS Account</p> <p>TCMB : TIPS Credit Memorandum Balance</p> <p>TTAC : TIPS Transit Account</p> <p>TAST: TIPS AS Technical Account</p> <p>RTGS Account Types:</p> <p>RDCA : RTGS Dedicated Cash Account</p> <p>RSAA : RTGS Sub-Account</p> <p>RCBA: RTGS Central Bank Account</p> <p>RTAC : RTGS Dedicated Transit Account</p> <p>AGAC : Ancillary System Guarantee Funds Account</p> <p>ATEC : Ancillary System Technical Account</p> <p>CLM Account Types:</p> <p>CMCA : Main Cash Account</p> <p>ONDP : Overnight Deposit Account</p> <p>MGLD : Marginal Lending Account</p> <p>CCAC : CLM Central Bank Account</p> <p>CECB : Central Bank ECB Account</p> <p>CEMA : ECB Mirror Account</p> <p>CTTS : CLM Dedicated Transit Account for T2S</p> <p>CTTI : CLM Dedicated Transit Account for TIPS</p> <p>CTRT : CLM Dedicated Transit Account for RTGS</p> <p>CTEC: CLM Technical Account for ECONSII</p> <p>ECONS II Account Types:</p> <p>ECCB : CB Contingency Account</p> |  |  |  |
|--|--|--|--|---|--|--|--|



|    |   |                             |              |   |   |      |  |
|----|---|-----------------------------|--------------|---|---|------|--|
|    |   |                             |              | ECCA : Contingency Cash Account<br>ECTA : Contingency Technical Account<br>ECTR : Contingency Transit Account |   |      |  |
| 6  | F | Opening Date                | DATE         | Opening date of the Cash Account  |   | 1..1 |  |
| 7  | G | Closing Date                | DATE         | Closing date of the Cash Account  |   | 0..1 |  |
| 8  | H | Floor Notification Amount   | DEC (13,5)   | Threshold for floor notifications   | This field is only allowed for<br>- all T2S account types<br>- all TIPS account types<br>- RTGS DCAs<br>- RTGS CB Accounts<br>- Main Cash Accounts<br>- CLM CB Accounts | 0..1 |  |
| 9  | I | Ceiling Notification Amount | DEC (13,5)   | Threshold for ceiling notifications   | This field is only allowed for<br>- all T2S account types<br>- all TIPS account types<br>- RTGS DCAs<br>- RTGS CB Accounts<br>- Main Cash Accounts<br>- CLM CB Accounts | 0..1 |  |
| 10 | J | Parent BIC                  | CHAR (11)    | Parent BIC of the account owner   |   | 1..1 |  |
| 11 | K | BIC                         | CHAR (11)    | BIC of the account owner  |   | 1..1 |  |
| 12 | L | Linked Account              | VARCHAR (34) | Linked Cash Account   | This field is mandatory if the Account Type is T2S Dedicated Transit Account, T2S Central Bank Account, T2S Dedicated Cash Account, TIPS Credit Memorandum Balance      | 0..1 |  |

|        |   |                     |  |   |  |  |  |
|--------|---|---------------------|--|---|--|--|--|
|        |   |                     |  |   | <p>, RTGS Sub-Account, Contingency Cash Account, Contingency Technical Account, CB Contingency Account, ECB Mirror Account.</p> <p>It is optional if the Account Type is Overnight Deposit Account, Marginal Lending Account or RTGS Dedicated Cash Account.</p> <p>It is not allowed otherwise.</p>   |  |  |
| 1<br>3 | M | Linked Account Type | <p>Possible values:</p> <ul style="list-style-type: none"> <li>CASH</li> <li>EXTA</li> </ul> | <p>Possible values:</p> <ul style="list-style-type: none"> <li>- CASH (Cash Account)</li> <li>- EXTA (External RTGS Account)</li> </ul> | <p>This field is mandatory if the Account Type is T2S Dedicated Transit Account, T2S Central Bank Account, T2S Dedicated Cash Account, TIPS Credit Memorandum Balance, RTGS Sub-Account, ECB Mirror Account, Contingency Cash Account, Contingency Technical Account, CB Contingency Account.</p> <p>It is optional if the Account Type is Overnight Deposit Account, Marginal Lending Account or RTGS</p> |  |  |

|   |   |   |            |  |  |       |      |
|---|---|---|------------|--|--|-------|------|
|   |   |   |            |  | Dedicated Cash Account.<br><br>It is not allowed otherwise.                              |       |      |
| Group "Cash Account Restriction List"   |   |   |            |  |  | 0..10 |      |
| 14                                      | N | Restriction Type                                | CHAR (4)   | List of blocking restrictions.   |  |       | 1..1 |
| 15                                      | O | Restriction Valid From Date                     | DATE       | Valid from date and time of the restriction.   | Must be equal or greater than the current date and time.                                 |       | 1..1 |
| 16                                      | P | Restriction Valid From Time                     | TIME       |  |  |       | 1..1 |
| 17                                      | Q | Restriction Valid To Date                       | DATE       | Valid to date and time of the restriction.   | Date and time must occur together.<br>Must be greater than the Valid From date and time. |       | 0..1 |
| 18                                      | R | Restriction Valid To Time                       | TIME       |  |  |       | 0..1 |
| Group "Account Threshold Configuration" |   |   |            |  |  | 0..1  |      |
| 19                                      | S | Target Amount After Breaching Floor             | DEC (13,5) | Amount to reach with automated liquidity transfer.   | This field is only allowed if "Floor Notification Amount" is used.                       |       | 0..1 |
| 20                                      | T | Target Amount After Breaching Ceiling           | DEC (13,5) | Amount to reach with automated liquidity transfer.   | This field is only allowed if "Ceiling Notification Amount" is used.                     |       | 0..1 |
| 21                                      | U | Associated LT Account                           | CHAR (34)  | Account used for automated liquidity transfers and rule-based liquidity transfers in case of pending high/urgent payments. | This field can only be used if "Account Type" is MCA or RTGS DCA.                        |       | 0..1 |
| 22                                      | V | Floor Notification                              | BOOLEAN    | Flag to enable floor notifications.  |  |       | 0..1 |
| 23                                      | W | Ceiling Notification                            | BOOLEAN    | Flag to enable ceiling notifications.  |  |       | 0..1 |
| 24                                      | X | Rule-based LT for Queued High Priority Payments | BOOLEAN    | Flag to enable automated liquidity transfers for queued high priority payments.  | This attribute can only be used for RTGS DCA and must be equal to FALSE.                 |       | 0..1 |

|  |    |   |   |  |   |      |      |
|--|----|---|---|--|---|------|------|
|  |    |   |   |  | It is only allowed if "Associated LT Account" is used.  |      |      |
| 25   | Y  | Rule-based LT for Queued Urgent Priority Payments | BOOLEAN   | Flag to enable automated liquidit transfers for queued urgent priority payments.   | <p>This attribute can only be used for RTGS DCA and must be equal to FALSE.</p> <p>It is only allowed if "Associated LT Account" is used.</p>                         |      | 0..1 |
| Group "Reserve Management Account Configuration" |    |   |   |  | <p>This group is not allowed if the Account Type is CB Contingency Account, Contingency Cash Account, Contingency Technical Account, Contingency Transit Account.</p> | 0..1 |      |
| 26   | Z  | Minimum Reserve Calculation                       | BOOLEAN   | Flag to enable account for minimum reserve calculation.  |   |      | 0..1 |
| 27   | AA | Default MCA                                       | BOOLEAN   | Flag to enable account as default MCA.   | This field is mandatory if Account Type is Main Cash Account or CLM CB Account. It is not allowed otherwise.  |      | 0..1 |
| 28   | AB | Interest Calculation                              | Possible values: <ul style="list-style-type: none"> <li>• NONE</li> <li>• MINI</li> <li>• MONT</li> </ul>                                 | Possible values: <ul style="list-style-type: none"> <li>- NONE</li> <li>- MINI : Minimum reserve calculation period</li> <li>- MONT : Monthly</li> </ul>       | This attribute is mandatory if Minimum Reserve Calculation is set to FALSE. It is not allowed otherwise.  |      | 0..1 |
| 29   | AC | Interest Rate Type                                | Possible values: <ul style="list-style-type: none"> <li>• MRIR</li> <li>• MRP1</li> <li>• MRP2</li> <li>• EXRE</li> <li>• EXRR</li> </ul> | Possible values: <ul style="list-style-type: none"> <li>- MRIR - Minimum reserve interest rate</li> <li>-MRP1 - Minimum reserve penalty rate type 1</li> </ul> | This field is mandatory if Interest Calculation is set to a value different from "No". It is not  |      | 0..1 |

|  |    |   |  |   |  |      |      |
|--|----|---|--|---|--|------|------|
|  |    |   | <ul style="list-style-type: none"> <li>• ODIR</li> <li>• MLIR</li> </ul> | <ul style="list-style-type: none"> <li>- MRP2 - Minimum reserve penalty rate type 2</li> <li>- EXRE - Excess reserve interest rate (exempt tier)</li> <li>- EXRR - Excess reserve interest rate (non-exempt tier)</li> <li>- ODIR - Overnight deposit interest rate</li> <li>- MLIR - Marginal lending interest rate</li> </ul> | allowed otherwise.   |      |      |
| 30                                       | AD | Automated Generation of Interest Payment (System Generated) , | BOOLEAN  | Flag to enable the automated generation of interest payments.   |  |      | 0..1 |
| Group "Additional Account Configuration" |    |   |  |   |  | 0..1 |      |
| 31                                       | AE | Co-managed  | BOOLEAN  | Flag to enable account for co-management.   | This field is only allowed if Account Type is Main Cash Account.   |      | 0..1 |
| 32                                       | AF | Co-manager Parent BIC   | CHAR (11)  | Parent BIC of the party co-managing the account.  | This field is not allowed if "Co-managed" is set to FALSE. It is mandatory if "Co-managed" is set to TRUE. |      | 0..1 |
| 33                                       | AG | Co-manager  | CHAR (11)  | BIC of the Party co-managing the account.   | This field is not allowed if "Co-managed" is set to FALSE. It is mandatory if "Co-managed" is set to TRUE. |      | 0..1 |
| 34                                       | AH | Default RTGS Account  | BOOLEAN  | Flag to enable an RTGS DCA as default.  | This field is mandatory if Account Type is "RTGS DCA". It is not allowed otherwise.                        |      | 0..1 |
| 35                                       | AI | Credit-Based Only   | BOOLEAN  | Flag to prevent negative balances on the account.   | This field is only allowed for CLM and RTGS account types.   |      | 0..1 |
| 36                                       | AJ | Non-published   | BOOLEAN  | Flag to enable or not the publishing of the account in the directories.   | This field is only allowed for CLM and   |      | 0..1 |

|    |    |                                      |           |                                       |  |  |      |
|----|----|--------------------------------------|-----------|---------------------------------------|--|--|------|
|    |    |                                      |           |                                       | RTGS account types.  |  |      |
| 37 | AK | Maximum Amount to be Debited per Day | DEC(13,5) | Maximum amount to be debited per day. | This field is only allowed for CLM and RTGS account types. |  | 0..1 |

#### 4.5.3.35 Limit

- Record Type: "Limit"

The record is used to create a Limit on a Cash Account.

| Flat file column | Excel Column | Column Name         | Format   | Description  | Rules  | Occurs per Record | Occurs per Group |
|------------------|--------------|---------------------|--|--|--|-------------------|------------------|
| 2                | B            | Record Id           | NUMERIC (10)   | Unique identifier of the record.   |  | 1..1              |                  |
| 3                | C            | Cash Account Number | VARCHAR (34)   | Unique number of the Cash Account  |  | 1..1              |                  |
| 4                | D            | Limit Type          | Possible values:<br><ul style="list-style-type: none"> <li>BILI</li> <li>MULT</li> <li>UCDT</li> <li>ACOL</li> <li>EXGT</li> <li>INBI</li> </ul> | Classification of the Limit:<br><ul style="list-style-type: none"> <li>BILI: ISO Code identifying a bilateral Limit set between an Account Owner and a counterparty</li> <li>MULT: Multilateral limit for RTGS Cash Account</li> <li>UCDT: Unsecured credit</li> <li>ACOL: Auto-Collateralisation</li> <li>EXGT: External Guarantee</li> <li>INBI: TIPS CMB Limit</li> </ul> |  | 1..1              |                  |
| 5                | E            | Limit Amount        | DEC (18,5)   | Amount defined for the Limit   |  | 1..1              |                  |
| 6                | F            | Valid From          | DATE   | Starting validity date for the Limit   |  | 1..1              |                  |
| 7                | G            | Valid To            | DATE   | Ending validity date for the Limit.  | This field can only be used if Limit Type is Bilateral Limit and the Cash Account Number identifies a RTGS Account or if | 0..1              |                  |

|   |   |                |             |   |  |      |  |
|---|---|----------------|-------------|---|--|------|--|
|   |   |                |             |   | Limit Type is Multilateral Limit.  |      |  |
| 8 | H | BIC            | VARCHAR(11) |   | This field is not allowed if Limit Type is BILI or MULT. It is mandatory otherwise.    | 0..1 |  |
| 9 | I | To Account BIC | VARCHAR(11) | Account BIC of the cash account towards which the Limit is established. | This field is mandatory if Limit Type is Bilateral Limit. It is not allowed otherwise. | 0..1 |  |

#### 4.5.3.36 Authorised Account User

- Record Type: "Authorised Account User"

The record is used to define Authorised Account Users for a Cash Account.

| Flat file column | Excel Column | Column Name                 | Format   | Description   | Rules | Occurs per Record | Occurs per Group |
|------------------|--------------|-----------------------------|--|---|-------|-------------------|------------------|
| 2                | B            | Record Id                   | NUMERIC (10)   | Unique identifier of the record.  |       | 1..1              |                  |
| 3                | C            | Cash Account Number         | VARCHAR (34)   | Unique number of the Cash Account   |       | 1..1              |                  |
| 4                | D            | Authorised Account User BIC | VARCHAR (11)   | BIC code to authorise for the Cash Account  |       | 1..1              |                  |
| 5                | E            | Valid From                  | DATE   | Starting validity date for the authorisation  |       | 1..1              |                  |
| 6                | F            | Valid To                    | DATE   | Ending validity date for the authorisation  |       | 0..1              |                  |
| 7                | G            | Max Amount                  | DEC (18,5)   | Maximum Amount accepted for an IP transaction   |       | 0..1              |                  |
| 8                | H            | Participation Type          | Possible values are:<br>• DIRE<br>• INDI<br>• MADI<br>• MACI<br>• ADCO<br>• ADDI<br>• ADIN<br>• ADBC<br>• EXCL | Type of participation for RTGS service<br>•DIRE = Direct<br>•INDI = Indirect<br>•MADI = Multi Addressee – Branch of Direct Participant<br>• MACI = Multi Addressee – Credit Institution<br>• ADCO = Addressable BIC - Correspondent |       | 0..1              |                  |

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  | <ul style="list-style-type: none"> <li>• ADDI = Addressable BIC – Branch of Direct Participant</li> <li>• ADIN = Addressable BIC – Branch of Indirect Participant</li> <li>• ADBC = Addressable BIC – Branch of Correspondent</li> <li>• EXCL = Exclusion (BIC excluded from participation)</li> </ul> |  |  |  |
|--|--|--|--|--|--|--|--|

#### 4.5.3.37 Party Service Link

- Record Type: “Party Service Link”

The record is used to Link a Party to a Service.

| Flat file column | Excel Column | Column Name        | Format  | Description   | Rules | Occurs per Record | Occurs per Group |
|------------------|--------------|--------------------|---|---|-------|-------------------|------------------|
| 2                | B            | Record Id          | NUMERIC (10)  | Unique identifier of the record.  |       | 1..1              |                  |
| 3                | C            | Parent BIC         | CHAR (11)   | Parent BIC of the party to link.  |       | 1..1              |                  |
| 4                | D            | Party BIC          | CHAR (11)   | Party BIC of the party to link.   |       | 1..1              |                  |
| 5                | E            | Service Name       | CHAR (4)  | Identifier of the Service.  |       | 1..1              |                  |
| 6                | F            | Valid From         | DATE  | Starting validity date for the link.  |       | 1..1              |                  |
| 7                | G            | Valid To           | DATE  | Ending validity date for the link   |       | 0..1              |                  |
| 8                | H            | Service Party Type | Possible values: <ul style="list-style-type: none"> <li>• TPPT</li> <li>• TPRP</li> <li>• TPAS</li> <li>• MPPT</li> <li>• RACH</li> <li>• ANSY</li> <li>• CACH</li> <li>• IMMR</li> <li>• ECAH</li> <li>• ECAS</li> </ul> | Classification of the Service Name: <ul style="list-style-type: none"> <li>• TPPT: TIPS Participant</li> <li>• TPRP: Reachable Party</li> <li>• TPAS: TIPS Ancillary System</li> <li>• MPPT: MPL-Only Participant</li> <li>• RACH (RTGS Account Holder)</li> <li>• ANSY (Ancillary System)</li> </ul> |       | 1..1              |                  |



|                            |   |                             |  |   |  |      |      |
|----------------------------|---|-----------------------------|--|---|--|------|------|
|                            |   |                             |  | <ul style="list-style-type: none"> <li>• CACH (CLM Account Holder)</li> <li>• IMMR (Institution managing minimum reserve without account in CLM )</li> <li>• ECAH (Contingency Account Holder)•</li> <li>• ECAS (Contingency Ancillary System)</li> </ul>   |  |      |      |
| Group "RTGS Configuration" |   |                             |  |   | This block is mandatory if the Service Identifier in input refers to T2_RTGS.<br>It is not allowed in any other case.  | 0..1 |      |
| 9                          | I | U2A only                    | BOOLEAN  | Specifies whether a Party acts only through the U2A channel in RTGS.  |  |      | 1..1 |
| 10                         | J | Ancillary System Sub-Type   | Possible values: <ul style="list-style-type: none"> <li>• HVPS</li> <li>• RPS</li> <li>• IPS</li> <li>• SSS</li> <li>• FXS</li> <li>• MMS</li> <li>• CCP</li> <li>• OTH</li> </ul> | Sub-Type for an Ancillary System.<br>Possible values: <ul style="list-style-type: none"> <li>• HVPS: High-Value-Payment-Systems</li> <li>• RPS: Retail-Payment-Systems</li> <li>• IPS: Instant-Payment-Systems</li> <li>• SSS: Security-Settlement-Systems</li> <li>• FXS: Foreign-Exchange-Settlement-Systems</li> <li>• MMS: Money-Market-Settlement-Systems</li> <li>• CCP: Central-Counter-Parties</li> <li>• OTH: Other</li> </ul> | This field is mandatory if the Service Identifier in input refers to T2_RTGS and Service Party Type is "Ancillary System".<br>It is not allowed in any other case. |      | 0..1 |
| Group "CLM Configuration"  |   |                             |  |   | This block is mandatory if the Service Identifier in input refers to T2_CLM.<br>It is not allowed in any other case.   | 0..1 |      |
| 11                         | K | Overnight Deposit Indicator | BOOLEAN  | Specifies whether the Party uses the Overnight Deposit facility.  |  |      | 1..1 |
| 12                         | L | Marginal Lending Indicator  | BOOLEAN  | Specifies whether the Party uses the Marginal Lending facility.   |  |      | 1..1 |

|    |   |                                       |  |  |  |  |      |
|----|---|---------------------------------------|--|--|--|--|------|
| 13 | M | Minimum Reserve Obligation            | Possible values:<br><ul style="list-style-type: none"> <li>• Direct</li> <li>• Pool</li> <li>• Indirect</li> <li>• No</li> </ul>   | Specifies whether the Party is subject to the minimum reserve requirement and through which method it is calculated.               |  |  | 1..1 |
| 14 | N | Intraday Credit Indicator             | BOOLEAN  | Specifies whether the Party is allowed to receive intraday credit.   |  |  | 1..1 |
| 15 | O | Institutional Sector Code             | Possible values are:<br><ul style="list-style-type: none"> <li>• S.11</li> <li>• S.121</li> <li>• S.122</li> <li>• S.123</li> <li>• S.124</li> <li>• S.125</li> <li>• S.126</li> <li>• S.127</li> <li>• S.128S.128</li> <li>• S.129</li> <li>• S.1311</li> <li>• S.1312</li> <li>• S.1313</li> <li>• S.1314</li> <li>• S.14</li> <li>• S.15</li> </ul> | Identifies the financial corporations sector classification to which the Party belongs with respect to the nature of its business. |  |  | 1..1 |
| 16 | P | U2A Only                              | BOOLEAN  | Specifies whether a Party acts only through the U2A channel in CLM.  |  |  | 1..1 |
| 17 | Q | MFI Code                              | CHAR (35)  | Monetary Financial Institution Code  | Mandatory if "Minimum Reserve Obligation" is equal to "Pool", "Direct" or "Indirect"<br><br>Not allowed if "Minimum Reserve Obligation" is equal to "No" |  | 0..1 |
| 18 | R | Leading CLM Account Holder Parent BIC | CHAR (11)  | Parent BIC of the Leading CLM Account Holder for the calculation and settlement of interests or penalties                          | Mandatory if "Minimum Reserve Obligation" is equal to "Pool", "Direct" or "Indirect"   |  | 0..1 |
| 19 | S | Leading CLM Account Holder Party BIC  | CHAR (11)  | BIC of the Leading CLM Account Holder for the calculation and  | Mandatory if "Minimum Reserve Obligation" is   |  | 0..1 |

|  |  |  |  |                                      |   |  |  |
|--|--|--|--|--------------------------------------|---|--|--|
|  |  |  |  | settlement of interests or penalties | equal to "Pool", "Direct" or "Indirect" |  |  |
|--|--|--|--|--------------------------------------|---|--|--|

#### 4.5.3.38 DN-BIC Routing

- Record Type: "DN-BIC Routing"

The record is to define a Distinguished Name as Instructing Party for a specific BIC.

| Flat file column | Excel Column | Column Name        | Format  | Description  | Rules   | Occurs per Record | Occurs per Group |
|------------------|--------------|--------------------|---|--|---|-------------------|------------------|
| 2                | B            | Record Id          | NUMERIC (10)  | Unique identifier of the record.                           |   | 1..1              |                  |
| 3                | C            | Distinguished Name | VARCHAR (256)   | Distinguished Name to link to the BIC.                     | Interoperability character set restriction does not apply | 1..1              |                  |
| 4                | D            | BIC                | VARCHAR (11)  | BIC to link to the Distinguished Name                      |   | 1..1              |                  |
| 5                | E            | Inbound Flag       | BOOLEAN   | Type of link:<br>• TRUE: Inbound<br>• FALSE: Outbound      |   | 0..1              |                  |
| 6                | F            | Participation Type | Possible values:<br>• DIRE (Direct)<br>• MACI (Multi-Addressee – Credit Institution)<br>• MADI (Multi-Addressee – Branch of Direct Participant) | Participation Type of the related Authorised Account User. | Cannot be input if "Inbound Flag" is TRUE                 | 0..1              |                  |
| 7                | G            | Valid From         | DATE  | Starting validity date for the link.                       |   | 1..1              |                  |
| 8                | H            | Valid To           | DATE  | Ending validity date for the link                          |   | 0..1              |                  |

## 4.6 Format of “Enriched Files”

The format of the enriched files is based on the format of the Excel and the flat files that have been submitted to DMT. The submitted data remains unchanged but is supplemented with “Further Notifications” and “Statistical Information”.

### 4.6.1 Further Notifications for Static Data records

This data appears in the first row of each Static Data record. It is located right to the migration data.

| Flat file column | Excel Column | Field               | Format  | Description               | Rules                                 | Occurs per Record |
|------------------|--------------|---------------------|---|---------------------------|---------------------------------------|-------------------|
| last +1          | last +1      | Status              | Possible values: <ul style="list-style-type: none"> <li>Migrated</li> <li>Not migrated</li> </ul> | Status of the migration.  | n/a                                   | 1..1              |
| last +2          | last +2      | Error Code          | CHAR (4)  | Code of the error.        | Occurs when Status is 'Not migrated'. | 0..1              |
| last +3          | last +3      | Error Description   | VARCHAR (210)   | Description of the error. | Occurs when Status is 'Not migrated'. | 0..1              |
| last +4          | last +4      | Error Code 2        | CHAR (4)  | Code of the error.        | Occurs when Status is 'Not migrated'. | 0..1              |
| last +5          | last +5      | Error Description 2 | VARCHAR (210)   | Description of the error. | Occurs when Status is 'Not migrated'. | 0..1              |
| last +6          | last +6      | Error Code 3        | CHAR (4)  | Code of the error.        | Occurs when Status is 'Not migrated'. | 0..1              |
| last +7          | last +7      | Error Description 3 | VARCHAR (210)   | Description of the error. | Occurs when Status is 'Not migrated'. | 0..1              |
| last +8          | last +8      | Error Code 4        | CHAR (4)  | Code of the error.        | Occurs when Status is 'Not migrated'. | 0..1              |
| last +9          | last +9      | Error Description 4 | VARCHAR (210)   | Description of the error. | Occurs when Status is 'Not migrated'. | 0..1              |
| last +10         | last +10     | Error Code 5        | CHAR (4)  | Code of the error.        | Occurs when Status is 'Not migrated'. | 0..1              |
| last +11         | last +11     | Error Description 5 | VARCHAR (210)   | Description of the error. | Occurs when Status is 'Not migrated'. | 0..1              |

- “last” stands for the last column with migration data

## 4.6.2 Statistical Information

This data appears in the 2<sup>nd</sup> row of the spreadsheet. It is located right to the further notifications.

| Flat file column | Excel Column | Field        | Format       | Description  | Rules | Occurs per File |
|------------------|--------------|--------------|--------------|--|-------|-----------------|
| last +12         | last +12     | Submitted    | NUMERIC (10) | Total number of records submitted.                                   | n/a   | 1..1            |
| last +13         | last +13     | Migrated     | NUMERIC (10) | Total number of records that have been migrated successfully.        | n/a   | 1..1            |
| last +14         | last + 14    | Not Migrated | NUMERIC (10) | Total number or records that have not been migrated due to an error. | n/a   | 1..1            |

- “last” stands for the last column with migration data

## 5 Appendices

### 5.1 Business Rules

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text               | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--------------------------|-----|------|------|-----|--------|
| DCC1001 | <p>When performing a Cash Account create request, the Party Type of the Requestor must be NCB, Ancillary System or Payment Bank.</p> <p>Users belonging to NCBs can only create Cash Accounts for Parties that fall under their responsibility according to the Hierarchical Party Model, or TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility.</p> <p>Users belonging to Payment Banks can only create TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility.</p> <p>Users belonging to Ancillary Systems can only create TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility.</p> <p>Exceptions to the above rules are represented by any user that is granted the appropriate privilege(s) on the specific Party to be linked to the account.</p> | acmt.007        | acmt.011         | REJT        | Requestor not allowed    | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1024 | <p>When performing a Cash Account create request, the Restriction Type must refer to an existing Restriction Type with Object Restriction Type equal to Cash Account and belonging to the same system entity</p>  | acmt.007        | acmt.011         | REJT        | Invalid restriction type | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | of the Cash Account or of the Service Operator and to the correct Service .   |                 |                  |             |   |     |      |      |     |        |
| DCC1025 | When performing a Cash Account create request, the Valid From specified in the Cash Account Restriction section must be equal to or greater than the current timestamp. For CLM and RTGS restrictions it must be equal to or greater than the current date.   | acmt.007        | acmt.011         | REJT        | 'Valid From' invalid  | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1100 | When performing a Cash Account create request the Currency Code must refer to an existing instance in CRDM with Settlement Currency set to True or a Currency-Service Link in place with the relevant Service.  | acmt.007        | acmt.011         | REJT        | Currency Code not found   | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1101 | When performing a Cash Account create request the Floor Notification Amount specified must be less than the Ceiling Notification Amount.  | acmt.007        | acmt.011         | REJT        | Invalid Floor Notification Amount/<br>Ceiling Notification Amount | Yes | Yes  | Yes  | Yes | No     |
| DCC1103 | When performing a Cash Account create request, the Cash Account Number must be compliant with ISO 20022 standards and it must not be already assigned to any other Cash Account in CRDM.  | acmt.007        | acmt.011         | REJT        | Cash Account Number already assigned.                             | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1204 | When performing a Cash Account create request to create a T2S Dedicated Cash Account, T2S Dedicated Transit Account or T2S Central Bank Account, if the Linked Account refers to a Cash Account it must be an existing and active Cash Account (respectively a Main Cash Account, CLM Dedicated Transit Account for T2S or CLM Central Bank Account/Central Bank ECB Account) that is open in the relevant validity period in CRDM. | acmt.007        | acmt.011         | REJT        | Invalid linked account.   | Yes | No   | No   | No  | No     |
| DCC1205 | When performing a Cash Account create request the Opening Date must be equal to or greater than the current date and be   | acmt.007        | acmt.011         | REJT        | 'Opening Date' invalid  | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text                    | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|-------------------------------|-----|------|------|-----|--------|
|         | equal or greater than the Account Holder Opening Date. Furthermore it must be equal to or less than the Account Holder Closing Date. For CLM and RTGS accounts, the Opening Date cannot be equal to the current date.  |                 |                  |             |                               |     |      |      |     |        |
| DCC1206 | When performing a Cash Account create request to create a T2S Dedicated Cash Account, T2S Dedicated Transit Account or T2S Central Bank Account, if the Linked Account refers to an External RTGS Account it must be an existing, active and open External RTGS Account in CRDM. | acmt.007        | acmt.011         | REJT        | Invalid External RTGS account | Yes | Yes  | No   | No  | No     |
| DCC1207 | When performing a Cash Account create request, the Linked Account, regardless of type, must have the same currency code as the Cash Account.   | acmt.007        | acmt.011         | REJT        | Invalid Currency code         | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1208 | When performing a Cash Account create request, in case of request of creation of Cash Account Restriction, the Valid From of the Cash Account Restriction must be equal or greater than the Valid From of the Restriction Type entity.   | acmt.007        | acmt.011         | REJT        | 'Valid From' invalid          | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1209 | When performing a Cash Account create request, in case of request of creation of Cash Account Restriction, the Valid To of the Cash Account Restriction must be equal or less than the Valid To of the Restriction Type entity.  | acmt.007        | acmt.011         | REJT        | 'Valid To' invalid            | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1210 | When performing a Cash Account create request the Closing Date specified in the request must be equal to or greater than the Opening Date. Furthermore it must be equal to or less than the Account Holder Closing Date.   | acmt.007        | acmt.011         | REJT        | 'Closing Date' invalid        | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1212 | When performing a Cash Account create request, the Valid To specified in the Cash  | acmt.007        | acmt.011         | REJT        | 'Valid to ' invalid           | Yes | Yes  | Yes  | Yes | Yes    |



| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text                       | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|----------------------------------|-----|------|------|-----|--------|
|         | Account Restriction section must be equal to or greater than the Valid From.   |                 |                  |             |                                  |     |      |      |     |        |
| DCC1213 | When performing a Cash Account Create request, there cannot be more than one Cash Account Restriction on the same Cash Account for CLM or RTGS at any given point in time.   | acmt.007        | acmt.011         | REJT        | Overlapping restriction detected | No  | No   | Yes  | Yes | No     |
| DCC1214 | When performing a Cash Account Create request for a Cash Account Restriction related to CLM or RTGS, the time part of the Valid From and Valid To attributes must be set to zero.  | acmt.007        | acmt.011         | REJT        | Invalid timestamp.               | No  | No   | Yes  | Yes | No     |
| DCC1216 | When performing a Cash Account create request to create a TIPS Credit Memorandum Balance the Linked Account must refer to an existing Cash Account instance in CRDM with type "TIPS Account" or "TIPS AS Technical Account" which is open throughout the specified opening period of the TIPS CMB being created.   | acmt.007        | acmt.011         | REJT        | Invalid linked account           | No  | Yes  | No   | No  | No     |
| DCC1217 | When performing a Cash Account create request to create an RTGS Sub-Account, the Linked Account must refer to an existing Cash Account instance in CRDM with type "RTGS Dedicated Cash Account" or "RTGS CB Account" which is open throughout the specified opening period of the Sub-Account being created and belongs to the same Account Owner Party. | acmt.007        | acmt.011         | REJT        | Invalid linked account           | No  | No   | Yes  | No  | No     |
| DCC1219 | When performing a Cash Account create request to create an RTGS Dedicated Cash Account, Overnight Deposit Account or Marginal Lending Account the Linked Account, if specified, must refer to an existing Cash Account instance in CRDM  | acmt.007        | acmt.011         | REJT        | Invalid linked account           | No  | No   | Yes  | No  | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text             | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|------------------------|-----|------|------|-----|--------|
|         | with type "Main Cash Account" which is open throughout the specified opening period of the RTGS DCA being created and belongs to the same System Entity. Moreover, different RTGS DCAs cannot have the same Main Cash Account defined as Linked Account.   |                 |                  |             |                        |     |      |      |     |        |
| DCC1221 | When performing a Cash Account create request on a Contingency Technical Account, the Linked Account must refer to an existing Cash Account instance in CRDM with type "Ancillary System Technical Account" which is open throughout the specified opening period of the Cash Account being created and belongs to the same System Entity. Moreover, different Contingency Technical Accounts cannot have the same AS Technical Account defined as Linked Account.   | acmt.007        | acmt.011         | REJT        | Invalid linked account | No  | No   | No   | No  | Yes    |
| DCC1222 | When performing a Cash Account create request to create a Contingency Cash Account or CB Contingency Account, the Linked Account must refer to an existing Cash Account instance in CRDM (respectively with type "Main Cash Account" and "CLM CB Account") which is open throughout the specified opening period of the Cash Account being created and belongs to the same System Entity. Moreover, the Linked account cannot be specified as such for any other Contingency Cash Account or Contingency CB Account. | acmt.007        | acmt.011         | REJT        | Invalid linked account | No  | No   | No   | No  | Yes    |
| DCC1223 | When performing a Cash Account create request to create an ECB Mirror Account, the Linked Account must refer to an existing Cash Account instance in CRDM with type "CLM CB Account" with Default  | acmt.007        | acmt.011         | REJT        | Invalid linked account | No  | No   | No   | Yes | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | Flag set to TRUE which is open throughout the specified opening period of the ECB Mirror Account being created. If a CLM CB Account is already linked to an ECB Mirror Account, no Accounts of the same CB can be used in a link to another ECB Mirror Account.   |                 |                  |             |   |     |      |      |     |        |
| DCC1224 | When performing a Cash Account create request to create a Contingency Cash Account, Central Bank Contingency Account or Contingency Technical Account, the Linked Account cannot be specified as such if it has multiple Authorised Account Users with different Authorised Account User BICs. <b>{T2 CR0138}</b> | acmt.007        | acmt.011         | REJT        | Authorised Account User BIC already defined for Contingency Account | No  | No   | No   | No  | Yes    |
| DCC1225 | When performing a Cash Account Create request, if the Account Type is Overnight Deposit Account, Marginal Lending Account, Central Bank ECB Account or ECB Mirror Account, the Currency must be EUR.  | acmt.007        | acmt.011         | REJT        | Currency must be EUR  | No  | No   | No   | Yes | No     |
| DCC1226 | When performing a Cash Account Create request for a Marginal Lending Account, the requestor must be a Eurosystem CB.  | acmt.007        | acmt.011         | REJT        | Requestor must be a Eurosystem CB                                   | No  | No   | No   | Yes | No     |
| DCC1230 | When performing a Cash Account Create request including a Cash Account Restriction related to TIPS, the Valid From must take the conventional value representing the current timestamp and the Valid To cannot be set.  | acmt.007        | acmt.011         | REJT        | TIPS blocking can only have immediate effect                        | No  | Yes  | No   | No  | No     |
| DCC1250 | When performing a Cash Account Create request, the Closing Date for T2 Accounts cannot be set to a Currency Closing Day in the relevant Service.  | acmt.007        | acmt.011         | REJT        | Closing Date cannot be set to Currency Closing Day                  | No  | No   | Yes  | Yes | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| DCC1300 | When performing a Cash Account Create request, in case of request for creation of a Cash Account Restriction, the created restriction must not overlap with any other Cash Account Restriction in input having the same Restriction Type. | acmt.007        | acmt.011         | REJT        | Cash Account Restriction overlaps with existing instance | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1405 | When performing a Cash Account create request to create an ECB Mirror Account, the Currency must be set to EUR.   | acmt.007        | acmt.011         | REJT        | Invalid currency   | No  | No   | No   | Yes | No     |
| DCC1524 | When performing a Cash Account create request, the account holding Party must refer to an existing active and open instance in CRDM with Party Type equal to NCB, Payment Bank or Ancillary System.                                       | acmt.007        | acmt.011         | REJT        | Invalid Party Mnemonic                                   | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1530 | When performing a Cash Account create request, when creating a T2S Dedicated Transit Account, no other account of the same type must be already associated to the relevant currency.  | acmt.007        | acmt.011         | REJT        | Transit account already existing for this currency       | Yes | No   | No   | No  | No     |
| DCC1531 | When performing a Cash Account create request, when creating a T2S Dedicated Cash Account or a T2S central bank account, there must be a T2S Dedicated Transit Account related to the relevant currency.                                  | acmt.007        | acmt.011         | REJT        | Transit account not found for this currency              | Yes | No   | No   | No  | No     |
| DCC1532 | When performing a Cash Account create request, when creating a TIPS Account or a TIPS AS Technical Account, there must be a TIPS Transit Account related to the relevant currency.  | acmt.007        | acmt.011         | REJT        | Transit account not found for this currency              | No  | Yes  | No   | No  | No     |
| DCC1533 | When performing a Cash Account create request, when creating a TIPS Transit Account, no other account of the same type must be already associated to the relevant currency.   | Acmt.007        | acmt.011         | REJT        | Transit account already existing for this currency       | No  | Yes  | Yes  | Yes | No     |
| DCC1534 | When performing a Cash Account create request, when creating an RTGS  | Acmt.007        | acmt.011         | REJT        | Transit account already existing for this currency       | Yes | Yes  | Yes  | Yes | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | Dedicated Transit Account, no other account of the same type must be already associated to the relevant currency over the same validity period.  |                 |                  |             |   |     |      |      |     |        |
| DCC1535 | When performing a Cash Account create request, when creating an RTGS Dedicated Cash Account or RTGS Central Bank Account, there must be an RTGS Dedicated Transit Account related to the relevant currency.  | acmt.007        | acmt.011         | REJT        | Transit account not found for this currency           | No  | No   | Yes  | No  | No     |
| DCC1536 | When performing a Cash Account create request, when creating any kind of CLM Dedicated Transit Account or Contingency Transit Account, no other account of the same type must be already associated to the relevant currency over the same validity period.  | acmt.007        | acmt.011         | REJT        | Transit account already existing for this currency    | No  | No   | No   | Yes | Yes    |
| DCC1550 | When performing a Cash Account Create request, the specified Currency Code must be consistent with the Currency Code of the responsible Central Bank.  | acmt.007        | acmt.011         | REJT        | Invalid Currency cde                                  | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1555 | When performing a Cash Account create request the Account Type to be created must be consistent with the Party Type of the account holder.   | acmt.007        | acmt.011         | REJT        | Invalid relations between account type and party type | Yes | Yes  | Yes  | Yes | No     |
| DCC1601 | When performing a Cash Account Create request, in case of immediate setup of Cash Account Restriction, the timestamp to be used must take a conventional value which the system will interpret as the current timestamp. Furthermore, no check must be performed on such a conventional value in case of four eyes second step or processing of retrieved queued requests. | acmt.007        | n/a              | REJT        | n/a   | Yes | Yes  | Yes  | Yes | Yes    |
| DCC1800 | When performing a Cash Account Create request, the number of decimals in the values provided for Floor Notification  | acmt.007        | acmt.011         | REJT        | Invalid number of decimals.                           | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | Amount, Target Amount After Breaching Floor, Ceiling Notification Amount Target Amount After Breaching Ceiling and Maximum Amount To Be Debited Per Day must be compliant with the number of decimals foreseen for the relevant currency.  |                 |                  |             |   |     |      |      |     |        |
| DCC4001 | A Standing and Predefined Liquidity Transfer Order can only be created by the NCB or Payment Bank or Ancillary System responsible for the account to be debited. Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the specified account to be debited. In addition, NCBs and Payment Banks can manage LTOs on Cash Accounts for which they are defined as Co-Managers. | camt.024        | camt.025         | REJT        | Requestor not allowed   | Yes | No   | Yes  | Yes | No     |
| DCC4070 | When performing a Standing Liquidity Transfer Order Create request, the specified Cash account to be debited must refer to an existing, active and open instance in CRDM with cash account type RTGS DCA, RTGS Central Bank Account, MCA, CLM Central Bank Account, T2S Dedicated Cash Account or T2S Central Bank Account.  | camt.024        | camt.025         | REJT        | Invalid Debited Cash Account  | Yes | No   | Yes  | Yes | No     |
| DCC4071 | When performing Predefined Liquidity Transfer Order Create request, the specified Cash account to be debited must refer to an existing, active and open instance in CRDM with cash account type T2S Dedicated Cash Account or T2S Central Bank Account.  | camt.024        | camt.025         | REJT        | Invalid Debited Cash Account  | Yes | No   | No   | No  | No     |
| DCC4075 | When performing a Standing and Predefined Liquidity Transfer Order Create request, the specified Standing and Predefined Liquidity Transfer Order Reference must not be already assigned   | camt.024        | camt.025         | REJT        | Standing and Predefined Liquidity Transfer Order Reference already assigned | Yes | No   | Yes  | Yes | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text                                  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | to an existing and active instance for the same debited Cash Account.  |                 |                  |             |   |     |      |      |     |        |
| DCC4079 | When performing a Standing and Predefined Liquidity Transfer Order Create request, when the specified Creditor Account is a Cash Account, it must refer to an existing, active and open instance in CRDM with cash account type RTGS DCA, RTGS Sub-Account, RTGS Central Bank Account, Ancillary System Technical Account, TIPS Account, MCA, Overnight Deposit Account, CLM Central Bank Account, T2S Dedicated Cash Account or T2S Central Bank Account. If the debited account is a T2S DCA or T2S CB Account, the creditor account must be a TIPS Account, RTGS DCA, RTGS CB Account, MCA or CLM CB Account. If the debited account is an MCA, the creditor account cannot be an RTGS AS Technical Account. If the debited account is a CLM CB Account, the creditor account cannot be an RTGS AS Technical Account or an Overnight Deposit Account. Furthermore, when the Creditor Account is a Cash Account, it must have the same currency as the debited Cash Account. | camt.024        | camt.025         | REJT        | Invalid Creditor Cash Account               | Yes | No   | Yes  | Yes | No     |
| DCC4080 | When performing a Standing and Predefined Liquidity Transfer Order Create request, when the specified Creditor Account is an External RTGS Account, it must refer to an existing, active and open instance in CRDM. Furthermore, it must have the same currency as the debited Cash Account.   | camt.024        | camt.025         | REJT        | Invalid Creditor External RTGS Cash Account | Yes | No   | Yes  | Yes | No     |
| DCC4081 | When performing a Standing and Predefined Liquidity Transfer Order Create request, the Event Type Code, when specified in the create request,  | camt.024        | camt.025         | REJT        | Unknown Event Type Identifier               | Yes | No   | Yes  | Yes | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | must refer to an active and existing instance in Event Type belonging to the same Service as the debited Cash Account and eligible for this use.   |                 |                  |             |   |     |      |      |     |        |
| DCC4090 | Only one predefined liquidity transfer order can be defined to be executed at the same timestamp and/or business event for each Cash account.  | camt.024        | camt.025         | REJT        | Predefined liquidity transfer order already defined for the specified time/business event | Yes | No   | Yes  | Yes | No     |
| DCC4092 | When performing a Standing and Predefined Liquidity Transfer Order Create request, the Amount must be set to zero if the Dedicated Amount field or the All Cash field are set to True.   | camt.024        | camt.025         | REJT        | Amount must be set to zero if All Cash/Dedicated Amount is TRUE                           | Yes | No   | Yes  | Yes | No     |
| DCC4093 | When performing a Standing and Predefined Liquidity Transfer Order Create request, the Amount cannot be set to zero if the Dedicated Amount field and the All Cash field are set to False.   | camt.024        | camt.025         | REJT        | Amount cannot be set to zero if All Cash/Dedicated Amount is FALSE                        | Yes | No   | Yes  | Yes | No     |
| DCC4120 | When performing a Standing and Predefined Liquidity Transfer Order Create request, the Valid From specified in a Liquidity Transfer Order maintenance request must be equal to or greater than the current date and not greater than the debited account's closing date (if applicable).   | camt.024        | camt.025         | REJT        | Valid From invalid  | Yes | No   | Yes  | Yes | No     |
| DCC4121 | When performing a Standing and Predefined Liquidity Transfer Order Create request, the Valid To specified in a Standing and Predefined Liquidity Transfer Order maintenance request must be equal to or greater than the current date, equal to or greater than the Valid From, and not greater than the debited account's closing date (if applicable). | camt.024        | camt.025         | REJT        | Valid To invalid  | Yes | No   | Yes  | Yes | No     |
| DCC4200 | When performing a Standing and Predefined Liquidity Transfer Order Create request, there cannot be more  | camt.024        | camt.025         | REJT        | LTO linked to CARL event already exists for this DCA                                      | Yes | No   | No   | No  | No     |



| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | than one instance for each Cash Account linked to Event Type Code 'CARL' in a given time period.  |                 |                  |             |   |     |      |      |     |        |
| DCC4205 | When performing a Liquidity Transfer Order Create request, Creditor BIC, Debtor BIC, ASTN Creditor Account and ASTN Debtor Account can only be specified in case of standing order for AS settlement procedure D.   | camt.024        | camt.025         | REJT        | Invalid use of AS Procedure                                       | No  | No   | Yes  | No  | No     |
| DCC4210 | When performing a Liquidity Transfer Order Create request, Event Type Code 'OCS2' (second optional cash sweep) can only be linked to Cash Accounts in EUR.  | camt.024        | camt.025         | REJT        | OCS2 cannot be linked to a non-EUR account                        | Yes | No   | No   | No  | No     |
| DCC4300 | When performing a Liquidity transfer Order Create request, the Liquidity Transfer Order Reference cannot be longer than 16 characters for LTOs defined on External RTGS accounts.   | camt.024        | camt.025         | REJT        | Invalid reference length  | Yes | No   | No   | No  | No     |
| DCC4800 | When performing a Liquidity Transfer Order Create request, the number of decimals in the value provided for Amount must be compliant with the number of decimals foreseen for the relevant currency.  | camt.024        | camt.025         | REJT        | Invalid number of decimals.                                       | Yes | No   | Yes  | Yes | No     |
| IIMP063 | Element CtrctDts/RmvlInd must be equal 'true'.  | acmt.019        | acmt.011         | REJT        | Removal indicator not set for cash account closing request.       | Yes | No   | Yes  | Yes | No     |
| DCD1300 | When performing a Cash Account deletion request, the Cash Account cannot be deleted if it is referenced in an object privilege assignment.  | acmt.019        | acmt.011         | REJT        | Deletion not allowed due to exist-ing object privilege assignment | Yes | No   | No   | No  | No     |
| DCD1001 | When performing a Cash Account delete or restore request, the Party Type of the Requestor must be NCB, Ancillary System or Payment Bank. Users belonging to NCBs can only delete or restore Cash Accounts for Parties that fall under their responsibility according to | acmt.019        | acmt.011         | REJT        | Requestor not allowed   | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | <p>the Hierarchical Party Model, or TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility. In addition, they can delete or restore Cash Accounts for which they are defined as Co-Managers.</p> <p>Users belonging to Payment Banks can only delete or restore TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility.</p> <p>Users belonging to Ancillary Systems can only delete or restore TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility.</p> <p>Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the account or on the relevant Party holding the account.</p> |                 |                  |             |  |     |      |      |     |        |
| DCD1003 | The delete requests of Cash Accounts must refer to an existing and active instance. The account to be deleted must be already closed or must have Opening Date greater than the current date.  | acmt.019        | acmt.011         | REJT        | Unknown Cash Account. The account must be closed or have Opening Date greater than the current date. | Yes | Yes  | Yes  | Yes | Yes    |
| DCD1014 | When performing a Cash Account delete request, in case of deletion of a future T2S Dedicated Transit Account, RTGS Dedicated Transit Account or TIPS Transit Account, no active Cash Accounts with the same currency for T2S, RTGS or TIPS respectively must exist in CRDM.  | acmt.019        | acmt.011         | REJT        | Deletion not allowed due to open Cash Accounts related to this Transit Account.                      | Yes | Yes  | Yes  | Yes | No     |
| DCD1030 | A Cash Account cannot be deleted if there still are valid instances of the following entities linked to it: Liquidity Transfer Order, Liquidity Transfer Order Link Set, Credit Memorandum Balance, Authorised Account User, Data Aggregation, Limit,  | acmt.019        | acmt.011         | REJT        | The deletion/close is not allowed due to a deletion priority constraint                              | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | Standing Order for Reservation, Direct Debit Mandate, or if it is referenced in another Cash Account as a Linked Account, Associated LT Account or Debited MCA.  |                 |                  |             |   |     |      |      |     |        |
| DCD4001 | A Standing and Predefined Liquidity Transfer Order can only be deleted by the NCB or Payment Bank responsible for the account to be debited. Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the specified account to be debited. In addition, NCBs and Payment Banks can manage LTOs on Cash Accounts for which they are defined as Co-Managers.   | camt.071        | camt.025         | REJT        | Requestor not allowed   | Yes | No   | Yes  | Yes | No     |
| DCD4003 | When performing a Standing and Predefined Liquidity Transfer Order delete request, it must refer to an existing and active instance in CRDM.   | camt.071        | camt.025         | REJT        | Unknown Standing and Predefined Liquidity Transfer Order                | Yes | No   | Yes  | Yes | No     |
| DCD4030 | When performing a Standing and Predefined Liquidity Transfer Order delete request, a Standing and Predefined Liquidity Transfer Order cannot be deleted if there still are valid instances of Standing and Predefined Liquidity Transfer Order Link Set linked to it.  | camt.071        | camt.025         | REJT        | The deletion/close is not allowed due to a deletion priority constraint | Yes | No   | Yes  | Yes | No     |
| DCU1001 | When performing a Cash Account update request the Party Type of the Requestor must be NCB, Ancillary System or Payment Bank.<br><br>Users belonging to NCBs can only update Cash Accounts for Parties that fall under their responsibility according to the Hierarchical Party Model, or TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility. In addition, they can | acmt.015        | acmt.011         | REJT        | Requestor not allowed   | Yes | Yes  | Yes  | Yes | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | <p>update Cash Accounts for which they are defined as Co-Managers.</p> <p>Users belonging to Payment Banks can only update floor/ceiling attributes for Cash Accounts for which they are defined as Account Owners or Co-Managers. In addition, they can update TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility.</p> <p>Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the account or on the relevant Party holding the account.</p> |                 |                  |             |   |     |      |      |     |        |
| DCU1003 | <p>The update requests of a Cash Account must refer to an existing and active account. Furthermore, the Closing Date must be equal to or greater than the current date. The Service Operator can skip this check in contingency situations.</p> <p><b>{T2 CR0138}</b></p>   | acmt.015        | acmt.011         | REJT        | Data to be updated not found                                      | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1024 | <p>When performing a Cash Account update request, in case of request of creation of Cash Account Restriction, the Restriction Type must refer to an existing Restriction Type with Object Restriction Type equal to Cash Account and belonging to the same system entity of the Cash Account or of the Service Operator and to the correct Service.</p>   | acmt.015        | acmt.011         | REJT        | Invalid restriction type  | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1030 | <p>A Cash Account cannot be closed if there still are valid instances of the following entities linked to it: Liquidity Transfer Order, Liquidity Transfer Order Link Set, Authorised Account User, Data Aggregation, Limit, Standing Order for</p>   | acmt.015        | acmt.011         | REJT        | The account cannot be closed due to a closure priority constraint | Yes | Yes  | Yes  | Yes | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | Reservation, Direct Debit Mandate, AS Procedure.  |                 |                  |             |   |     |      |      |     |        |
| DCU1040 | When performing a Cash Account update request, any update of the Opening Date and Closing Date must be consistent with the validity periods of other existing Cash Accounts with type 'TIPS Credit Memorandum Balance' linking to it.   | acmt.015        | acmt.011         | REJT        | Opening/Closing Date not consistent with linked TIPS CMB      | No  | Yes  | No   | No  | No     |
| DCU1041 | When performing a Cash Account update request, any update of the Opening Date and Closing Date must be consistent with the validity periods of other existing Cash Accounts referencing it as Linked Account.   | acmt.015        | acmt.011         | REJT        | Opening/Closing Date not consistent with linked Cash Account  | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1101 | When performing a Cash Account update request, the Floor Notification Amount must be less than the Ceiling Notification Amount.   | acmt.015        | acmt.011         | REJT        | Invalid Floor Notification Amount/Ceiling Notification Amount | Yes | Yes  | Yes  | Yes | No     |
| DCU1205 | When performing a Cash Account update request to update a Contingency Cash Account, Central Bank Contingency Account or Contingency Technical Account, the Linked Account cannot be specified as such if it has multiple Authorised Account Users with different Authorised Account User BICs. <b>{T2 CR0138}</b> | acmt.015        | acmt.011         | REJT        | Invalid Linked Account  | No  | No   | No   | No  | Yes    |
| DCU1210 | When performing a Cash Account update request, the Closing Date must be equal to or greater than the current date and equal to or greater than the Cash Account Opening Date. Furthermore it must be equal to or less than the Account Holder Closing Date.   | acmt.015        | acmt.011         | REJT        | "Closing Date" Invalid  | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1211 | When performing a Cash Account update request, in case of request of creation of Cash Account Restriction, the Valid From must be equal to or greater than the current timestamp. For CLM and RTGS  | acmt.015        | acmt.011         | REJT        | "Valid From" invalid  | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text             | T2S                    | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|------------------------|------------------------|------|------|-----|--------|
|         | restrictions it must be equal to or greater than the current date.   |                 |                  |             |                        |                        |      |      |     |        |
| DCU1212 | When performing a Cash Account update request, in case of request of creation/update of Cash Account Restriction, the Valid To specified in the Cash Account Restriction section must be equal to or greater than the current timestamp, or the current date for CLM and RTGS restrictions, and must be equal to or greater than the Valid From.   | acmt.015        | acmt.011         | REJT        | "Valid To" invalid     | Yes                    | Yes  | Yes  | Yes | Yes    |
| DCU1214 | When performing a Cash Account update request on the Linked Account, Opening Date and/or Closing Date of a TIPS Credit Memorandum Balance, the Linked Account must refer to an existing Cash Account instance in CRDM with type "TIPS Cash Account" or "TIPS AS Technical Account" which is open throughout the specified validity period of the TIPS CMB being updated.   | acmt.015        | acmt.011         | REJT        | Invalid linked account | No                     | Yes  | No   | No  | No     |
| DCU1215 | When performing a Cash Account update request on the Linked Account, Opening Date and/or Closing Date of an RTGS Dedicated Cash Account, RTGS Sub-Account, Overnight Deposit Account, Marginal Lending Account, Main Cash Account, Contingency Cash Account or CB Contingency Account, the Linked Account must refer to an existing Cash Account instance in CRDM with the correct type which is open throughout the specified validity period of the Cash Account being updated. For RTGS DCA, Contingency Cash Account, Overnight Deposit Account and Marginal Lending Account the Linked Account must be a Main Cash Account; for RTGS sub-account it must be an RTGS DCA; for RTGS sub-account it must be an | acmt.015        | acmt.015         | acmt.011    | REJT                   | Invalid linked account | No   | No   | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text                    | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|-------------------------------|-----|------|------|-----|--------|
|         | RTGS DCA or RTGS CB Account; for CB Contingency Account it must be a CLM CB Account; for ECB Mirror Account it must be a CLM CB Account with Default Flag set to TRUE. Moreover, the same Linked account cannot be specified as such for multiple Contingency Cash Accounts or Contingency CB Accounts. Accounts of the same CB cannot be specified as Linked Accounts for multiple ECB Mirror Accounts. |                 |                  |             |                               |     |      |      |     |        |
| DCU1216 | When performing a Cash Account update request, in case of request of deletion of Cash Account Restriction, the Valid From must be greater than the current timestamp or the Cash Account Restriction must be closed. For CLM and RTGS restrictions the Valid From must be greater than the current date or the Valid To must be equal or earlier than the current date.                                  | acmt.015        | acmt.011         | REJT        | Restriction cannot be deleted | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1217 | When performing a Cash Account update request, case of request of update of Cash Account Restriction, it must refer to an existing Cash Account Restriction with a non-past Valid To.  | acmt.015        | acmt.011         | REJT        | Account is not restricted     | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1218 | When performing a Cash Account update request, the specified Currency Code must refer to the one already linked to the existing Cash Account.  | acmt.015        | acmt.011         | REJT        | Invalid Currency Code         | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1219 | When performing a Cash Account update request, in case of request of creation of Cash Account Restriction, the Valid From of the Cash Account Restriction must be equal or greater than the Valid From of the Restriction Type.  | acmt.015        | acmt.011         | REJT        | "Valid From" invalid          | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1220 | When performing a Cash Account update request, in case of request of creation of Cash Account Restriction, the Valid To of   | acmt.015        | acmt.011         | REJT        | "Valid To" invalid            | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | the Cash Account Restriction must be equal or less than the Valid To of the Restriction Type.  |                 |                  |             |  |     |      |      |     |        |
| DCU1222 | When performing a Cash Account Update request, there cannot be more than one Cash Account Restriction on the same Cash Account for CLM or RTGS at any given point in time.   | acmt.007        | acmt.011         | REJT        | Overlapping restriction detected                                 | No  | No   | Yes  | Yes | No     |
| DCU1223 | When performing a Cash Account Update request for a Cash Account Restriction related to CLM or RTGS, the time part of the Valid From and Valid To attributes must be set to zero.  | acmt.007        | acmt.011         | REJT        | Invalid timestamp.   | No  | No   | Yes  | Yes | No     |
| DCU1250 | When performing a Cash Account Update request, the Closing Date for T2 Accounts cannot be set to a Currency Closing Day in the relevant Service.   | acmt.015        | acmt.011         | REJT        | Closing Date cannot be set to a Currency Closing Day             | No  | No   | Yes  | Yes | No     |
| DCU1263 | When performing a Cash Account Update request including Cash Account Restrictions related to TIPS, the changes can only be performed via U2A.  | acmt.015        | acmt.011         | REJT        | TIPS blocking/unblocking cannot be performed via A2A             | No  | Yes  | No   | No  | No     |
| DCU1300 | When performing a Cash Account Update request, in case of request for creation/update of Cash Account Restriction, the new or updated restriction must not overlap with any other Cash Account Restrictions having the same Restriction Type on the same Cash Account.   | acmt.015        | acmt.011         | REJT        | Cash Account Restriction overlaps with existing instance         | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1313 | When performing a Cash Account update request, in case of update of the Opening or Closing Date of a T2S Dedicated Transit Account, RTGS Dedicated Transit Account or TIPS Transit Account, no active Cash Account with the same currency for T2S, RTGS and TIPS respectively must be open outside of the Transit Account validity period. | acmt.015        | acmt.011         | REJT        | Closing Date not allowed due to open DCA related Transit Account | Yes | Yes  | Yes  | Yes | No     |



| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| DCU1400 | When performing a Cash Account Update request, to update a Main Cash Account, Automated Generation of Interest Payment (system generated) can only be set to TRUE in case a Leading CLM Account Holder is defined at Party Service Link Level.   | acmt.015        | acmt.011         | REJT        | Invalid use of Automated Generation of Interest Payment flag     | No  | No   | No   | Yes | No     |
| DCU1532 | When performing a Cash Account Update request, the validity period of the Cash Account must be contained within the validity period of the relevant Transit Account.   | acmt.015        | acmt.011         | REJT        | No valid Transit Account found for the specified validity period | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1534 | When performing a Cash Account Update request, when updating the Opening/Closing Dates of an RTGS Dedicated Transit Account, T2S Dedicated Transit Account, TIPS Transit Account or any kind of Contingency Transit Account or CLM Dedicated Transit Account, no other account of the same type must be already associated to the relevant currency over the same validity period. | acmt.015        | acmt.011         | REJT        | Transit Account already defined                                  | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1555 | When performing a Cash Account Update request, Cash Accounts for TIPS require an existing and active Party-Service Link to be in place between the Owner Party and TIPS for the relevant validity period.  | acmt.015        | acmt.011         | REJT        | Party-Service Link for TIPS not found or not valid               | No  | Yes  | No   | No  | No     |
| DCU1556 | When performing a Cash Account Update request, Cash Accounts for CLM require an existing and active Party-Service Link to be in place between the Owner Party and CLM for the relevant validity period.  | acmt.015        | acmt.011         | REJT        | Party-Service Link for CLM not found or not valid                | No  | No   | No   | Yes | No     |
| DCU1557 | When performing a Cash Account Update request, Cash Accounts for RTGS require an existing and active Party-Service Link to be in place between the Owner Party and RTGS for the relevant validity period.  | acmt.015        | acmt.011         | REJT        | Party-Service Link for RTGS not found or not valid               | No  | No   | Yes  | No  | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| DCU1558 | When performing a Cash Account Update request, Cash Accounts for ECONS2 require an existing and active Party-Service Link to be in place between the Owner Party and ECONS2 for the relevant validity period.  | acmt.015        | acmt.011         | REJT        | Party-Service Link for ECONS2 not found or not valid | No  | No   | No   | No  | Yes    |
| DCU1600 | When performing a Cash Account Update request, in case of immediate setup or removal of Cash Account Restriction, the timestamp to be used must take a conventional value which the system will interpret as the current timestamp. Furthermore, no check must be performed on such a conventional value in case of four eyes second step or processing of retrieved queued requests.  | acmt.015        | n/a              | n/a         | n/a  | Yes | Yes  | Yes  | Yes | Yes    |
| DCU1800 | When performing a Cash Account Update request, the number of decimals in the values provided for Floor Notification Amount, Target Amount After Breaching Floor, Ceiling Notification Amount, Target Amount After Breaching Ceiling and Maximum Amount To Be Debited Per Day must be compliant with the number of decimals foreseen for the relevant currency.   | acmt.015        | acmt.011         | REJT        | Invalid number of decimals.                          | Yes | Yes  | Yes  | Yes | Yes    |
| DCU4001 | A Standing and Predefined Liquidity Transfer Order can only be updated by the NCB, Payment Bank or Ancillary System responsible for the account to be debited. Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the specified account to be debited. In addition, NCBs and Payment Banks can manage LTOs on Cash Accounts for which they are defined as Co-Managers. | camt.024        | camt.025         | REJT        | Requestor not allowed                                | Yes | No   | Yes  | Yes | No     |
| DCU4003 | When performing a Standing and Predefined Liquidity Transfer Order   | camt.024        | camt.025         | REJT        | Data to be updated not found                         | Yes | No   | Yes  | Yes | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | update request, it must refer to an existing and active instance in CRDM.  |                 |                  |             |   |     |      |      |     |        |
| DCU4010 | When performing a Standing and Predefined Liquidity Transfer Order Update request, if the Order Type is 'Predefined', the Valid From and Valid To must contain identical values.   | camt.024        | camt.025         | REJT        | Invalid "Valid From"/"Valid To" for a Predefined Order                                    | Yes | No   | Yes  | Yes | No     |
| DCU4030 | When performing a Standing and Predefined Liquidity Transfer Order update request, the Standing and Predefined Liquidity Transfer Order cannot be 'closed' if there still are valid Standing and Predefined Liquidity Transfer Order Link Sets linked to it. | camt.024        | camt.025         | REJT        | The deletion/close is not allowed due to a deletion priority constraint                   | Yes | No   | No   | No  | No     |
| DCU4081 | When performing a Standing and Predefined Liquidity Transfer Order update request, the Event Type Code, when specified in the update request, must refer to an active and existing instance in Event Type eligible for this use.                             | camt.024        | camt.025         | REJT        | Unknown Event Type Identifier   | Yes | No   | Yes  | Yes | No     |
| DCU4090 | Only one predefined liquidity transfer order can be defined to be executed at the same timestamp and/or business event for each cash account.  | camt.024        | camt.025         | REJT        | Predefined liquidity transfer order already defined for the specified time/business event | Yes | No   | Yes  | Yes | No     |
| DCU4091 | When performing a Standing and Predefined Liquidity Transfer Order update request, the Dedicated Amount field and the All Cash field cannot be set both to True.   | camt.024        | camt.025         | REJT        | All Cash/Dedicated Amount must not be set both to TRUE                                    | Yes | No   | Yes  | Yes | No     |
| DCU4092 | When performing a Standing and Predefined Liquidity Transfer Order update request, the Amount must be set to zero if the Dedicated Amount field or the All Cash field are set to True.   | camt.024        | camt.025         | REJT        | Amount must be set to zero if All Cash/Dedicated Amount is TRUE                           | Yes | No   | Yes  | Yes | No     |
| DCU4093 | When performing a Standing and Predefined Liquidity Transfer Order update request, the Amount cannot be set  | camt.024        | camt.025         | REJT        | Amount cannot be set to zero if All Cash and Dedicated Amount are FALSE                   | Yes | No   | Yes  | Yes | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | to zero if the Dedicated Amount field and the All Cash field are set to False.   |                 |                  |             |   |     |      |      |     |        |
| DCU4130 | When performing a Standing and Predefined Liquidity Transfer Order update request, the Valid To must be equal to or greater than the current date, greater than the valid from and not greater than the Cash account's closing date (if applicable). | camt.024        | camt.025         | REJT        | "Valid To" invalid  | Yes | No   | Yes  | Yes | No     |
| DCU4140 | When performing a Standing and Predefined Liquidity Transfer Order update request, the Valid From specified must be equal to or greater than the current date and not greater than the Cash account's closing date (if applicable).                  | camt.024        | camt.025         | REJT        | "Valid From" invalid  | Yes | No   | Yes  | Yes | No     |
| DCU4141 | When performing a Standing and Predefined Liquidity Transfer Order update request, the Valid From can be modified only if the existing one is greater than the current date.   | camt.024        | camt.025         | REJT        | "Valid From" invalid  | Yes | No   | Yes  | Yes | No     |
| DCU4185 | When performing a Liquidity Transfer Order Update request from an RTGS DCA to another RTGS DCA or from an MCA to another MCA, the accounts must belong to the same Liquidity Transfer Group defined in CRDM.   | camt.024        | camt.025         | REJT        | The Creditor and Debited No Accounts must belong to the same Liquidity Transfer Group | No  | No   | Yes  | Yes | No     |
| DCU4200 | When performing a Standing and Predefined Liquidity Transfer Order Update request, there cannot be more than one instance for each Cash Account linked to Event Type Code 'CARL' in a given time period.   | camt.024        | camt.025         | REJT        | LTO linked to CARL event already exists for this DCA                                  | Yes | No   | No   | No  | No     |
| DCU4201 | When performing a Liquidity Transfer Order Restore request, if the AS Procedure is set to Procedure D, the credited RTGS AS Technical Account must   | camt.024        | camt.025         | REJT        | Invalid use of AS Procedure   | No  | No   | Yes  | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text                                 | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | be linked to an existing and active AS Procedure D in CRDM. <b>{T2 CR0138}</b>  |                 |                  |             |  |     |      |      |     |        |
| DCU4072 | When performing a Liquidity Transfer Order update request, the 'Creditor BIC', if specified, must exist in the BIC Directory.   | camt.024        | camt.025         | REJT        | Invalid Creditor BIC                       | No  | No   | Yes  | No  | No     |
| DCU4073 | When performing a Liquidity Transfer Order update request, the 'Debtor BIC', if specified, must exist in the BIC Directory.   | camt.024        | camt.025         | REJT        | Invalid Debtor BIC                         | No  | No   | Yes  | No  | No     |
| DCU4205 | When performing a Liquidity Transfer Order Update request, Creditor BIC, Debtor BIC, ASTN Creditor Account and ASTN Debtor Account can only be specified in case of standing order for AS settlement procedure D.   | camt.024        | camt.025         | REJT        | Invalid use of AS Procedure                | No  | No   | Yes  | No  | No     |
| DCU4210 | When performing a Liquidity Transfer Order Update request, Event Type Code 'OCS2' (second optional cash sweep) can only be linked to Cash Accounts in EUR.  | camt.024        | camt.025         | REJT        | OCS2 cannot be linked to a non-EUR account | Yes | No   | No   | No  | No     |
| DCU4800 | When performing a Liquidity Transfer Order Update request, the number of decimals in the value provided for Amount must be compliant with the number of decimals foreseen for the relevant currency.  | camt.024        | camt.025         | REJT        | Invalid number of decimals.                | Yes | No   | Yes  | Yes | No     |
| DPC1001 | A Party can be created only by Service Operator, CSD or NCB. A user belonging to a CSD or NCB can only create parties that fall under their responsibility according to the Hierarchical Party Model. Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the Party responsible for the Party to be created. | reda.014        | reda.016         | REJT        | Requestor not allowed                      | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1002 | When performing a Party Create request, the 'System Entity' specified in input must refer to an existing instance in CRDM, and  | reda.014        | reda.016         | REJT        | Invalid System Entity Identifier           | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | its type must be consistent with the 'Party Type' specified in input.  |                 |                  |             |   |     |      |      |     |        |
| DPC1013 | When performing a Party Create request, the 'Party Mnemonic' specified in the Party Code section must not be already assigned to another active Party belonging to the same System Entity and having the same Parent BIC.    | reda.014        | reda.016         | REJT        | Party Mnemonic already used                       | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1021 | When performing a Party Create request, the 'Country Code' specified in the Party Address section must refer to an existing Country Code in CRDM.  | reda.014        | reda.016         | REJT        | Invalid country code                              | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1024 | When performing a Party Create request, In case of request for creation of Party Restriction, the created restriction type must refer to an existing type in [Restriction Type] entity with Object Restriction Type 'Party'. | reda.014        | reda.016         | REJT        | Invalid restriction type                          | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1025 | When performing a Party Create request, In case of request for creation of Party Restriction, the created restriction type must not overlap with any other Party Restriction in input having the same [Restriction Type].    | reda.014        | reda.016         | REJT        | Party Restriction overlaps with existing instance | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1180 | When performing a Party Create request, the 'Party Mnemonic' specified in the Party Code section (when its type is BIC) must exist in the BIC Directory.   | reda.014        | reda.016         | REJT        | Party Mnemonic not found in BIC directory         | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1205 | When performing a Party Create request, the Party Opening Date specified in the request must be equal to or greater than the current date.   | reda.014        | reda.016         | REJT        | "Opening Date" invalid                            | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1206 | When performing a Party Create request, the Party Closing Date, if specified, must be equal to or greater than the current date and greater than the Opening Date.   | reda.014        | reda.016         | REJT        | "Closing Date" invalid                            | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1207 | When performing a Party Create request, the Party Restriction 'Valid To', when   | reda.014        | reda.016         | REJT        | "Valid To" invalid                                | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | specified, must be equal to or greater than the current timestamp(or the current date for CLM and RTGS restrictions), equal to or greater than the Party Restriction Valid From and equal to or less than the Valid To of the relevant Restriction Type entity.  |                 |                  |             |   |     |      |      |     |        |
| DPC1208 | When performing a Party Create request, the Party Restriction "Valid From", when specified, must be equal to or greater than the current timestamp (or the current date for CLM and RTGS restrictions) and equal to or greater than the Valid From of the relevant Restriction Type entity and equal to or less than the Valid To of the relevant Restriction Type entity. | reda.014        | reda.016         | REJT        | "Valid From" invalid  | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1209 | When performing a Party Create request for a Party Restriction related to CLM or RTGS, the time part of the Valid From and Valid To attributes must be set to zero.  | reda.014        | reda.016         | REJT        | Overlapping restriction detected  | No  | No   | Yes  | Yes | No     |
| DPC1230 | When performing a Party Create request including a Party Restriction related to TIPS, the Valid From must take the conventional value representing the current timestamp and the Valid To cannot be set.   | reda.014        | reda.016         | REJT        | TIPS blocking can only have immediate effect  | No  | Yes  | No   | No  | No     |
| DPC1252 | When performing a Party Create request, in case of request for creation of Market-Specific Party Attribute Value, it must refer to an existing Market-Specific Attribute with Type "Party" and it must belong to the relevant System Entity.   | reda.014        | reda.016         | REJT        | Invalid Market-Specific Party Attribute Value                                       | Yes | Yes  | No   | No  | No     |
| DPC1254 | When performing a Party Create request, in case of request for creation of Market-Specific Party Attribute Value, it must be unique within its System Entity in case it is defined as such in CRDM.  | reda.014        | reda.016         | REJT        | The value for the Market-Specific attribute is already used (and it must be unique) | Yes | Yes  | No   | No  | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| DPC1256 | When performing a Party Create request, in case of request for creation of a Market-Specific Party Attribute, the Market-Specific Attribute Value must be present if the relevant Market-Specific Attribute is defined as mandatory.   | reda.014        | reda.016         | REJT        | Missing mandatory Market-Specific attribute value                                  | Yes | Yes  | No   | No  | No     |
| DPC1257 | When performing a Party create request the Market-Specific Party Attribute Value must be compliant with the values or rules defined in the relevant Attribute Domain.  | reda.014        | reda.016         | REJT        | Invalid Market-Specific Party Attribute Value                                      | Yes | Yes  | No   | No  | No     |
| DPC1300 | When performing a Party Create request, the 'Valid From' specified in the Party Code section must be equal to the current business date.   | reda.014        | reda.016         | REJT        | "Valid From" invalid   | Yes | Yes  | Yes  | Yes | No     |
| DPC1301 | When performing a Party Create request, the 'Valid From' specified in the Party Address section must be equal to the current business date.  | reda.014        | reda.016         | REJT        | "Valid From" invalid   | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1302 | When performing a Party Create request, the 'Valid From' specified in the Party Name section must be equal to the current business date.   | reda.014        | reda.016         | REJT        | "Valid From" invalid   | Yes | Yes  | Yes  | Yes | Yes    |
| DPC1305 | When performing a Party Create request, the Party Address section must not be filled in if the Party Type is CSD Participant.  | reda.014        | reda.016         | REJT        | Party Address must not be defined for CSD Participant                              | Yes | No   | No   | No  | No     |
| DPC1600 | When performing a Party Create request, in case of immediate setup of Party Restriction, the timestamp to be used must take a conventional value which the system will interpret as the current timestamp. Furthermore, no check must be performed on such a conventional value in case of four eyes second step or processing of retrieved queued requests. | reda.014        | n/a              | n/a         | n/a  | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP132 | When performing a Party Create request, the Party Address section must be filled in  | reda.014        | reda.016         | REJT        | Party Address must be defined if the Party Type is different than CSD Participant. | Yes | No   | No   | No  | No     |



| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | if the Party Type is different than CSD Participant.   |                 |                  |             |   |     |      |      |     |        |
| DPD1001 | Party can only be deleted or restored by the Service Operator, CSD or NCB. A user belonging to a CSD or NCB can only delete or restore parties that fall under their responsibility according to the Hierarchical Party Model. Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the specific Party to be maintained. | reda.031        | reda.016         | REJT        | Requestor not allowed   | Yes | Yes  | Yes  | Yes | Yes    |
| DPD1003 | When performing a Party Delete request, it must refer to an existing, active and closed Party or with a future Opening date.   | reda.031        | reda.016         | REJT        | Unknown party   | Yes | Yes  | Yes  | Yes | Yes    |
| DPD1030 | In case of request to delete a Party, all the linked instances in a higher position within the deletion hierarchy (i.e. Securities Account, Cash Account, External RTGS Account, Security CSD Link, CSD Account Link, Party Service Link and Party) must be deleted.   | reda.031        | reda.016         | REJT        | The deletion is not allowed due to a deletion priority constraint | Yes | Yes  | Yes  | Yes | Yes    |
| DPD1300 | When performing a Party deletion request, the Party cannot be deleted if it is referenced in an object privilege assignment.   | reda.031        | reda.016         | REJT        | Deletion not allowed due to existing object privilege assignment  | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1001 | Party can only be updated by the Service Operator, CSD or NCB. A user belonging to a CSD or NCB can only update parties that fall under their responsibility according to the Hierarchical Party Model. Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the specific Party to be maintained.                        | reda.022        | reda.016         | REJT        | Requestor not allowed   | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1003 | When performing a Party Update request, it must refer to an existing and active  | reda.022        | reda.016         | REJT        | Unknown party   | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | Party whose Closing Date is equal to or greater than the current business date. The Service Operator can skip this check in contingency situations. <b>{T2 CR0138}</b>   |                 |                  |             |  |     |      |      |     |        |
| DPU1005 | When performing a Party Update request, the update request of a "minor" entity (such as Party Name, Party code, Party Address, Party Contact, Market-Specific Party Attribute, Party Restriction, AutoCollateralisation Rule) must refer to an existing and active instance with a non-past Valid To, where applicable.                            | reda.022        | reda.016         | REJT        | Unknown minor entity                               | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1007 | When performing a Party Update request, in case of request for creation of Party Technical Address, the PTA specified cannot be identical to a PTA already linked to the relevant Party.   | reda.022        | reda.016         | REJT        | Party Technical address already defined for Party  | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1009 | When performing a Party Update request, the create request of a historical (i.e. which has the validity date) "minor" entity (such as Party Name Party code, Party Address, Party Contact) cannot have a past validity date.   | reda.022        | reda.016         | REJT        | "Opening Date" or "Close Date" invalid             | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1010 | When performing a Party Update request, the delete request of a historical (i.e. which has the validity date) "minor" entity (such as Party Name, Party Address) cannot refer to an entity having a past validity date. This does not apply to the Party Code, for which only the currently active entity cannot be deleted, nor to Party Contact. | reda.022        | reda.016         | REJT        | Instance with past validity date cannot be deleted | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1013 | When performing a Party Update request, the 'Party Mnemonic' specified in the Party Code section must not be already assigned, as an active instance, to another active Party belonging to the same System Entity and having the same Parent BIC.  | reda.022        | reda.016         | REJT        | Party Mnemonic already used                        | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DPU1021 | When performing a Party Update request, the 'Country Code' specified in the Party Address section must refer to an existing Country Code in CRDM.   | reda.022        | reda.016         | REJT        | Invalid country code  | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1024 | When performing a Party Update request, in case of request for creation of Party Restriction, the created restriction type must refer to an existing type in [Restriction Type] entity with Object Restriction Type 'Party'.  | reda.022        | reda.016         | REJT        | Invalid restriction type  | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1025 | When performing a Party Update request, in case of request for deletion of Party Restriction, it must refer to a closed instance or its Valid From must be greater than the current timestamp. For CLM and RTGS restrictions the Valid From must be greater than the current date or the Valid To must be equal or earlier than the current date. | reda.022        | reda.016         | REJT        | Invalid restriction type  | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1030 | When performing a Party Update request, in case of request to close a Party, all the linked instances in a higher position within the deletion hierarchy (i.e. Securities Account, Cash Account, External RTGS Account, Security CSD Link and CSD Account link, Party, Party Service Link, Data Aggregation) must be closed or deleted.           | reda.022        | reda.016         | REJT        | The deletion/close is not allowed due to a deletion priority constraint | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1180 | When performing a Party Update request, the 'Party Mnemonic' specified in the Party Code section (when its type is BIC) must exist in the BIC Directory.  | reda.022        | reda.016         | REJT        | Party Mnemonic not found in BIC directory                               | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1205 | When performing a Party Update request, in case of Closing of [Party], the specified 'Closing Date' must be equal to or greater than the current business date.   | reda.022        | reda.016         | REJT        | "Opening Date" or "Close Date" invalid                                  | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1206 | When performing a Party Update request, it is only possible to update the 'Opening  | reda.022        | reda.016         | REJT        | "Opening Date" or "Close Date" invalid                                  | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | Date' if it is greater than the current business date. The new specified value must be equal to or greater than the current business date and it must not be greater than the opening date of the Cash Account for which the party is the Account holder.   |                 |                  |             |  |     |      |      |     |        |
| DPU1207 | When performing a Party Update request, the specified Party Restriction 'Valid To' must be equal to or greater than the current timestamp (or the current date for CLM and RTGS restrictions) , greater than the relevant Valid From, equal to or greater than the Valid From of the relevant Restriction Type and equal to or less than the Valid To of the relevant Restriction Type. | reda.022        | reda.016         | REJT        | "Valid To" invalid                                   | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1208 | When performing a Party update request, the Valid From specified in a Party Restriction create request must be equal to or greater than the current timestamp (or the current date for CLM and RTGS restrictions) , equal to or greater than the Valid From of the relevant Restriction Type and equal to or less than the Valid To of the relevant Restriction Type.                   | reda.022        | reda.016         | REJT        | "Valid From" invalid                                 | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1209 | When performing a Party Update request for a Party Restriction related to CLM or RTGS, the time part of the Valid From and Valid To attributes must be set to zero.   | reda.022        | reda.016         | REJT        | Overlapping restriction detected                     | No  | No   | Yes  | Yes | No     |
| DPU1233 | When performing a Party Update request including Party Restrictions related to TIPS, the changes can only be performed via U2A.   | reda.022        | reda.016         | REJT        | TIPS blocking/unblocking cannot be performed via A2A | No  | Yes  | No   | No  | No     |
| DPU1250 | When performing a Party Update request, the Closing Date for Parties linked to CLM or RTGS cannot be set to a Currency Closing Day in the relevant Service  | reda.022        | reda.016         | REJT        | Closing Date cannot be set to Currency Closing Day   | No  | No   | Yes  | Yes | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DPU1252 | When performing a Party Update request, in case of request for creation/update of Market-Specific Party Attribute Value, it must refer to an existing Market-Specific Attribute with Type "Party" and it must belong to the relevant System Entity. | reda.022        | reda.016         | REJT        | Invalid Market-Specific Party Attribute Name  | Yes | No   | No   | No  | No     |
| DPU1254 | When performing a Party Update request, in case of request for creation/update of Market-Specific Party Attribute Value, it must be unique within its System Entity in case it is defined as such in CRDM.  | reda.022        | reda.016         | REJT        | The value for the Market-Specific attribute is already used (and it must be unique) | Yes | No   | No   | No  | No     |
| DPU1255 | When performing a Party Update request, in case of request for deletion of a Market-Specific Party Attribute, the relevant [Market-Specific Attribute] entity must not be defined as "mandatory".   | reda.022        | reda.016         | REJT        | Missing mandatory section/field   | Yes | No   | No   | No  | No     |
| DPU1256 | When performing a Party Update request, in case of request for update of a Market-Specific Party Attribute, the Market-Specific Attribute Value must be present if the relevant [Market-Specific Attribute] is defined as mandatory.                | reda.022        | reda.016         | REJT        | Missing mandatory Market-Specific attribute value                                   | Yes | No   | No   | No  | No     |
| DPU1257 | When performing a Party update request the Market-Specific Party Attribute Value must be compliant with the values or rules defined in the relevant Attribute Domain.   | reda.022        | reda.016         | REJT        | Invalid Market-Specific Party Attribute Name  | Yes | Yes  | No   | No  | No     |
| DPU1258 | When performing a Party Update request, each Market-Specific Attribute can have no more than one value for a given Party.   | reda.022        | reda.016         | REJT        | Market-Specific Attribute cannot have more than one value for this Party            | Yes | Yes  | No   | No  | No     |
| DPU1300 | When performing a Party Update request, in case of request for creation/update of Party Restriction, the new or updated restriction must not overlap with any other Party Restriction having the same Restriction Type on the same Party.           | reda.022        | reda.016         | REJT        | Party Restriction overlaps with existing instance                                   | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1305 | When performing a Party update request, the Party Address section must  | reda.022        | reda.016         | REJT        | Party Address must not be defined for CSD Participant                               | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | not be filled in if the Party Type is CSD Participant.  |                 |                  |             |  |     |      |      |     |        |
| DPU1350 | When performing a Party Update request to change the Party BIC, there cannot be more than one Party, with the same BIC linked to the same Service (if the Service is TIPS, ECONS2, T2_CLM or T2_RTGS). Moreover, different Parties with the same BIC cannot be linked simultaneously to T2_CLM and T2_RTGS  | reda.022        | reda.016         | REJT        | Party BIC already linked to this No service                        | No  | Yes  | Yes  | Yes | Yes    |
| DPU1351 | When performing a Party Update request to change the Party BIC, there cannot be more than one User flagged as Main User for the same Certificate DN and the same Party BIC.   | reda.022        | reda.016         | REJT        | Main User already exists for this No Party BIC                     | No  | Yes  | No   | No  | No     |
| DPU1500 | When performing a Party Update request, the update request of a historical "minor" entity (such as Party Name, Party Address, Party Contact) must refer to an instance currently in use or having a future validity.  | reda.022        | reda.016         | REJT        | Minor entity is not the one Yes currently in use or the future one | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1501 | When performing a Party Update request, the update request of Party Code must refer to an instance having a future validity.  | reda.022        | reda.016         | REJT        | Party Code to be updated must Yes have a future validity           | Yes | Yes  | Yes  | Yes | Yes    |
| DPU1600 | When performing a Party Update request, in case of immediate setup or removal of Party Restriction, the timestamp to be used must take a conventional value which the system will interpret as the current timestamp. Furthermore, no check must be performed on such a conventional value in case of four eyes second step or processing of retrieved queued requests. | reda.022        | n/a              | n/a         | n/a  | Yes | Yes  | Yes  | Yes | Yes    |
| DXAA007 | Each historical entity may have no more than one future instance.   | reda.022        | reda.016         | REJT        | Only one instance may become Yes effective in the future.          | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| IIMP101 | If the requested operation is an update (UPDT), the party technical address must not be present.   | reda.022        | reda.016         | REJT        | The party technical address can not be modified.                     | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP104 | Combined values for SysRstrctn/Tp and SysRstrctn/VldFr must be unique per message.   | reda.022        | reda.016         | REJT        | Combined value for SysRstrctn/Tp and SysRstrctn/VldFr is not unique. | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP105 | Value for MktSpfcAttr/Nm must be unique per message.   | reda.022        | reda.016         | REJT        | Value for MktSpfcAttr/Nm must be unique per message.                 | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP106 | An attribute for 'SysPtyDt' can be used only once per message.   | reda.022        | reda.016         | REJT        | An attribute for 'SysPtyDt' must be used only once.                  | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP107 | Value for PtyId/VldFr must be unique per message.  | reda.022        | reda.016         | REJT        | Value for PtyId/VldFr must be unique per message.                    | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP108 | Value for PtyNm/VldFr must be unique per message.  | reda.022        | reda.016         | REJT        | Value for PtyNm/VldFr must be unique per message.                    | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP109 | Value for PtyAdr/VldFr must be unique per message.   | reda.022        | reda.016         | REJT        | Value for PtyAdr/VldFr must be unique per message.                   | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP110 | Value for TechAdr must be unique per message.  | reda.022        | reda.016         | REJT        | Value for TechAdr must be unique per message.                        | Yes | Yes  | Yes  | Yes | Yes    |
| DRD9001 | When performing a request to delete a Limit, the requestor must be authorised to delete the requested data according to the following:<br>A System Operator user can delete all data<br>A NCB user can delete only Limits for CMBs (T2S CMBs and TIPS CMBs) and RTGS Dedicated Cash Accounts belonging to its own System Entity<br>A Payment Bank user can delete only | camt.012        | camt.025         | REJT        | Requestor not allowed  | Yes | Yes  | Yes  | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text                    | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|-------------------------------|-----|------|------|-----|--------|
|         | Limits for its own non-primary T2S CMBs, its own RTGS DCAs and TIPS CMBs linked to its own Cash Account   |                 |                  |             |                               |     |      |      |     |        |
| DRD9003 | The delete requests of an autocollateralisation, external guarantee or unsecured credit Limit must refer to an existing and active instance whose Limit Amount is equal to zero.  | camt.012        | camt.025         | REJT        | Limit to be deleted not found | Yes | No   | No   | No  | No     |
| DRU9001 | When performing a request to update a Limit, the requestor must be authorised to update the requested data according to the following:<br>A Service Operator user can update all data<br>A NCB user can update only Limits for CMBs (T2S CMBs and TIPS CMBs) and RTGS Dedicated Cash Accounts belonging to its own System Entity<br>A Payment Bank user can update only Limits for its own non-primary T2S CMBs, its own RTGS DCAs and TIPS CMBs linked to its own Cash Account | camt.011        | camt.025         | REJT        | Requestor not allowed         | Yes | Yes  | Yes  | No  | No     |
| DRU9003 | The update requests of a Limit must refer to an existing and active instance.   | camt.011        | camt.025         | REJT        | Data to be updated not found  | Yes | Yes  | Yes  | No  | No     |
| DRU9055 | When performing an autocollateralisation, external guarantee or unsecured credit Limit update request, the Limit Value must be set to zero for Primary CMB if the Regular Securities Account or the NCB Cash Account for the relevant CMB are not defined.  | camt.011        | camt.025         | REJT        | Limit Amount must be zero     | Yes | No   | No   | No  | No     |
| DRU9056 | When performing an autocollateralisation, external guarantee or unsecured credit Limit update request, the Limit Value must be set to zero if the Receiving Securities Account for the relevant CMB are not defined for Repo and Pledge countries.  | camt.011        | camt.025         | REJT        | Limit Amount must be zero     | Yes | No   | No   | No  | No     |



| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text                                 | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| DRU9059 | When performing a Limit update request, the To Account BIC specified must refer to an existing and active Authorised Account User instance of type "Direct" in CRDM defined on an RTGS Dedicated Cash Account.  | camt.011        | camt.025         | REJT        | Unknown To Account BIC                     | No  | No   | Yes  | Yes | No     |
| DRU9101 | When performing a T2 Bilateral Limit or T2 Multilateral Limit update request, there cannot be more than one Limit on the same Cash Account for each Limit Type and To Account BIC over the same validity period.  | camt.011        | camt.025         | REJT        | Limit already defined                      | No  | No   | Yes  | Yes | No     |
| DRU9150 | When performing a T2 Bilateral Limit or T2 Multilateral Limit update request, the Limit Amount must be equal to or greater than the minimum value defined by the Operator in the relevant Attribute Domain for the given Currency.  | camt.011        | camt.025         | REJT        | Amount below minimum threshold             | Yes | No   | Yes  | No  | No     |
| DRU9233 | When performing a Limit Update request for a TIPS CMB Limit, the changes can only be performed via U2A.   | camt.011        | camt.025         | REJT        | TIPS CMB Limit can only be updated via U2A | No  | Yes  | No   | No  | No     |
| DRU9800 | When performing a Limit Update request, the number of decimals in the value provided for Limit Amount must be compliant with the number of decimals foreseen for the relevant currency.   | camt.011        | camt.025         | REJT        | Invalid number of decimals.                | Yes | Yes  | Yes  | No  | No     |
| DCU7001 | Standing Order for Reservation can be updated by Service Operator, CB, Payment Bank or Ancillary System.<br>CBs can update Standing Orders for Reservation for Cash Accounts in their System Entity.<br>Payment Banks and Ancillary Systems can update Standing Orders for Reservation for Cash Accounts they own or co-manage. | camt.048        | camt.025         | REJT        | Requestor not allowed                      | No  | No   | Yes  | Yes | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DCU7002 | The Standing Order for Reservation to be updated must refer to an existing and active instance with future Valid To.  | camt.048        | camt.025         | REJT        | Unknown or invalid Standing Order for Reservation to be updated | No  | No   | Yes  | Yes | No     |
| DCU7006 | There can be no more than one Standing Order for Reservation for the same Cash Account and Priority over the same validity period.  | camt.048        | camt.025         | REJT        | Overlapping instance exists                                     | No  | No   | Yes  | Yes | No     |
| DSC1001 | Securities can be created only by a User belonging to a CSD or by the T2S Operator. CSD users can only create Securities within their own System Entity, or according to the Object Privileges they have been granted.  | reda.006        | reda.008         | REJT        | Requestor not allowed   | Yes | No   | No   | No  | No     |
| DSC1013 | When performing a Securities creation, the Securities Mnemonic specified in the Securities Code section must not be already assigned to another active Securities.  | reda.006        | reda.008         | REJT        | Securities Mnemonic already used                                | Yes | No   | No   | No  | No     |
| DSC1021 | When performing a Securities creation request, the Country Code must refer to an existing Country Code in T2S.  | reda.006        | reda.008         | REJT        | Invalid country code  | Yes | No   | No   | No  | No     |
| DSC1022 | When performing a Securities creation request, the Currency Code must refer to an existing Currency Code in T2S.  | reda.006        | reda.008         | REJT        | Invalid Currency code   | Yes | No   | No   | No  | No     |
| DSC1024 | When performing a Securities creation request, in case of request for creation of Securities Restriction, it must refer to an existing Restriction Type whose Object Restriction Type is Security belonging to the System entity of the Requestor or to the T2S Operator. | reda.006        | reda.008         | REJT        | Invalid restriction type  | Yes | No   | No   | No  | No     |
| DSC1025 | When performing a Securities creation request, the Final Maturity-Expiry Date must be greater than the current date.  | reda.006        | reda.008         | REJT        | Invalid Final Maturity-Expiry Date                              | Yes | No   | No   | No  | No     |
| DSC1026 | When performing a Securities creation request, the Valid From specified in the  | reda.006        | reda.008         | REJT        | Valid From invalid  | Yes | No   | No   | No  | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | Securities Code of the request must be equal to the current date.  |                 |                  |             |  |     |      |      |     |        |
| DSC1027 | When performing a Securities creation request, the Valid From specified in the Securities Name of the request must be equal to the current date.   | reda.006        | reda.008         | REJT        | Valid From invalid                                 | Yes | No   | No   | No  | No     |
| DSC1028 | When performing a Securities creation request, the Final Maturity-Expiry Date must be greater than the Issue Date.   | reda.006        | reda.008         | REJT        | Invalid Final Maturity-Expiry Date                 | Yes | No   | No   | No  | No     |
| DSC1029 | When performing a Securities create request, the ISIN must be compliant with ISO 6166 standards.   | reda.006        | reda.008         | REJT        | ISIN not compliant with ISO 6166                   | Yes | No   | No   | No  | No     |
| DSC1032 | When performing a Securities Create request, the same Deviating Settlement Unit value cannot be specified more than once in the input flow.  | reda.006        | reda.008         | REJT        | Deviating Settlement Unit already specified        | Yes | No   | No   | No  | No     |
| DSC1040 | When performing a Securities creation request, in case of request for creation of Securities Restriction, the specified validity timestamps must be consistent with the validity dates of the Restriction Type; furthermore they must be greater than the current timestamp <sup>102</sup> and the Valid To must be greater than the Valid From. | reda.006        | reda.008         | REJT        | Invalid Securities Restriction validity period     | Yes | No   | No   | No  | No     |
| DSC1252 | When performing a Securities creation request, in case of request for creation of Market-Specific Securities Attribute Value, it must refer to an existing Market-Specific Attribute whose Type is Securities belonging to the System entity of the Requestor  | reda.006        | reda.008         | REJT        | Invalid Market-Specific Securities Attribute Value | Yes | No   | No   | No  | No     |

102 The current timestamp is determined by the internal T2S clock, so the user should take into account the time lag between the submission of the request and its execution in T2S when setting the restriction.

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DSC1254 | When performing a Securities creation request, in case of request for creation of Market-Specific Securities Attribute Value, it must be unique within its System Entity in case it is defined as such in T2S.  | reda.006        | reda.008         | REJT        | The value for the Market-Specific attribute is already used (and it must be unique) | Yes | No   | No   | No  | No     |
| DSC1256 | When performing a Securities create request, all mandatory Market-Specific Attributes the requestor has defined must have values.   | reda.006        | reda.008         | REJT        | Missing mandatory Market-Specific Attribute value                                   | Yes | No   | No   | No  | No     |
| DSC1257 | When performing a Securities create request the Market-Specific Party Attribute Value must be compliant with the values or rules defined in the relevant Attribute Domain.  | reda.006        | reda.008         | REJT        | Invalid Market-Specific Securities Attribute Value                                  | Yes | No   | No   | No  | No     |
| DSC1300 | When performing a Securities creation request, the Settlement Unit Multiple for the relevant settlement type cannot be set to zero.   | reda.006        | reda.008         | REJT        | Settlement Unit Multiple cannot be set to zero.                                     | Yes | No   | No   | No  | No     |
| DSC1301 | When performing a Securities Create request, in case of request for creation of Securities Restriction, the created restriction type must not overlap with any other Securities Restriction in input having the same Restriction Type.  | reda.006        | reda.008         | REJT        | Securities Restriction overlaps with existing instance                              | Yes | No   | No   | No  | No     |
| DSC1600 | When performing a Security Create request, in case of immediate setup or removal of Security Restriction, the timestamp to be used must be the current timestamp of the system. Furthermore, no check must be performed on such a conventional value in case of four eyes second step or processing of retrieved queued requests. | reda.006        | reda.008         | REJT        |   | Yes | No   | No   | No  | No     |
| DSC1700 | When performing a Securities Create request, the CFI must be compliant with ISO/DIS 10962:2015(E) standards.  | reda.006        | reda.008         | REJT        | CFI not compliant with ISO/DIS 10962:2015(E) standards                              | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DSC1800 | When performing a Securities Create request, the number of decimals in the values provided for Minimum Settlement Unit (as Nominal), Settlement Unit Multiple (as Nominal) and Deviating Settlement Unit (as Nominal) must be compliant with the number of decimals foreseen for the relevant currency. | reda.006        | reda.008         | REJT        | Invalid number of decimals.                                 | Yes | No   | No   | No  | No     |
| IIMP133 | When performing a Security Create request, the settlement denomination must be consistent with the security quantity type. If security quantity type is UNIT, only Unit elements must be used. If security quantity type is FAMT, only FaceAmt elements must be used.                                   | reda.006        | reda.008         | REJT        | Denomination not compliant with the security quantity type. | Yes | No   | No   | No  | No     |
| DSU1001 | Securities can be updated only by a User belonging to the responsible CSD, by the T2S Operator or by any user granted with the relevant update privilege on the Securities. Any CSD User in T2S can enter its own Securities Restriction and Market-Specific Attribute Values for the Security.         | reda.007        | reda.029         | REJT        | Requestor not allowed                                       | Yes | No   | No   | No  | No     |
| DSU1003 | When performing a Securities update request, unless it is purely a request to shift the maturity date to the future or to configure Case 2 Intraday Restrictions on Securities, it must refer to an existing and active Securities with a maturity date that is greater than the current business date. | reda.007        | reda.029         | REJT        | Unknown Securities  | Yes | No   | No   | No  | No     |
| DSU1005 | When performing a Securities update request, the update/delete request of a minor entity must refer to an existing and active instance of the Securities.   | reda.007        | reda.029         | REJT        | Unknown Securities  | Yes | No   | No   | No  | No     |
| DSU1006 | Each Securities must have at least one Securities Name, at least one Securities Code  | reda.007        | reda.029         | REJT        | Deletion of mandatory instance is not allowed               | Yes | No   | No   | No  | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| DSU1007 | When performing a Securities update request, in case of delete request for historical minor entities, the current date must be less than the Valid From of the entity to be deleted or greater than its Valid To   | reda.007        | reda.029         | REJT        | Deletion of an open instance is not allowed        | Yes | No   | No   | No  | No     |
| DSU1009 | When performing a Securities update request, the create request of a historical minor entity. the current date must be less than or equal to the Valid From of the entity to be created  | reda.007        | reda.029         | REJT        | 'Valid from' or 'Valid to' invalid                 | Yes | No   | No   | No  | No     |
| DSU1022 | When performing a Securities update request, the Currency Code must refer to an existing Currency Code in T2S.   | reda.007        | reda.029         | REJT        | Invalid currency code                              | Yes | No   | No   | No  | No     |
| DSU1024 | When performing a Securities update request, in case of request for creation of Securities Restriction, it must refer to an existing Restriction Type whose Object Restriction Type is Securities and belonging to the same System Entity of the requestor or to the T2S Operator. | reda.007        | reda.029         | REJT        | Invalid restriction type                           | Yes | No   | No   | No  | No     |
| DSU1025 | When performing a Securities update request, the Final Maturity-Expiry Date must be greater than the current business date.  | reda.007        | reda.029         | REJT        | Invalid Final Maturity-Expiry Date                 | Yes | No   | No   | No  | No     |
| DSU1026 | When performing a Securities update request, the Final Maturity-Expiry Date must be greater than the Issue Date.   | reda.007        | reda.029         | REJT        | Invalid Final Maturity-Expiry Date                 | Yes | No   | No   | No  | No     |
| DSU1030 | When performing a Security Update request, the values provided for Minimum Settlement Unit, Settlement Unit Multiple and Deviating Settlement Unit must be compliant with the Settlement Type of the Security.   | reda.007        | reda.029         | REJT        | Values not compliant with Settlement Type          | Yes | No   | No   | No  | No     |
| DSU1031 | When performing a Security Update request, if the Settlement Type is changed, new values for the Minimum Settlement Unit and Settlement Unit   | reda.007        | reda.029         | REJT        | Settlement Type not compliant with existing values | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | Multiple must be provided in accordance with the new Settlement Type. Furthermore, there cannot be values for Deviating Settlement Unit for the old Settlement Type.  |                 |                  |             |   |     |      |      |     |        |
| DSU1032 | When performing a Securities Create request, the same Deviating Settlement Unit value cannot be specified more than once in the input flow.   | reda.007        | reda.029         | REJT        | Deviating Settlement Unit already specified       | Yes | No   | No   | No  | No     |
| DSU1040 | When performing a Securities update request, in case of request for creation or update of Securities Restriction, the specified validity timestamps must be consistent with the validity dates of the Restriction Type furthermore they must be greater than the current timestamp <sup>103</sup> and the Valid To must be greater than the Valid From. | reda.007        | reda.029         | REJT        | Invalid Securities Restriction validity period    | Yes | No   | No   | No  | No     |
| DSU1041 | When performing a Securities update request, in case of request for update of Securities Restriction, it must refer to an existing instance of Securities Restriction in the System Entity of the Requestor with a non-past Valid To.   | reda.007        | reda.029         | REJT        | Invalid Securities Restriction                    | Yes | No   | No   | No  | No     |
| DSU1042 | When performing a Securities update request, in case of request for deletion of Securities Restriction, it must refer to an existing instance of Securities Restriction in the System Entity of the Requestor with future Valid From or past Valid To.  | reda.007        | reda.029         | REJT        | Invalid Securities Restriction                    | Yes | No   | No   | No  | No     |
| DSU1252 | When performing a Securities update request, in case of request for creation of Market-Specific Securities Attribute Value, it must refer to an existing  | reda.007        | reda.029         | REJT        | Invalid Market-Specific Securities Attribute Name | Yes | No   | No   | No  | No     |

103 The current timestamp is determined by the internal T2S clock, so the user should take into account the time lag between the submission of the request and its execution in T2S when setting the restriction.

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | Market-Specific Attribute whose Type is Securities belonging to the same System Entity of the Requestor.  |                 |                  |             |   |     |      |      |     |        |
| DSU1254 | When performing a Securities update request, in case of request for creation/update of Market-Specific Securities Attribute Value, it must be unique within its System Entity in case it is defined as such in T2S.   | reda.007        | reda.029         | REJT        | The value for the Market-Specific attribute is already used (and it must be unique) | Yes | No   | No   | No  | No     |
| DSU1255 | When performing a Securities update request, in case of request for deletion of a Market-Specific Securities Attribute, it must not be defined as mandatory.  | reda.007        | reda.029         | REJT        | Deletion of mandatory Market-Specific Attribute value is not allowed                | Yes | No   | No   | No  | No     |
| DSU1256 | When performing a Securities update request, in case of request for creation/update of a Market-Specific Securities Attribute Value, the Market-Specific Attribute Value must be present if the relevant Market-Specific Attribute is defined as mandatory. | reda.007        | reda.029         | REJT        | Market-Specific Attribute Value is mandatory  | Yes | No   | No   | No  | No     |
| DSU1257 | When performing a Securities update request the Market-Specific Securities Attribute Value must be compliant with the values or rules defined in the relevant Attribute Domain.   | reda.007        | reda.029         | REJT        | Invalid Market-Specific Securities Attribute Name                                   | Yes | No   | No   | No  | No     |
| DSU1258 | When performing a Securities Update request, each Market-Specific Attribute can have no more than one value for a given Security.   | reda.007        | reda.029         | REJT        | Market-Specific Attribute cannot have more than one value for this Security         | Yes | No   | No   | No  | No     |
| DSU1300 | When performing a Securities Update request, it is not possible to restrict a Securities more than once using the same Restriction Type on overlapping periods.   | reda.007        | reda.029         | REJT        | Securities Restriction overlaps with existing instance                              | Yes | No   | No   | No  | No     |
| DSU1301 | When performing a Securities update request, the Settlement Unit Multiple for the relevant settlement type cannot be set to zero.   | reda.007        | reda.029         | REJT        | Settlement Unit Multiple cannot be set to zero.                                     | Yes | No   | No   | No  | No     |



| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2                  |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|-------------------------|
| DSU1400 | When performing a Securities update request, the Country Code must refer to an existing Country Code in T2S.  | reda.007        | reda.029         | REJT        | Invalid country code   | Yes | No   | No   | No  | No                      |
| DSU1410 | When performing a Securities update request, the CFI must be compliant with ISO/DIS 10962:2015(E) standards.  | reda.007        | reda.029         | REJT        | CFI not compliant with ISO/DIS 10962:2015(E) standards                               | Yes | No   | No   | No  | No                      |
| DSU1420 | When performing a Securities Update request to change the CFI code from a value corresponding to or from a 'Shares' Financial Instrument Type, there cannot be any related Securities Subject to Cash Penalties instance with an inconsistent Liquidity indicator and Valid To date later than the one preceding the current business date.   | reda.007        | reda.029         | REJT        | Invalid CFI-Liquidity Indicator combination  | Yes | No   | No   | No  | No{ <b>T2S CR0819</b> } |
| DSU1600 | When performing a Security Update request, in case of immediate setup or removal of Security Restriction, the timestamp to be used must take a conventional value which the system will interpret as the current timestamp Furthermore, no check must be performed on such a conventional value in case of four eyes second step or processing of retrieved queued requests   | reda.007        | reda.029         | REJT        |  | Yes | No   | No   | No  | No                      |
| DSU1700 | When performing a Security Update request, if the request contains updates to Issue Date, Minimum Settlement Unit or Settlement Unit Multiple or Deviating Settlement Unit or Settlement Type and it is submitted outside of the End of Day period, the creation date of the Security must be equal to the current date or, in case it is in the past, the Security must not be defined as eligible for autocollateralisation in T2S. If the request does not meet these conditions, it is queued and executed at the start of the End of Day period. | reda.007        | reda.029         | QUED        | Securities update has been queued and will be executed during the End of Day period. | Yes | No   | No   | No  | No                      |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| DSU1704 | When performing a Security Update request of a Security expressed in units, if the request contains updates to the Settlement Unit Multiple increasing the number of decimal positions, and it is submitted outside of the End of Day period, the request is queued and executed at the start of the End of Day period.            | reda.007        | reda.029         | QUED        | Securities update has been queued and will be executed during the End of Day period.               | Yes | No   | No   | No  | No     |
| DSU1705 | When performing a Security Update request of a Security expressed in face amount, if the request contains updates to the Currency increasing or leaving unchanged the number of decimal positions, and it is submitted outside of the End of Day period, the request is queued and executed at the start of the End of Day period. | reda.007        | reda.029         | QUED        | Securities update has been queued and will be executed during the End of Day period.               | Yes | No   | No   | No  | No     |
| DSU1706 | When performing a Security Update request of a Security, if the request contains updates to the Settlement Type increasing or leaving unchanged the number of decimal positions, and it is submitted outside of the End of Day period, the request is queued and executed at the start of the End of Day period.                   | reda.007        | reda.029         | QUED        | Securities update has been queued and will be executed during the End of Day period.               | Yes | No   | No   | No  | No     |
| DSU1800 | When performing a Securities Update request, the number of decimals in the values provided for Minimum Settlement Unit (as Nominal), Settlement Unit Multiple (as Nominal) and Deviating Settlement Unit (as Nominal) must be compliant with the number of decimals foreseen for the relevant currency.                            | reda.007        | reda.029         | REJT        | Invalid number of decimals.  | Yes | No   | No   | No  | No     |
| IIMP062 | At least one of the optional elements must be present for element 'FinancialInstrumentAttributes' in securities maintenance request message  | reda.007        | reda.029         | REJT        | At least one of the optional elements must be present for element 'FinancialInstrumentAttributes'. | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| IIMP137 | When performing a Security Update request, the Valid From element for Securities Name in the addition, update or delete block must be filled in if either Long Name or Short Name of the Securities Name in the correspondent block are filled.   | reda.007        | reda.029         | REJT        | Valid From must be provided for changing Securities Name for the Security.  | Yes | No   | No   | No  | No     |
| IIMP042 | For the user query 'Securities Reference Data Query (SECR)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>- ISIN</li> <li>- CFI</li> <li>- Maturity Date</li> <li>- Issue Date</li> <li>- Currency Code</li> <li>- Securities Maintaing CSD</li> <li>- Country of Issuance</li> </ul> | reda.010        | reda.012         | REJT        | While referring to the query 'Securities Reference Data Query (SECR)', the selected search criteria are invalid.    | Yes | No   | No   | No  | No     |
| IIMP043 | For the user query 'ISIN List Query (ISIN)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>- ISIN</li> <li>- CFI</li> <li>- Maturity Date</li> <li>- Currency Code</li> <li>- Country of Issuance</li> </ul>   | reda.010        | reda.012         | REJT        | While referring to the query 'ISIN List Query (ISIN)', the selected search criteria are invalid.                    | Yes | No   | No   | No  | No     |
| IIMP044 | For the user query 'Securities CSD Link Query (CSDL)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>- CSD</li> <li>- ISIN</li> <li>- Investor CSD</li> <li>- Issuer CSD</li> <li>- Technical Issuer CSD</li> </ul>  | reda.010        | reda.012         | REJT        | While referring to the query 'Securities CSD Link Query (CSDL)', the selected search criteria are invalid.          | Yes | No   | No   | No  | No     |
| IIMP045 | For the user query 'Securities Deviating Nominal Query (DEVN)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>- ISIN</li> </ul>  | reda.010        | reda.012         | REJT        | While referring to the query 'Securities Deviating Nominal Query (DEVN)', the selected search criteria are invalid. | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| IIMP046 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'Securities Reference Data Query (SECR)':<br><ul style="list-style-type: none"> <li>- ISIN</li> <li>- CFI</li> <li>- Maturity Date</li> <li>- Issue Date</li> <li>- Currency Code</li> <li>- Securities Maintaing CSD</li> <li>- Country of Issuance</li> </ul> | reda.010        | reda.012         | REJT        | Please select at least one valid search criteria parameter. | Yes | No   | No   | No  | No     |
| IIMP047 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'ISIN List Query (ISIN)':<br><ul style="list-style-type: none"> <li>- ISIN</li> <li>- CFI</li> <li>- Maturity Date</li> <li>- Currency Code</li> <li>- Country of Issuance</li> </ul>   | reda.010        | reda.012         | REJT        | Please select at least one valid search criteria parameter. | Yes | No   | No   | No  | No     |
| IIMP048 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'Securities CSD Link Query (CSDL)':<br><ul style="list-style-type: none"> <li>- CSD</li> <li>- ISIN</li> <li>- Investor CSD</li> <li>- Issuer CSD</li> <li>- Technical Issuer CSD</li> </ul>  | reda.010        | reda.012         | REJT        | Please select at least one valid search criteria parameter. | Yes | No   | No   | No  | No     |
| IIMP049 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'Securities Deviating Nominal Query (DEVN)':<br><ul style="list-style-type: none"> <li>- ISIN</li> </ul>  | reda.010        | reda.012         | REJT        | Please select at least one valid search criteria parameter. | Yes | No   | No   | No  | No     |
| DSD1001 | Securities can only be deleted or restored by T2S Operator or CSDs. A user belonging to a CSD can only delete   | reda.013        | reda.030         | REJT        | Requestor not allowed                                       | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | or restore securities that fall under their responsibility. Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the specific Securities to be maintained.  |                 |                  |             |   |     |      |      |     |        |
| DSD1003 | When performing a Securities delete request, it must refer to an existing and active instance of Securities that is past the transformation detection period (i.e. the maturity date plus the number of business days set for the transformation detection period in T2S) or has not yet reached its issue date.  | reda.013        | reda.030         | REJT        | Unknown or Invalid Securities   | Yes | No   | No   | No  | No     |
| DSD1030 | When performing a Securities delete request, if the maturity date is in the past by a number of days smaller than the system parameter "Matured ISIN deletion offset", all the linked instances in a higher position within the deletion hierarchy must be deleted (i.e. Close Link, Eligible Counterpart CSD and Security CSD Link have to be deleted before deleting the linked Securities). For Securities CSD Link, this is limited to links with Maintenance Flag = False. | reda.013        | reda.030         | REJT        | The deletion is not allowed due to a deletion priority constraint                 | Yes | No   | No   | No  | No     |
| DSD1300 | When performing a Security deletion request, the Security cannot be deleted if it is referenced in an object privilege assignment or secured group.   | reda.013        | reda.030         | REJT        | Deletion not allowed due to existing object privilege or secured group assignment | Yes | No   | No   | No  | No     |
| DAC1001 | When performing a Security Account create request the Party Type of the Requestor must be 'CSD' or T2S Operator. A user belonging to a CSD can only create Securities Account linked to his relevant CSD or to a Party that fall under his responsibility according to the Hierarchical Party Model. Exceptions to the above rule are represented by any user that is granted the appropriate   | reda.018        | reda.020         | REJT        | Requestor not allowed   | Yes | No   | No   | No  | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | privilege(s) on the specific Party to be linked to the account.  |                 |                  |             |  |     |      |      |     |        |
| DAC1023 | When performing a Security Account create request, the Account Number must be unique in T2S.   | reda.018        | reda.020         | REJT        | Security Account Number already assigned.                      | Yes | No   | No   | No  | No     |
| DAC1024 | When performing a Security Account create request, in case of creation of Securities Account Restriction, it must refer to an existing Restriction Type entity whose Object Restriction Type is Security Account or Securities Position. In the first case the Restriction Processing Type must be Blocking or Rejection; in the latter case the it must be Earmarking or Earmarking for Auto-collateralisation.   | reda.018        | reda.020         | REJT        | Invalid Restriction Type                                       | Yes | No   | No   | No  | No     |
| DAC1025 | When performing a Securities Account Create request, in case of request for creation of Securities Account Restriction having Object Restriction Type equal to Securities Account, the created restriction type must not overlap with any other Securities Account Restriction in input having the same Restriction Type. In case of request for creation of Securities Account Restriction having Object Restriction Type equal to Securities Position, the created restriction type must not overlap with any other Securities Account Restriction in input having the same Object Restriction Type. | reda.018        | reda.020         | REJT        | Securities Account Restriction overlaps with existing instance | Yes | No   | No   | No  | No     |
| DAC1030 | When performing a Security Account create request, the Party it is linked to, must refer to an existing and active instance in T2S with Party Type equal to CSD, CSD Participant or External CSD.  | reda.018        | reda.020         | REJT        | Unknown party  | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text                                    | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DAC1031 | When performing a Security Account create request, the Party it is linked to must be equal to CSD, if the account type is 'mirror account' or 'inter-csd account' or 'T2S technical offset account'.  | reda.018        | reda.020         | REJT        | Party must be CSD                             | Yes | No   | No   | No  | No     |
| DAC1032 | When performing a Security Account create request, the Party it is linked to must be equal to CSD Participant or External CSD, if the account type is 'omnibus account' or 'CSD participant account'.   | reda.018        | reda.020         | REJT        | Party must be CSD Participant or External CSD | Yes | No   | No   | No  | No     |
| DAC1033 | When performing a Security Account create request, if the Account Type is T2S technical offset account, the relevant System Entity must be a Direct Holding CSD.  | reda.018        | reda.020         | REJT        | CSD is not a Direct Holding CSD               | Yes | No   | No   | No  | No     |
| DAC1034 | When performing a Security Account create request, the Party it is linked to must be equal to CSD or CSD Participant if the account type is 'issuance account'  | reda.018        | reda.020         | REJT        | Party must be CSD or CSD Participant          | Yes | No   | No   | No  | No     |
| DAC1205 | When performing a Security Account create request, the Opening Date must be equal to or greater than the T2S Business date, equal to or greater than the Opening Date of the relevant Party and equal to or less than the Closing Date of the relevant Party. | reda.018        | reda.020         | REJT        | 'Opening Date' invalid                        | Yes | No   | No   | No  | No     |
| DAC1207 | When performing a Security Account create request, the Closing Date must be equal to or greater than the Opening Date.  | reda.018        | reda.020         | REJT        | 'Valid To' or 'Valid From' invalid            | Yes | No   | No   | No  | No     |
| DAC1208 | When performing a Securities Account create request, the Valid From specified in a Securities Account Restriction create request must be equal to or greater than   | reda.018        | reda.020         | REJT        | 'Valid To' or 'Valid From' invalid            | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | the current timestamp 104, equal to or greater than the Valid From of the relevant Restriction Type and equal to or less than the Valid To of the relevant Restriction Type.  |                 |                  |             |   |     |      |      |     |        |
| DAC1209 | When performing a Securities Account create request, the Valid To specified in the Securities Account Restriction must be greater than the relevant Valid From, equal to or greater than the Valid From of the relevant Restriction Type and equal to or less than the Valid To of the relevant Restriction Type. | reda.018        | reda.020         | REJT        | 'Valid To' or 'Valid From' invalid                      | Yes | No   | No   | No  | No     |
| DAC1252 | When performing a Security Account create request, the Market-Specific Attribute Name and the Market-Specific Attribute Value must be present if defined as mandatory in T2S  | reda.018        | reda.020         | REJT        | Missing mandatory 'CSD-specific attribute name'         | Yes | No   | No   | No  | No     |
| DAC1253 | When performing a Security Account create request, in case of request of creation of Market-Specific Securities Account Attribute Value, it must be unique within its System Entity in case it is defined as such in T2S  | reda.018        | reda.020         | REJT        | The value for the CSD-Specific attribute must be unique | Yes | No   | No   | No  | No     |
| DAC1255 | When performing a Security Account create request, in case of creation of Market-Specific Securities Account Attribute Value, it must refer to an existing Market-Specific Attribute whose Type is Securities Account and it must belong to the system entity related to the account.                             | reda.018        | reda.020         | REJT        | Invalid Market-Specific Attribute Name                  | Yes | No   | No   | No  | No     |
| DAC1256 | When performing a Securities Account create request the Market-Specific Securities Account Attribute Value must   | reda.018        | reda.020         | REJT        | Invalid Market Specific Attribute Value                 | Yes | No   | No   | No  | No     |

104 The current timestamp is determined by the internal T2S clock, so the user should take into account the time lag between the submission of the request and its execution in T2S when setting the restriction.



| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | be compliant with the values or rules defined in the relevant Attribute Domain.  |                 |                  |             |  |     |      |      |     |        |
| DAC1600 | When performing a Security Account Create request, in case of immediate setup of Security Account Restriction, the timestamp to be used must take a conventional value which the system will interpret as the current timestamp. Furthermore, no check must be performed on such a conventional value in case of four eyes second step or processing of retrieved queued requests.                                     | reda.018        | reda.020         | REJT        |  | Yes | No   | No   | No  | No     |
| IIMP050 | For the user query 'Securities Account Reference Data Query (SARD)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>- BIC of the party</li> <li>- Securities Account Identifier</li> <li>- BIC of the CSD</li> <li>- Party Type</li> <li>- Opening Date</li> <li>- Closing Date</li> <li>- Securities Account Type</li> <li>- End Investor Flag</li> <li>- Pricing Scheme</li> </ul> | reda.019        | reda.021         | REJT        | While referring to the query 'Securities Account Reference Data Query (SARD)', the selected search criteria are invalid. | Yes | No   | No   | No  | No     |
| IIMP051 | For the user query 'Securities Account List Query (SALI)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>- BIC of the party</li> <li>- BIC of the CSD</li> </ul>  | reda.019        | reda.021         | REJT        | While referring to the query 'Securities Account List Query (SALI)', the selected search criteria are invalid.           | Yes | No   | No   | No  | No     |
| IIMP052 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'Securities Account Reference Data Query (SARD)': <ul style="list-style-type: none"> <li>- BIC of the party</li> <li>- Securities Account Identifier</li> <li>- BIC of the CSD</li> <li>- Party Type</li> <li>- Opening Date</li> </ul>  | reda.019        | reda.021         | REJT        | Please select at least one valid search criteria parameter.  | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | <ul style="list-style-type: none"> <li>- Closing Date</li> <li>- Securities Account Type</li> <li>- End Investor Flag</li> <li>- Pricing Scheme</li> </ul>  |                 |                  |             |   |     |      |      |     |        |
| IIMP053 | <p>At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'Securities Account List Query (SALI)':</p> <ul style="list-style-type: none"> <li>- BIC of the party</li> <li>- BIC of the CSD</li> </ul>   | reda.019        | reda.021         | REJT        | Please select at least one valid search criteria parameter. | Yes | No   | No   | No  | No     |
| DAU1001 | A Securities Account can be updated only by T2S Operator or CSD. A user belonging to a CSD can only update Securities Account linked to his relevant CSD or to a Party that fall under his responsibility according to the Hierarchical Party Model. Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the account to be updated or on the relevant Party holding the account. | reda.023        | reda.020         | REJT        | Requestor not allowed                                       | Yes | No   | No   | No  | No     |
| DAU1005 | The update requests of a Securities Account must refer to an existing, active and not yet closed account. The Service Operator can skip this check in contingency situations. <b>{T2 CR0138}</b>  | reda.023        | reda.020         | REJT        | Data to be updated not found                                | Yes | No   | No   | No  | No     |
| DAU1024 | When performing a Securities Account update request, in case of creation of Securities Account Restriction, it must refer to an existing Restriction Type entity whose Object Restriction Type is Security Account or Securities Position. In the first case the Restriction Processing Type must be Blocking or Rejection; in the latter case the it must be Earmarking or Earmarking for Auto-collateralisation.                    | reda.023        | reda.020         | REJT        | Invalid restriction type                                    | Yes | No   | No   | No  | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DAU1025 | When performing a Securities Account Update request, in case of request for creation/update of Securities Account Restriction having Object Restriction Type equal to Securities Account, the new or updated restriction must not overlap with any other Securities Account Restriction already defined or in input flow having the same Restriction Type. In case of request for creation/update of Securities Account Restriction having Object Restriction Type equal to Securities Position, the restriction type must not overlap with any other Securities Account Restriction already defined or in input flow having the same Object Restriction Type. | reda.023        | reda.020         | REJT        | Securities Account Restriction overlaps with existing instance                    | Yes | No   | No   | No  | No     |
| DAU1030 | A Securities account cannot be closed if there are still any active and open CSD Account Links or CMB Securities Account Links linked to the relevant Securities Account. Furthermore, no active and open T2S Dedicated Cash Account referencing the Securities Account in its Credit Memorandum Balance must exist.   | reda.023        | reda.020         | REJT        | The deletion/closure is not allowed due to a deletion/closure priority constraint | Yes | No   | No   | No  | No     |
| DAU1205 | When performing a Securities Account update request, the Closing Date must be equal to or greater than the T2S Business date and greater than the opening date.  | reda.023        | reda.020         | REJT        | Invalid 'Opening Date'/'Closing Date'   | Yes | No   | No   | No  | No     |
| DAU1208 | When performing a Securities Account update request, the Valid From specified in a Securities Account Restriction create request must be equal to or greater than the current timestamp <sup>105</sup> , equal to or   | reda.023        | reda.020         | REJT        | Invalid 'Valid from'/'Valid to'   | Yes | No   | No   | No  | No     |

<sup>105</sup> The current timestamp is determined by the internal T2S clock, so the user should take into account the time lag between the submission of the request and its execution in T2S when setting the restriction.

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | greater than the Valid From of the relevant Restriction Type and less than the Valid To of the relevant Restriction Type.   |                 |                  |             |  |     |      |      |     |        |
| DAU1209 | When performing a Securities Account update request, the Valid To specified in the Securities Account Restriction must be greater than the current timestamp <sup>106</sup> , greater than the relevant Valid From, equal to or greater than the Valid From of the relevant Restriction Type and equal to or less than the Valid To of the relevant Restriction Type. | reda.023        | reda.020         | REJT        | Invalid 'Valid from/' 'Valid to'                   | Yes | No   | No   | No  | No     |
| DAU1241 | When performing a Securities Account update request, in case of request of deletion of Restriction Type, it must refer to an instance already closed or with a future Valid From.   | reda.023        | reda.020         | REJT        | Restriction type cannot be deleted                 | Yes | No   | No   | No  | No     |
| DAU1252 | When performing a Securities Account update request, the Market-Specific Securities Account Attribute Value must refer to an existing Market-Specific Attribute whose Type is Securities Account and it must belong to the System Entity related to the account.  | reda.023        | reda.020         | REJT        | Invalid Market Specific Attribute                  | Yes | No   | No   | No  | No     |
| DAU1253 | When performing a Securities Account update request, the Market-Specific Securities Account Attribute Value must be unique within its System Entity in case it is defined as such in T2S  | reda.023        | reda.020         | REJT        | The Market-Specific Attribute value must be unique | Yes | No   | No   | No  | No     |
| DAU1255 | When performing a Securities Account update request the Market-Specific Securities Account Attribute Value cannot be deleted if the relevant Market-  | reda.023        | reda.020         | REJT        | Mandatory attribute cannot be deleted              | Yes | No   | No   | No  | No     |

106 The current timestamp is determined by the internal T2S clock, so the user should take into account the time lag between the submission of the request and its execution in T2S when setting the restriction.

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | Specific Attribute is defined as mandatory in T2S.  |                 |                  |             |   |     |      |      |     |        |
| DAU1256 | When performing a Securities Account update request the Market-Specific Securities Account Attribute Value must be compliant with the values or rules defined in the relevant Attribute Domain.   | reda.023        | reda.020         | REJT        | Invalid Market Specific Attribute Value   | Yes | No   | No   | No  | No     |
| DAU1258 | When performing a Securities Account Update request, each Market-Specific Attribute can have no more than one value for a given Securities Account.   | reda.023        | reda.020         | REJT        | Market-Specific Attribute cannot have more than one value for this Securities Account | Yes | No   | No   | No  | No     |
| DAU1305 | When performing a Securities Account update request, the update and the delete request of a minor entity (such as Securities Account Restriction, Party Securities Account Relationship) must refer to an existing instance in T2S; if the instance is being updated, it must have a minor entity a Valid To equal to current business date or future, where applicable.                      | reda.023        | reda.020         | REJT        | Data to be updated not found  | Yes | No   | No   | No  | No     |
| DAU1600 | When performing a Security Account Update request, in case of immediate setup or removal of Security Account Restriction, the timestamp to be used must take a conventional value which the system will interpret as the current timestamp. Furthermore, no check must be performed on such a conventional value in case of four eyes second step or processing of retrieved queued requests. | reda.023        | reda.020         | REJT        |   | Yes | No   | No   | No  | No     |
| IIMP103 | An attribute for 'SysSctiesAcct' can be used only once per message.   | reda.023        | reda.020         | REJT        | An attribute for 'SysSctiesAcct' can be used only once.                               | Yes | No   | No   | No  | No     |
| IIMP136 | When performing a Securities Account Update request, the Valid To element for Restriction must be filled in when scope indication is 'Update'.  | reda.023        | reda.020         | REJT        | Valid To must be provided for updating a Restriction on a Securities Account.         | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DSC3001 | A Securities Valuation can be created only by T2S Operator, NCB or Payment Bank. The T2S Operator can create all Securities valuations whereas a user belonging to a NCB or Payment Bank can create only Securities Valuations linked to securities it applies a price for. | reda.024        | reda.028         | REJT        | Requestor not allowed                               | Yes | No   | No   | No  | No     |
| DSC3020 | When performing a Securities Valuation Create request, the values provided for the Price and Own-Used Asset Price must be compliant with the Securities Settlement Type.  | reda.024        | reda.028         | REJT        | Price not compliant with Securities Settlement Type | Yes | No   | No   | No  | No     |
| DSC3030 | When performing a Securities Valuation Create request, the Currency Code must refer to an existing instance in T2S defined as a T2S Settlement Currency.  | reda.024        | reda.028         | REJT        | Unknown or non-T2S Settlement Currency              | Yes | No   | No   | No  | No     |
| DSC3040 | When performing a Securities Valuation Create request, the Securities Mnemonic must refer to an existing and valid Security in T2S.   | reda.024        | reda.028         | REJT        | Unknown Securities                                  | Yes | No   | No   | No  | No     |
| DSC3050 | When performing a Securities Valuation Create request, there cannot be another existing Securities Valuation for the specified combination of Securities, Party, Currency and Date.   | reda.024        | reda.028         | REJT        | Securities Valuation already existing               | Yes | No   | No   | No  | No     |
| DSC3060 | When performing a Securities Valuation Create request, the referenced Party must refer to existing and active NCB or Payment Bank in T2S.   | reda.024        | reda.028         | REJT        | Unknown or invalid Party                            | Yes | No   | No   | No  | No     |
| DSC3205 | When performing a Securities Valuation Create request, the Securities Valuation Date specified in the request must be equal to or greater than the current date.  | reda.024        | reda.028         | REJT        | Invalid Securities Valuation date                   | Yes | No   | No   | No  | No     |
| DSC3800 | When performing a Securities Valuation Create request, the number of decimals in the values provided for Price (as amount) and Own-Used Asset Price (as   | reda.024        | reda.028         | REJT        | Invalid number of decimals.                         | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text                           | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--------------------------------------|-----|------|------|-----|--------|
|         | amount) must be compliant with the number of decimals foreseen for the relevant currency.   |                 |                  |             |                                      |     |      |      |     |        |
| DSC5002 | When performing an Auto-Collateralisation Eligibility Link create request, the Securities Mnemonic must refer to an existing and active Securities Code which Code Type is ISIN.                            | reda.025        | reda.028         | REJT        | Unknown Securities Mnemonic          | Yes | No   | No   | No  | No     |
| DSC5003 | When performing an Auto-Collateralisation Eligibility Link create request, the Securities Mnemonic must not be already assigned to another existing link for the same party with the same Currency Code.    | reda.025        | reda.028         | REJT        | Securities Mnemonic already assigned | Yes | No   | No   | No  | No     |
| DSC5004 | When performing an Auto-Collateralisation Eligibility Link create request, the Currency Code must refer to an existing Currency Code in T2S.  | reda.025        | reda.028         | REJT        | Invalid Currency code                | Yes | No   | No   | No  | No     |
| DSC5005 | When performing an Auto-Collateralisation Eligibility Link create request, the Party must refer to an existing, active and open Party in T2S with Party Type equal to NCB or Payment Bank.                  | reda.025        | reda.028         | REJT        | Unknown Party                        | Yes | No   | No   | No  | No     |
| DPC2001 | Eligible Counterpart CSD can only be created by CSD or T2S Operator. A user of a CSD can create only Eligible Counterpart CSD entities where the Investor CSD is a T2S Party belonging to his relevant CSD. | reda.026        | reda.044         | REJT        | Requestor not allowed                | Yes | No   | No   | No  | No     |
| DPC2070 | When performing an Eligible Counterpart CSD create request, the Eligible Counterpart CSD and the Investor CSD must refer to existing, active and open Parties with Party Type equal to CSD or External CSD. | reda.026        | reda.044         | REJT        | Unknown Party                        | Yes | No   | No   | No  | No     |
| DPC2071 | When performing an Eligible Counterpart CSD create request, the Issuer Party  | reda.026        | reda.044         | REJT        | Unknown Party                        | Yes | No   | No   | No  | No     |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text                       | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|----------------------------------|-----|------|------|-----|--------|
|         | must refer to existing, active and open Parties with Party Type equal to CSD or External CSD.  |                 |                  |             |                                  |     |      |      |     |        |
| DPC2080 | When performing an Eligible Counterpart CSD create request, the Country Code must exist in T2S.  | reda.026        | reda.044         | REJT        | Unknown Country Code             | Yes | No   | No   | No  | No     |
| DPC2100 | When performing an Eligible Counterpart CSD create request, the Securities specified must refer to an existing and active instance in T2S.   | reda.026        | reda.044         | REJT        | Unknown Securities               | Yes | No   | No   | No  | No     |
| DPC2120 | When performing an Eligible Counterpart CSD create request, the Valid From specified must be equal to or greater than the current date.  | reda.026        | reda.044         | REJT        | 'Valid From' invalid             | Yes | No   | No   | No  | No     |
| DPC2121 | When performing an Eligible Counterpart CSD create request, the Valid To, when specified, must be equal to or greater than the current date and must be equal to or greater than the valid from.   | reda.026        | reda.044         | REJT        | 'Valid To' invalid               | Yes | No   | No   | No  | No     |
| DPC2200 | When performing an Eligible Counterpart CSD create request, no other Eligible Counterpart CSD having the same Investor CSD, Eligible Counterpart CSD, Eligibility Type and Issuer CSD or Country or Security must exist in an overlapping validity period. | reda.026        | reda.044         | REJT        | Invalid Eligible Counterpart CSD | Yes | No   | No   | No  | No     |
| DSC2001 | When performing a Close Link creation request, the Party Type of the Requestor must be NCB, payment bank or T2S Operator.  | reda.027        | reda.028         | REJT        | Requestor not allowed            | Yes | No   | No   | No  | No     |
| DSC2020 | When performing a Close Link creation request, the Credit Provider Party must refer to an existing and active Party in T2S within the data scope of the requestor with Party Type NCB or Payment Bank.   | reda.027        | reda.028         | REJT        | Unknown Credit Provider Party    | Yes | No   | No   | No  | No     |



| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| DSC2030 | When performing a Close Link creation request the Linked Security must exist in Security entity.  | reda.027        | reda.028         | REJT        | Unknown Security   | Yes | No   | No   | No  | No     |
| DSC2040 | When performing a Close Link creation request the Linked BIC must exist in T2S BIC Directory entity.  | reda.027        | reda.028         | REJT        | Unknown Party  | Yes | No   | No   | No  | No     |
| DSC2050 | When performing a Close Link creation request, a link between the same BIC and the same Security for the same Credit Provider must not be already defined.  | reda.027        | reda.028         | REJT        | Close Link already defined   | Yes | No   | No   | No  | No     |
| DAD1001 | A Securities Account can be deleted/restored only by T2S Operator or CSD. A user belonging to a CSD can only delete/restore Securities Account linked to his relevant CSD or to a Party that fall under his responsibility according to the Hierarchical Party Model. Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) on the account to be maintained or on the relevant Party holding the account. | reda.032        | reda.020         | REJT        | Requestor not allowed  | Yes | No   | No   | No  | No     |
| DAD1020 | The request to delete a Securities Account must refer to an existing and active Securities Account in T2S.  | reda.032        | reda.020         | REJT        | Invalid Securities Account to be deleted or restored                               | Yes | No   | No   | No  | No     |
| DAD1021 | When performing a Securities Account delete request, the Opening Date of the account to be deleted must be greater than the current date or the Closing Date must be less than the current date   | reda.032        | reda.020         | REJT        | Invalid opening date   | Yes | No   | No   | No  | No     |
| DAD1030 | A Securities Account cannot be deleted if there are still active CSD Account Links or Credit Memorandum Balance linked to it in T2S.  | reda.032        | reda.020         | REJT        | Operation not allowed due to an active and linked instance.                        | Yes | No   | No   | No  | No     |
| DAD1300 | When performing a Securities Account deletion request, the Securities Account cannot be deleted if it is referenced in an   | reda.032        | reda.020         | REJT        | Deletion not allowed due to existing object privilege or secured group assignment. | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | object privilege assignment or secured group.   |                 |                  |             |   |     |      |      |     |        |
| IIMP071 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query Securities Audit Trail: <ul style="list-style-type: none"> <li>- ISIN</li> <li>- DatePeriod</li> </ul>                        | reda.033        | reda.034         | REJT        | Please select at least one valid search criteria parameter. | Yes | No   | No   | No  | No     |
| IIMP072 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query Securities Account Audit Trail: <ul style="list-style-type: none"> <li>- SecuritiesAccountId</li> <li>- DatePeriod</li> </ul> | reda.036        | reda.037         | REJT        | Please select at least one valid search criteria parameter. | Yes | No   | No   | No  | No     |
| DSC4001 | When performing a Security CSD Link create request, the Requestor must belong to a CSD or External CSD. A User can create only Security CSD Link where the Issuer or Investor CSD belongs to him according the hierarchical model.                      | reda.045        | reda.047         | REJT        | Requestor not allowed                                       | Yes | No   | No   | No  | No     |
| DSC4002 | When performing a Security CSD Link create request, only one Security CSD Link can exist for a given combination of Investor/Issuer Party, Valid From and Linked Security.  | reda.045        | reda.047         | REJT        | Security CSD Link already exists                            | Yes | No   | No   | No  | No     |
| DSC4020 | When performing a Security CSD Link create request the Valid From specified must be greater than or equal to the current date.  | reda.045        | reda.047         | REJT        | 'Valid From' invalid  | Yes | No   | No   | No  | No     |
| DSC4021 | When performing a Security CSD Link create request the Valid To specified must be equal to or greater than the current date and greater than or equal to the incoming Valid From  | reda.045        | reda.047         | REJT        | 'Valid To' invalid  | Yes | No   | No   | No  | No     |
| DSC4030 | When performing a Security CSD Link create request, the Linked Security must exist in Security entity.  | reda.045        | reda.047         | REJT        | Unknown Security  | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DSC4040 | When performing a Security CSD Link create request, the Issuer/Investor Party must exist in Party entity.   | reda.045        | reda.047         | REJT        | Unknown Issuer/Investor Party                             | Yes | No   | No   | No  | No     |
| DSC4041 | When performing a Security CSD Link create request, the Technical Issuer Party, if specified, must exist in Party entity.   | reda.045        | reda.047         | REJT        | Unknown Technical Issuer Party                            | Yes | No   | No   | No  | No     |
| DSC4043 | When performing a Security CSD Link create request, there can only be one valid Security CSD Link with Maintenance Flag = True at any given moment for the same Security-   | reda.045        | reda.047         | REJT        | Link with Maintenance flag = set to True already existing | Yes | No   | No   | No  | No     |
| DSC4044 | When performing a Security CSD Link create request, if an External CSD is specified as Issuer, the Maintenance Flag must be set to False.   | reda.045        | reda.047         | REJT        | External CSD cannot maintain Securities                   | Yes | No   | No   | No  | No     |
| DSC4045 | When performing a Security CSD Link create request, in a specific timeframe a CSD (internal or external) can be defined as Investor of a specific Security only once.   | reda.045        | reda.047         | REJT        | External CSD already defined as Investor of the security. | Yes | No   | No   | No  | No     |
| DSC4046 | When performing a Security CSD Link create request, the Issuance Account cannot be specified if the Link Type is 'Investor CSD' or the Issuer CSD is an External CSD.   | reda.045        | reda.047         | REJT        | Issuance Account not allowed for this Link                | Yes | No   | No   | No  | No     |
| DSC4047 | When performing a Security CSD Link create request, the Issuance Account must be an existing, active and open account belonging to the Issuer CSD or to a CSD Participant of the Issuer CSD, with account type equal to 'Issuance Account'. | reda.045        | reda.047         | REJT        | Invalid Issuance Account                                  | Yes | No   | No   | No  | No     |
| DSC4048 | When performing a Security CSD Link create request, the Investor CSD, in case of External CSD, must belong to the specified Technical Issuer.   | reda.045        | reda.047         | REJT        | Invalid Investor CSD                                      | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
| DSC4049 | When performing a Security CSD Link create request, in case of Link Type = Investor and the Investor CSD is not an External CSD, a value must be already assigned to the relevant Security for the market-specific attribute defined as mandatory in the Investor CSD system entity.                  | reda.045        | reda.047         | REJT        | Missing mandatory market-specific securities attribute value    | Yes | No   | No   | No  | No     |
| DSC4050 | When performing a Security CSD Link create request, if at least one Issuance Account belonging to the Issuer CSD is specified, then one and only one Issuance Account of the Issuer CSD must be specified as Primary. No Issuance Account belonging to a CSD Participant can be specified as Primary. | reda.045        | reda.047         | REJT        | One and only one Issuance Account can be set as Primary         | Yes | No   | No   | No  | No     |
| IIMP141 | When the element Document/SctyCSDLkCreReq/SctyCSDLk/IssrInvstrCSD/InvstrCSD is present, then Document/SctyCSDLkCreReq/SctyCSDLk/TechIssrCSD must be included.   | reda.045        | reda.047         | REJT        | Technical issuer is mandatory for Investor Securities CSD Links | Yes | No   | No   | No  | No     |
| DSU4001 | Security CSD Link can be created only by CSD or External CSD. A user can update only Security CSD Link where his own CSD is linked as Issuer or Investor.   | reda.046        | reda.047         | REJT        | Requestor not allowed   | Yes | No   | No   | No  | No     |
| DSU4003 | When performing a Security CSD Link update request, it must refer to an existing and active instance of the Security CSD Link.  | reda.046        | reda.047         | REJT        | Unknown Instance  | Yes | No   | No   | No  | No     |
| DSU4021 | When performing a Security CSD Link update request the Valid To must be greater than or equal to the current date and greater than or equal to the Security CSD Link Valid From.  | reda.046        | reda.047         | REJT        | 'Valid To' invalid  | Yes | No   | No   | No  | No     |
| DAC3001 | A CMB Securities Account Link can be created only by T2S Operator, CSD, CSD Participant or External CSD. A user belonging to a CSD, CSD Participant or  | reda.049        | reda.051         | REJT        | Requestor not allowed   | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | External CSD, can only create CMB Securities Account Links for Securities Accounts it is responsible for.   |                 |                  |             |   |     |      |      |     |        |
| DAC3024 | When performing a CMB Securities Account Link create request, the CMB identifier specified must refer to an existing and active CMB in T2S.   | reda.049        | reda.051         | REJT        | Unknown CMB Identifier  | Yes | No   | No   | No  | No     |
| DAC3030 | When performing a CMB Securities Account Link create request, the Securities Account specified must refer to an existing, active and not closed Securities Account in T2S.  | reda.049        | reda.051         | REJT        | Unknown Securities Account Identifier                                   | Yes | No   | No   | No  | No     |
| DAC3040 | When performing a CMB Securities Account Link create request, the owner of the specified Securities Account must be authorized to use the specified CMB.  | reda.049        | reda.051         | REJT        | Securities Account owner not authorized                                 | Yes | No   | No   | No  | No     |
| DAC3050 | When performing a CMB Securities Account Link create request, the Default CMB must not be set to true if a different CMB Securities Account Link for the same Securities Account and Currency is already defined in the same validity period. | reda.049        | reda.051         | REJT        | Default CMB already existing  | Yes | No   | No   | No  | No     |
| DAC3051 | When performing a CMB Securities Account Link create request, the Default CMB must be set to true if no other CMB Securities Account Link for the same Securities Account and Currency is already defined.                                    | reda.049        | reda.051         | REJT        | Default CMB must be set to true   | Yes | No   | No   | No  | No     |
| DAC3052 | When performing a CMB Securities Account Link create request, the Cash Settlement Link must be True if the Default CMB is set to true.  | reda.049        | reda.051         | REJT        | Cash Settlement Link must be set to true                                | Yes | No   | No   | No  | No     |
| DAC3100 | When performing a CMB Securities Account Link creation request, there can only be one instance for a given combination of CMB and Securities Account over a given validity period.  | reda.049        | reda.051         | REJT        | CMB Securities Account link already defined in the same validity period | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| DAC3205 | When performing a CMB Securities Account Link create request, the Valid From specified must be equal to or greater than the T2S Business date.  | reda.049        | reda.051         | REJT        | 'Valid To' or 'Valid From' invalid   | Yes | No   | No   | No  | No     |
| DAC3206 | When performing a CMB Securities Account Link create request, the Valid From specified must be greater than or equal to the Opening Date of the relevant Securities Account.  | reda.049        | reda.051         | REJT        | 'Valid To' or 'Valid From' invalid   | Yes | No   | No   | No  | No     |
| DAC3207 | When performing a CMB Securities Account Link create request, the Valid To specified must be equal to or greater than the current date and equal to or greater than the Valid From.   | reda.049        | reda.051         | REJT        | 'Valid To' or 'Valid From' invalid   | Yes | No   | No   | No  | No     |
| DAC3208 | When performing a CMB Securities Account Link create request, the Valid From specified must be less than or equal to the Closing Date of the relevant Securities Account.   | reda.049        | reda.051         | REJT        | 'Valid To' or 'Valid From' invalid   | Yes | No   | No   | No  | No     |
| DAC3209 | When performing a CMB Securities Account Link create request, the Valid To specified must be less than or equal to the Closing Date of the relevant Securities Account.   | reda.049        | reda.051         | REJT        | 'Valid To' or 'Valid From' invalid   | Yes | No   | No   | No  | No     |
| DAU3001 | A CMB Securities Account Link can be updated only by T2S Operator, CSD, CSD Participant or External CSD. A user belonging to a CSD, CSD Participant or External CSD can only update CMB Securities Account Links for Securities Accounts it is responsible for. | reda.050        | reda.051         | REJT        | Requestor not allowed  | Yes | No   | No   | No  | No     |
| DAU3005 | When performing a CMB Securities Account Link update request, it must refer to an existing and active CMB Securities Account Link in T2S which has not yet reached its closing date and the owner of the specified Securities Account                           | reda.050        | reda.051         | REJT        | Data to be updated not found or Securities Account owner not authorised to use the related CMB | Yes | No   | No   | No  | No     |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | must still be authorized to use the specified CMB.  |                 |                  |             |   |     |      |      |     |        |
| DAU3050 | When performing a CMB Securities Account Link update request, the Default CMB must not be set to true if a different CMB Securities Account Link for the same Securities Account and Currency is already defined in the same validity period.   | reda.050        | reda.051         | REJT        | Default CMB already existing  | Yes | No   | No   | No  | No     |
| DAU3100 | When performing a CMB Securities Account Link update request, there can only be one instance for a given combination of CMB and Securities Account over a given validity period.  | reda.050        | reda.051         | REJT        | CMB Securities Account link already defined in the same validity period   | Yes | No   | No   | No  | No     |
| DAU3207 | When performing a CMB Securities Account Link update request, the specified Valid To must be equal to or greater than the current date and equal to or greater than the Valid From.   | reda.050        | reda.051         | REJT        | Invalid 'Valid from'/'Valid to'   | Yes | No   | No   | No  | No     |
| DAU3208 | When performing a CMB Securities Account Link update request, the specified Valid To must be equal to or earlier than the Closing Date of the relevant Securities Account.  | reda.050        | reda.051         | REJT        | 'Valid To' is later than 'Closing Date' of the related Securities Account | Yes | No   | No   | No  | No     |
| DSD2001 | When performing a Close Link deletion/restore request, the Party Type of the Requestor must be NCB, Payment Bank or T2S Operator. A user belonging to an NCB can delete/restore only Close Links within their System Entity, while a user belonging to a Payment Bank can delete/restore only Close Links their Party is responsible for. | reda.077        | reda.028         | REJT        | Requestor not allowed   | Yes | No   | No   | No  | No     |
| DSD2003 | When performing a Close Link delete request, it must refer to an existing Close Link.   | reda.077        | reda.028         | REJT        | Unknown Close Link  | Yes | No   | No   | No  | No     |
| DSD2014 | When performing a Close Link deletion/restore request, the Security   | reda.077        | reda.028         | REJT        | Unknown Security  | Yes | No   | No   | No  | No     |

| Rule Id        | Description   | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2                |
|----------------|---|-----------------|------------------|-------------|--|-----|------|------|-----|-----------------------|
|                | Identifier to be restored must refer to an existing instance in T2S   |                 |                  |             |  |     |      |      |     |                       |
| IIMP200        | For the user query 'Liquidity Transfer Order Detail Query (SDTL)' the following search criteria are allowed:<br>- Account Identification<br>- Party BIC<br>- Parent BIC   | camt.069        | camt.070         | REJT        | While referring to the query 'Liquidity Transfer Order Detail Query (SDTL)', the selected search criteria are invalid. | Yes | No   | Yes  | Yes | No                    |
| IIMP202        | No other account search criteria fields are allowed, if the tag search criteria is specified for query 'Settlement Bank Account Group Query (SBAG)'.  | acmt.025        | acmt.026         | REJT        | While referring to the query 'Settlement Bank Account Group Query (SBAG)', the selected search criteria are invalid.   | No  | No   | Yes  | No  | No <b>{T2 CR0097}</b> |
| <u>IIMP054</u> | - For the Cash Account Reference Data Query the following search criteria are allowed:<br>- Cash Account Identifier<br>- BIC of the account owner<br>- BIC of the NCB<br>- Account Type<br>- Opening Date<br>- Closing Date<br>- Referenced account<br>- Currency | acmt.025        | acmt.026         | REJT        | While referring to the query 'Cash Account Reference Data Query (CASH)', the selected search criteria are invalid.     | Yes | Yes  | Yes  | Yes | No                    |
| IIMP055        | For the user query 'Cash Account List Query (LIST)' the following search criteria are allowed:<br>- BIC of the account owner<br>- BIC of the NCB<br>- Currency code   | acmt.025        | acmt.026         | REJT        | While referring to the query 'Cash Account List Query (LIST)', the selected search criteria are invalid.               | Yes | Yes  | No   | No  | No                    |
| IIMP056        | For the Cash Account Reference Data Query, at least one of the following search criteria fields should be present:<br>- Cash Account Identifier<br>- Account Type<br>- Currency<br>- Opening Date<br>- Closing Date<br>- Account Owner BIC                        | acmt.025        | acmt.026         | REJT        | While referring to the query 'Cash Account Reference Data Query (CASH)', the selected search criteria are invalid.     | Yes | Yes  | Yes  | Yes | No                    |



| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| IIMP057 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'Cash Account List Query (LIST)':<br>- BIC of the account owner<br>- BIC of the NCB<br>- Currency code | acmt.025        | acmt.026         | REJT        | While referring to the query 'Cash Account List Query (LIST)', the selected search criteria are invalid. | Yes | Yes  | No   | No  | No     |
| IIMP064 | If element Prtry/SchmeNm is equal 'REQT', Prtry/Id must be 'CASH', 'LIST' or 'SBAG' <b>{T2 CR0097}</b>   | acmt.025        | acmt.026         | REJT        | Request type invalid   | Yes | Yes  | Yes  | Yes | No     |
| IIMP065 | If element Prtry/SchmeNm is equal 'PTYP', Prtry/Id must be 'PMBK' or 'NCBK'  | acmt.025        | acmt.026         | REJT        | Party type invalid   | Yes | Yes  | Yes  | Yes | No     |
| IIMP087 | A single REQT - Request Type - must be present in a message  | acmt.025        | acmt.026         | REJT        | Request type invalid or redundant  | Yes | Yes  | Yes  | Yes | No     |
| DRRI001 | When performing a request to read an Audit Trail, the requestor must be authorised to access the requested data.   | reda.039        | reda.040         | REJT        | Requestor not allowed  | Yes | Yes  | Yes  | Yes | No     |
| DRRI002 | A request to read an Audit Trail must refer to existing data in CRDM.  | reda.042        | reda.043         | REJT        | No data available  | Yes | Yes  | Yes  | Yes | No     |
|         |  | reda.039        | reda.040         | REJT        |  |     |      |      |     |        |
| IIMP073 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query Cash Account Audit Trail:<br>- CashAccountId<br>- DatePeriod   | reda.042        | reda.043         | REJT        | Please select at least one valid search criteria parameter.  | Yes | Yes  | Yes  | Yes | No     |
|         |  | reda.039        | reda.040         | REJT        |  |     |      |      |     |        |
| IIMP114 | For the user query 'Limit Query (LIMI)' the following search criteria are allowed:<br>- Limit Type<br>- Credit Consumer<br>- Cash Account Number<br>- Limit Currency<br>- Limit Amount<br>- Valid-as-of Date                     | camt.009        | camt.010         | REJT        | While referring to the query 'Limit Query (LIMI)', the selected search criteria are invalid.             | Yes | Yes  | Yes  | Yes | No     |
| DPR1001 | When performing a request to read a Party, the requestor must be authorised  | reda.015        | reda.017         | REJT        | Requestor not allowed  | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | <p>to access the requested data according to the following:</p> <p>The Service Operator user can access all data</p> <p>A CSD or NCB user can access only data belonging to its own System Entity</p> <p>A CSD Participant or Payment Bank user can access only its own data</p> <p>Exceptions to the above rule are represented by any user that is granted the appropriate privilege(s) to read the specified Party or the Party responsible for it.</p> |                 |                  |             |   |     |      |      |     |        |
| IIMP036 | <p>For the user query 'Party Reference Data Query (PYRD)' the following search criteria are allowed:</p> <ul style="list-style-type: none"> <li>- BIC of the Party</li> <li>- Parent BIC of the Party (NCB BIC or CSD BIC)</li> <li>- Party Type</li> <li>- Opening Date</li> <li>- Closing Date</li> </ul>  | reda.015        | reda.017         | REJT        | While referring to the query 'Party Reference Data Query (PYRD)', the selected search criteria are invalid. | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP037 | <p>For the user query 'Party List Query (PYLI)' the following search criteria are allowed:</p> <ul style="list-style-type: none"> <li>- BIC of the CSD</li> <li>- BIC of the NCB</li> </ul>  | reda.015        | reda.017         | REJT        | While referring to the query 'Party List Query (PYLI)', the selected search criteria are invalid.           | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP038 | <p>For the user query 'Restricted Party Query (PYRS)' the following search criteria are allowed:</p> <ul style="list-style-type: none"> <li>- BIC of the CSD</li> <li>- BIC of the NCB</li> <li>- Party Type</li> <li>- Restriction Type</li> <li>- Restriction Issue Date</li> </ul>  | reda.015        | reda.017         | REJT        | While referring to the query 'Restrict-ed Party Query (PYRS)', the selected search criteria are invalid.    | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP039 | At least one of the following search criteria fields should be present, if the   | reda.015        | reda.017         | REJT        | Please select at least one valid search criteria parameter.   | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|------------------|-------------|---|-----|------|------|-----|--------|
|         | tag search criteria is specified for query 'Party Reference Data Query (PYRD) ':<br><ul style="list-style-type: none"> <li>- BIC of the Party</li> <li>- BIC of the CSD</li> <li>- BIC of the NCB</li> <li>- Party Type</li> <li>- Opening Date</li> <li>- Closing Date</li> </ul>   |                 |                  |             |   |     |      |      |     |        |
| IIMP040 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'Party List Query (PYLI)':<br><ul style="list-style-type: none"> <li>- BIC of the CSD</li> <li>- BIC of the NCB</li> </ul>   | reda.015        | reda.017         | REJT        | Please select at least one valid search criteria parameter. | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP041 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'Restricted Party Query (PYRS)':<br><ul style="list-style-type: none"> <li>- BIC of the CSD</li> <li>- BIC of the NCB</li> <li>- Party Type</li> <li>- Restriction Type</li> <li>- Restriction Issue Date</li> </ul> | reda.015        | reda.017         | REJT        | Please select at least one valid search criteria parameter. | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP070 | At least one of the following search criteria fields should be present, if the tag search criteria is specified for query Party Audit Trail:<br><ul style="list-style-type: none"> <li>- PartyId</li> <li>- DatePeriod</li> </ul>  | reda.042        | reda.043         | REJT        | Please select at least one valid search criteria parameter. | Yes | Yes  | Yes  | Yes | Yes    |
| DCR8001 | In case a Cash Account Identification is specified, it has to be known in CRDM.  | camt.099        | camt.100         | REJT        | Unknown or invalid Cash Account                             | No  | No   | Yes  | Yes | Yes    |
| DCR8002 | The Creditor Party has to be known in CRDM.  | camt.099        | camt.100         | REJT        | Unknown or invalid Creditor Party                           | No  | No   | Yes  | Yes | Yes    |
| QMPC111 | For the Calendar Query, at least the search criteria Service and Currency should be present.   | reda.064        | reda.065         | REJT        | Invalid selected search criteria.                           | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message      | Outbound message     | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|----------------------|----------------------|-------------|---|-----|------|------|-----|--------|
| QMPC112 | For the Calendar Query, specified Service and Currency has to be known in CRDM.  | reda.064             | reda.065             | REJT        | Unknown Service and Currency  | Yes | Yes  | Yes  | Yes | Yes    |
| QMPC113 | For the Calendar Query, in case a Month is specified, also Year has to be specified in the search criteria fields.                     | reda.064             | reda.065             | REJT        | Search criteria Year is mandatory if Month is specified.  | Yes | Yes  | Yes  | Yes | Yes    |
| QMPC104 | For the Calendar Query, requested data should exists in CRDM.  | reda.064             | reda.065             | REJT        | No data available   | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP199 | Default block should be present for CRDM requests.   | camt.011<br>camt.048 | camt.025<br>camt.025 | REJT        | Default block not present   | Yes | Yes  | Yes  | Yes | Yes    |
| ICSA002 | The System User sending the inbound A2A communication has to be known in CRDM.   | head.001<br>head.002 | admi.007<br>admi.007 | I008        | The System User is not known in CRDM.   | Yes | Yes  | Yes  | Yes | Yes    |
| ICSA003 | The System User sending the inbound A2A communication must not be locked.  | head.001<br>head.002 | admi.007<br>admi.007 | I009        | The System User is blocked due to lockout.  | Yes | Yes  | Yes  | Yes | Yes    |
| ICSA004 | The Technical Sending User (Party Technical Address) which was used for sending the inbound A2A communication has to be known in CRDM. | head.001<br>head.002 | admi.007<br>admi.007 | I018        | The Technical Sending User is not known for CRDM.   | Yes | Yes  | Yes  | Yes | Yes    |
| ICSA005 | The Technical Sending User (Party Technical Address) of the inbound A2A communication has to be known for the used Network Service.    | head.001<br>head.002 | admi.007<br>admi.007 | I019        | The Technical Sending User is not known for the used Network Service.                           | Yes | Yes  | Yes  | Yes | Yes    |
| ICSA008 | The File Header tags which are necessary for authentication processing must be valid according to the XML schema.                      | head.002             | admi.007             | I011        | At least one BFH tag for authentication is not valid. //Dynamic error including element name.// | Yes | Yes  | Yes  | Yes | Yes    |
| ICSA009 | The Business Application Header tags which are necessary for authentication processing must be valid according to the XML schema.      | head.001             | admi.007             | I070        | At least one BAH tag for authentication is not valid. //Dynamic error including element name.// | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message  | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|---|-------------|--|-----|------|------|-----|--------|
| ICSA011 | The Business Sending User has to be known in CRDM.   | head.001        | admi.007  | I072        | The Business Sending User is not known in CRDM.                                      | Yes | Yes  | Yes  | Yes | Yes    |
|         |  | head.002        | admi.007  |             |  |     |      |      |     |        |
| ICSA012 | Technical Sending User is allowed to send for the Business Sending Party.  | head.001        | admi.007  | I073        | Technical Sending User is not allowed to send for the Business Sending Party.        | Yes | Yes  | Yes  | Yes | Yes    |
|         |  | head.002        | admi.007  |             |  |     |      |      |     |        |
| ICSA013 | Business Sending User is allowed to send for the system user reference.  | head.001        | admi.007  | I075        | Business Sending User is not allowed to send for the system user reference.          | Yes | Yes  | Yes  | Yes | Yes    |
|         |  | head.002        | admi.007  |             |  |     |      |      |     |        |
| IICP001 | A System User must have the appropriate privilege to be authorised for an intended request. The check only includes generic authorisation for the requested action on system level. The check for the data scope including object level is processed in the backend modules. | head.001        | respective outbound business message for received inbound message except for the messages which are explicitly listed | I007        | The System User is not authorised to initiate such request due to missing privilege. | Yes | Yes  | Yes  | Yes | Yes    |
| IICP002 | It is only allowed to initiate requests in A2A mode, if the required privilege is assigned to the System User with four eyes option = 'False'. A request in U2A mode can be initiated independent from the four eyes option usage.   | head.001        | respective outbound business message for received inbound message except for the messages which are explicitly listed | I010        | It is not allowed to initiate A2A requests in four eyes mode.                        | Yes | No   | No   | No  | Yes    |
| IIMP066 | It is not possible to process elements, which are only filled with blanks, CR/LFs and/or tabs.   | head.001        | respective outbound business message for received inbound message except for the                                      | I064        | Content of element //tag name// is only filled with blanks, CR/LFs and/or tabs.      | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description  | Inbound message | Outbound message   | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-----------------|--|-------------|---|-----|------|------|-----|--------|
|         |  |                 | messages which are explicitly listed   |             |   |     |      |      |     |        |
| IIMP069 | CRDM does not process any copies of messages.  | head.001        | respective outbound business message for received inbound message except for the messages which are explicitly listed                                      | I065        | The usage of the Copy Duplicate Indicator with Code Copy is not possible.                   | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP089 | A message definition identifier of the BAH is equal to the message type in namespace.  | head.001        | respective outbound business message for linked received inbound message except for the messages which are explicitly listed based on namespace definition | I049        | The message definition identifier of the BAH is not equal to the message type in namespace. | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP097 | In order to ensure correct processing, it is only possible to send instructing requests (e.g. Static Data updates or settlement instructions) via a store and forward network service. | head.001        | respective outbound business message for received inbound message except for the messages which are explicitly listed                                      | I066        | The instructing request has to be sent via store and forward network service.               | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description   | Inbound message | Outbound message  | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|---|-------------|---|-----|------|------|-----|--------|
| IIMP098 | In order to ensure correct processing, it is only possible to send query requests via a real-time network service.                | head.001        | respective outbound business message for received inbound message except for the messages which are explicitly listed | I067        | The query request has to be sent via real-time network service.   | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP099 | In order to ensure correct processing, it is only possible to send instructing requests within a functional file (multi-message). | head.001        | respective outbound business message for received inbound message except for the messages which are explicitly listed | I068        | In order to ensure correct processing, it is only possible to send instructing requests within a functional file (multi-message). | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP120 | In an incoming message, Services BIC cannot be informed in the BIC and Parent BIC simultaneously within the 'From' block.         | head.001        | respective outbound business message for received inbound message except for the messages which are explicitly listed | I069        | Services are not allowed as Instructing Party   | Yes | Yes  | Yes  | Yes | Yes    |
| IIMS001 | A message type has to be supported by CRDM.   | head.001        | admi.007  | I005        | The received single message type is not known. <b>{T2 CR0138}</b>   | Yes | Yes  | Yes  | Yes | Yes    |
| IIFV001 | The file must be valid according to the XML schema.   | head.002        | admi.007  | I011        | The file is not valid.<br>//Dynamic error including element name.//   | Yes | Yes  | Yes  | Yes | Yes    |

| Rule Id | Description   | Inbound message | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|---|-----------------|------------------|-------------|--|-----|------|------|-----|--------|
| IIFV007 | The file must not have been already processed. The file was sent twice or the reference number of the file was used before by the same Business Sending Party.  | head.002        | admi.007         | I003        | The file was sent twice or the reference number of the file was used before. It could only be processed once.            | Yes | Yes  | Yes  | Yes | Yes    |
| IIFV008 | The file must be delivered via a store and forward network service.   | head.002        | admi.007         | I078        | The file is delivered via real-time network service. It can only be processed if received via store and forward.         | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP011 | For the user query 'Liquidity Transfer Order List Query (LLIQ)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>- Parent BIC of the party</li> <li>- BIC of the party</li> <li>- Cash Account Number</li> <li>- Currency</li> <li>- Only key fields returned</li> <li>- Valid From</li> <li>- Valid To</li> </ul> | camt.069        | camt.070         | I030        | While referring to the query 'Liquidity transfer order list query (LLIQ)', the selected search criteria are invalid.     | Yes | No   | No   | No  | No     |
| IIMP012 | For the user query 'Liquidity Transfer Order Detail Query (LDEQ)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>  Liquidity Transfer Order Identifier</li> <li>  Only key fields returned</li> </ul>  | camt.069        | camt.070         | I031        | While referring to the query 'Liquidity Transfer detail query (LDEQ)', the selected search criteria are invalid.         | Yes | No   | No   | No  | No     |
| IIMP013 | For the user query 'Liquidity Transfer Order Link Set Query (LLSQ)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>- BIC of the party</li> <li>- Parent BIC</li> <li>- Cash Account Number</li> <li>- Valid from</li> <li>- Valid to</li> <li>- Currency</li> </ul>  | camt.069        | camt.070         | I032        | While referring to the query 'Liquidity transfer Order link set query (LLSQ)', the selected search criteria are invalid. | Yes | No   | No   | No  | No     |
| IIMP014 | For the user query 'Sequenced liquidity transfer order for a link set (SLSQ)' the following search criteria are allowed:  | camt.069        | camt.070         | I033        | While referring to the query 'Se-sequenced liquidity transfer order for a link set (SLSQ)', the                          | Yes | No   | No   | No  | No     |



| Rule Id | Description  | Inbound message   | Outbound message | Reason Code | Error Text   | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|-------------------|------------------|-------------|--|-----|------|------|-----|--------|
|         | <ul style="list-style-type: none"> <li>- Unique technical identifier of the liquidity transfer order link set</li> <li>- Key field indicator.</li> </ul>   |                   |                  |             | selected search criteria are invalid.  |     |      |      |     |        |
| IIMP015 | For the user query 'Total amount of standing and predefined orders Query (TALT)' the following search criteria are allowed: <ul style="list-style-type: none"> <li>- BIC of the Party</li> <li>- Parent BIC of the Party.</li> </ul> | camt.069          | camt.070         | I033        | While referring to the query 'Total predefined/standing liquidity transfer orders (TALT)', the selected search criteria are invalid.                                     | Yes | No   | No   | No  | No     |
| IIMP027 | For the user query 'Liquidity transfer order list query (LLIQ)' the following search criteria are mandatory: <ul style="list-style-type: none"> <li>- Key field indicator</li> </ul>   | camt.069          | camt.070         | I045        | For 'Liquidity transfer order list query (LLIQ)', selection of <ul style="list-style-type: none"> <li>- Key field indicator</li> </ul> is mandatory.                     | Yes | No   | No   | No  | No     |
| IIMP028 | For the user query 'Liquidity Transfer detail query (LDEQ)' the following search criteria are mandatory:<br><br>Liquidity Transfer Order Identifier <ul style="list-style-type: none"> <li>- Key field indicator.</li> </ul>         | camt.069          | camt.070         | I046        | For 'Liquidity Transfer detail query (LDEQ)' query, selection of <ul style="list-style-type: none"> <li>- LTO Identifier</li> </ul>                                      | Yes | No   | No   | No  | No     |
| IIMP029 | For the user query 'Sequenced liquidity transfer order for a link set (SLSQ)' the following search criteria are mandatory: <ul style="list-style-type: none"> <li>- Key field indicator.</li> </ul>                                  | camt.069          | camt.070         | I047        | For 'Sequenced liquidity transfer order for a link set (SLSQ)' query, selection of <ul style="list-style-type: none"> <li>- Key field indicator</li> </ul> is mandatory. | Yes | No   | No   | No  | No     |
| ICQ001  | If a query has to be queued due to maintenance window, then the real-time communication has to be finalised and the query response will be sent out after successful execution   | any query message | admi.007         | I001        | The Query is queued due to maintenance window.   | Yes | Yes  | Yes  | Yes | Yes    |
| IIMP152 | The request type must be valid for the addressed service.  | camt.009          | camt.010         | REJT        | The used request type is not valid.  | Yes | Yes  | Yes  | Yes | No     |

| Rule Id | Description  | Inbound message      | Outbound message     | Reason Code | Error Text  | T2S | TIPS | RTGS | CLM | ECONS2 |
|---------|--|----------------------|----------------------|-------------|---|-----|------|------|-----|--------|
|         |  | camt.069             | camt.070             |             |   |     |      |      |     |        |
| IIMS002 | A message structure is valid according to the schema defined for a message.  | any message          | admi.007             | I006        | The message is not valid. //Dynamic error including element name.//                                       | Yes | Yes  | Yes  | Yes | No     |
| QMPC114 | When performing a Cash Account Create request, the reference account is mandatory if the Account Type is T2S Dedicated Transit Account, T2S Central Bank Account, T2S Dedicated Cash Account, TIPS Credit Memorandum Balance, RTGS Sub-Account, Contingency Cash Account or CB Contingency Account. It is optional if the Account Type is Overnight Deposit Account, Marginal Lending Account or RTGS Dedicated Cash Account It is not allowed in all other cases. | acmt.007             | acmt.011             | REJT        | Invalid filling of Reference Account  | Yes | Yes  | Yes  | Yes | Yes    |
| DXAA002 | It is not allowed to perform a maintenance request, neither in 2-Eyes nor in 4-Eyes first step mode, that refers to an instance already awaiting for approval.   | reda.007<br>reda.013 | reda.029<br>reda.030 | REJT        | Data awaiting for approval cannot be modified   | Yes | No   | No   | No  | No     |
| IOCP001 | The query request is answered with a query response informing the CRDM actor that the data volume generated is too big to provide it with a query response. Instead CRDM continues to prepare the response applying pagination functionality. The created response pages will be sent out via store-and-forward.   | reda.010<br>reda.019 | reda 012<br>reda 021 | REJT        | High data volume - Response will be sent applying pagination functionality and in store-and-forward mode. | Yes | No   | No   | No  | No     |
| IIMP104 | Combined values for SysRstrctn/Tp and SysRstrctn/VldFr must be unique per message.   | reda.022<br>reda.023 | reda.016<br>reda.020 | REJT        | Combined value for SysRstrctn/Tp and SysRstrctn/VldFr is not unique.                                      | Yes | No   | No   | No  | No     |
| IIMP105 | Value for MktSpfcAttr/Nm must be unique per message.   | reda.022<br>reda.023 | reda.016<br>reda.020 | REJT        | Value for MktSpfcAttr/Nm is not unique.   | Yes | No   | No   | No  | No     |

## 5.2 Securities valuation bulk file format specifications

### 5.2.1 Introduction

#### 5.2.1.1 Context

The Securities Valuation collateral related data (also mentioned as SVA) are communicated by NCBs and Payment Banks to T2S through CRDM on a daily basis, on time for the start of Night-time settlement.

NCBs and Payment Banks provide SVAs via “flat files”, while A2A messages and U2A screens are used by Payments Banks for “client auto-collateralisation”. The U2A channel can also be used by NCBs and Payment Banks for contingency reasons or maintenance operations concerning a limited number of records.

#### 5.2.1.2 Purpose

This chapter provides a description of the structure of the “flat file” used by NCBs and Payment Banks to send SVAs to CRDM. The same structure applies to the file (so called “enriched” file) sent back from CRDM to the original sender and containing status and error information of rejected SVAs <sup>107</sup>.

### 5.2.2 Files technical Specification

The files have a simple XML format (in order to allow the network signature). All the records are included into a single “store and forward” message conveyed by the VAN provider. No business signature of the message is needed.

Within the message, the whole file is embedded in a single XML tag (<File> </EndFile>).

Between these tags the file has fixed-length records, with no header and footer. Each record has a length of 251 characters/bytes, the last character is a record separator (LF).

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<sup>107</sup> The “enriched” file is sent back to the NCB in any case, even if all the rows have been successfully loaded.

### 5.2.2.1 Identification and routing

The messages transporting Securities Valuations files will be identified by a specific RequestType <sup>108</sup> set by each VAN provider.

Only authorized NCBs and Payment Banks included in a “white list” are allowed to send the SVA files.

They must be known in advance by the CRDM and, moreover, CRDM must know in advance the technical addresses, expressed in form of standard “Distinguished Names”, used when sending the messages by each authorized party.

So, CRDM must have a pre-loaded configuration table, “white list”, such as the following:

| PARENT BIC | BIC  | SENDING DN |
|------------|------|------------|
| BIC1       | BIC2 | DN1        |
| BIC1       | BIC3 | DN2        |
| BIC1       | BIC4 | DN3        |
| ...        | ...  | ...        |

BIC2, BIC3 and BIC4 are the BICs identifying <sup>109</sup> the NCB in T2S and DN1, DN2 and DN3 are the technical senders that are authorised to send SVA files for the three NCBs. This configuration table must include all the parties authorized to send SVA files and, for each party, the DN of the authorised technical sender.

The SVA file is rejected by CRDM when it refers (in field 1 and 2 of the file, see below) to valuations provided by a party not present in the configuration table. It is also rejected if the XML message hasn’t been sent using a DN linked, in the same table, to the party providing the valuations.

### 5.2.2.2 Structure

In order to ensure full compatibility with existing CMS applications, T2S supports two versions of the flat file. Version A will continue being supported until the go-live of ECMS.

#### 5.2.2.2.1 Securities Valuations Flat File - Version A

##### XML schema for the request

The following is the XML schema used to embed the file into a “store and forward” message:

<sup>108</sup> This value is assigned to specify the type of message exchanged in the network. For SVA files a new value must be used, to be agreed with VAN providers, dedicated to this message.

<sup>109</sup> As the sending parties are only NCBs, BIC1 is always the BIC of T2S Operator.

```
<?xml version="1.0" ?>
<xs:schema xmlns="urn:T2S:SecuritiesValuationBulkFile" xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:T2S:SecuritiesValuationBulkFile"
  elementFormDefault="qualified">
  <xs:simpleType name="RestrictedFileType">
    <xs:restriction base="xs:string">
      <xs:pattern value="{181,181}\n+"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="File" type="File"/>
  <xs:complexType name="File">
    <xs:simpleContent>
      <xs:extension base="RestrictedFileType">
        <xs:attribute name="fileId" type="xs:string" default="" />
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</xs:schema>
```

### Example of XML request

```
<?xml version="1.0" encoding="UTF-8"?>
<File fileId = "T2SSVAFile20150630"
xmlns="urn:T2S:SecuritiesValuationBulkFile">Record1
Record2
...
Recordn
</File>
```

### XML schema for the response

```
<?xml version="1.0" ?>
<xs:schema xmlns="urn:T2S:SecuritiesValuationBulkFileResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:T2S:SecuritiesValuationBulkFileResponse"
  elementFormDefault="qualified">
  <xs:simpleType name="RestrictedFileType">
    <xs:restriction base="xs:string">
      <xs:pattern value="{181,181}\n"*/>
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="File" type="File"/>
  <xs:complexType name="File">
    <xs:simpleContent>
      <xs:extension base="RestrictedFileType">
        <xs:attribute name="fileId" type="xs:string" default="" />
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</xs:schema>
```



### 5.2.2.2.2 Securities Valuations Flat File - Version B

#### XML schema for the request

The following is the XML schema used to embed the file into a "store and forward" message:

```
<?xml version="1.0" ?>
<xs:schema xmlns="urn:T2S:SecuritiesValuationBulkFile" xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:T2S:SecuritiesValuationBulkFile"
  elementFormDefault="qualified">
  <xs:simpleType name="RestrictedFileType">
    <xs:restriction base="xs:string">
      <xs:pattern value="{251,251}\n}"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="File" type="File"/>
  <xs:complexType name="File">
    <xs:simpleContent>
      <xs:extension base="RestrictedFileType">
        <xs:attribute name="fileId" type="xs:string" default="" />
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>
</xs:schema>
```

#### Example of XML request

```
<?xml version="1.0" encoding="UTF-8"?>
<File fileId = "T2SSVAFile20150630"
xmlns="urn:T2S:SecuritiesValuationBulkFile">Record1
Record2
...
Recordn
</File>
```









### 5.2.3.2 Format of records

| FLAT FILE COLUMN | COLUM NAME           | FORMAT    | DESCRIPTION                                      | RULES   |
|------------------|----------------------|-----------|--|---|
| First row        |                      |           |  |   |
| 1                | Tag of start of file | CHAR (60) | " " or "<File>"                                  | The optional attribute fileId is a file reference that can be assigned by the sender. It is optional and it can be used to link the file returned by CRDM and the file originally sent to CRDM . The length of value assigned to fileId is from 0 to 54 characters. |
| Rows from #2 on  |                      |           |  |   |
| 1                | Parent BIC           | CHAR(11)  | Parent BIC of the Party providing the valuations | It must be known in advance by CRDM and included in the configuration table (see above).  |
| 2                | BIC                  | CHAR(11)  | BIC of the Party providing the valuations        | It must be known in advance by CRDM and included in the configuration table (see above).  |
| 3                | Valuation Date       | DATE      | Date of the valuation                            |   |

| FLAT<br>FILE<br>COLUMN | COLUM NAME  | FORMAT       | DESCRIPTION  | RULES   |
|------------------------|---|--------------|--|---|
| 4                      | ISIN  | CHAR(12)     | ISIN code of the securities  |   |
| 5                      | Currency  | CHAR (3)     | ISO Currency code for the valuations   |   |
| 6                      | Price coefficient                                 | NUMERIC (31) | Price as coefficient – without any decimal point / comma                     | Example:<br>If the price is 123,45 must be:<br>000...00012345<br>(number of leading zeroes is 26) |
| 7                      | Number of decimal digits for price as coefficient | NUMERIC (4)  | Price as coefficient (i.e. without currency) – number of fractional digits   | Example:<br>If the price is 123,45 must be:<br>0002   |
| 8                      | Price as amount                                   | NUMERIC (31) | Price as amount (i.e. with currency) – without any decimal point / comma     | Example as above  |
| 9                      | Number of decimal digits for price as amount      | NUMERIC (4)  | Price as coefficient (i.e. with currency) – number of fractional digits      | Example as above  |
| 10                     | Own-Used Asset Price coefficient <sup>110</sup>   | NUMERIC (31) | Price for own used assets as coefficient – without any decimal point / comma | Example as above  |

<sup>110</sup> Field only present in Version B of the flat file.

| FLAT FILE COLUMN | COLUM NAME   | FORMAT       | DESCRIPTION  | RULES  |
|------------------|--|--------------|--|--|
| 11               | Number of decimal digits for own-use price as coefficient <sup>111</sup> | NUMERIC (4)  | Price for own used assets as coefficient (i.e. without currency) – number of fractional digits | Example as above   |
| 12               | Own-Used Asset Price as amount <sup>112</sup>                            | NUMERIC (31) | Price for own used assets as amount (i.e. with currency) – without any decimal point / comma   | Example as above   |
| 13               | Number of decimal digits for own-use price as amount <sup>113</sup>      | NUMERIC (4)  | Price for own used assets as coefficient (i.e. with currency) – number of fractional digits    | Example as above   |
| 14               | Status   | CHAR (4)     | Status of the row  | It must be blank in the input file<br><br>This information is updated by CRDM in the file provided back to the sending NCB |
| 15               | Error description  | CHAR(60)     | Description of the error (if any) detected when the row was processed by CRDM                  | It must be blank in the input file<br><br>This information is updated by CRDM in the file provided back to the sending NCB |

111 Field only present in Version B of the flat file.

112 Field only present in Version B of the flat file.

113 Field only present in Version B of the flat file.

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| FLAT FILE COLUMN | COLUM NAME       | FORMAT   | DESCRIPTION     | RULES                  |
|------------------|------------------|----------|-----------------|------------------------|
| 16               | Record separator | CHAR(1)  | Fixed value: LF | LF = Line Feed (x'0A') |
| Last row         |                  |          |                 |                        |
| 1                | Tag of end file  | CHAR (7) | "</File>"       |                        |

### 5.2.3.3 Format of "Enriched Files" from CRDM to NCBs

The format of the enriched files is based on the format of the flat files that have been submitted to CRDM . It includes only rows which have not been accepted by CRDM (whose status is REJT, rejected). The submitted data remains unchanged but is supplemented with "Status" and "Error description".

#### Status and error supplementary fields

These data are located right to the record data.

| FLAT FILE COLUMN | FIELD                            | POSSIBLE VALUES  | DESCRIPTION  | RULES |
|------------------|----------------------------------|--|--|-------|
| 10               | Status                           |  | Status of the processing for the row.  | n/a   |
|                  |                                  | REJT   | Rejected   | n/a   |
| 11               | Error Description                |  | Description of the error.  |       |
|                  |                                  | Technical sender not allowed   | The technical sender of this Securities Valuation is not authorised to create Securities Valuations for this Party.  |       |
|                  |                                  | Price not compliant with Securities Settlement Type  | When performing a Securities Valuation Create request, the value provided for the Price and Own-Used Asset Type must be compliant with the Securities Settlement Type. |       |
|                  | Price format limitation exceeded | When performing a Securities Valuation Create request, the values provided for Price and Own-Use Price |  |       |

| FLAT<br>FILE<br>COLUMN | FIELD | POSSIBLE VALUES            | DESCRIPTION  | RULES |
|------------------------|-------|----------------------------|--|-------|
|                        |       |                            | <p>fields must be compliant with the following limitations:</p> <p>Amounts up to 18 digits, including decimal point, of which up to 5 decimals</p> <p>Percentages up to 18 digits, including decimal point, of which up to 17 decimals</p> |       |
|                        |       | Unknown currency           | When performing a Securities Valuation Create request, the Currency Code must refer to an existing instance in T2S.  |       |
|                        |       | Unknown or invalid Party   | When performing a Securities Valuation Create request, the referenced Party must refer to existing and active NCB or Payment Bank in T2S.  |       |
|                        |       | Unknown Securities         | When performing a Securities Valuation Create request, the Securities Mnemonic must refer to an existing and valid Security in T2S.  |       |
|                        |       | Invalid valuation date     | When performing a Securities Valuation Create request, the Securities Valuation Date specified in the request must be equal to or greater than the current date.   |       |
|                        |       | Invalid number of decimals | When performing a Securities Valuation Create request, the number of decimals in the value provided for Price (as amount) and Own-Used Asset Price (as amount) must be   |       |

| FLAT<br>FILE<br>COLUMN | FIELD | POSSIBLE VALUES | DESCRIPTION   | RULES |
|------------------------|-------|-----------------|---|-------|
|                        |       |                 | compliant with the number of decimals foreseen for the relevant currency. |       |

## 5.3 Securities Subject to cash penalties bulk file format specifications

### 5.3.1 Introduction

#### 5.3.1.1 Context

The Securities Subject to Cash Penalties data (from here on SStCP) is communicated by CSDs to T2S through CRDM on a daily basis, in time for the daily computation of new penalties for the previous business date. In addition, data can be provided for previous business dates if missing.

CSDs provide SStCP via “flat files” for creation and update operations, while U2A screens are used for the creation, update and deletion of specific individual instances.

#### 5.3.1.2 Purpose

The document provides a description of the structure of the “flat file” used by CSDs to send SStCP to CRDM. The same structure applies to the file (so called “enriched” file) sent back from CRDM to the original sender and containing status and error information.

### 5.3.2 Files technical Specification

The file has a simple XML format (in order to allow the network signature). All the records are included into a single “store and forward” message conveyed by the VAN provider. No business signature of the message is needed.

Within the message, the whole file is embedded in a single XML tag (<File> </File>).

Between these tags the file has fixed-length records, with no header and footer. Each record has a length of 135 characters/bytes, plus one last character as record separator (LF).

### 5.3.2.1 Identification and routing

The messages transporting SStCP files are identified by a specific RequestType <sup>114</sup>.

Only authorized CSDs <sup>115</sup> included in a “white list” are allowed to send the SStCP files.

They must be known in advance by CRDM and, moreover, CRDM must know in advance the technical addresses, expressed in form of standard “Distinguished Names”, used when sending the messages by each authorized party.

Therefore CRDM must have a pre-loaded configuration table, a “White list”, structured as follows:

| Parent BIC  | BIC         | Sending DN |
|-------------|-------------|------------|
| BIC1        | <b>BIC2</b> | <b>DN1</b> |
| <b>BIC1</b> | <b>BIC3</b> | <b>DN2</b> |
| <b>BIC1</b> | <b>BIC4</b> | <b>DN3</b> |
| ...         | ...         | ...        |

BIC2, BIC3 and BIC4 are the BICs identifying <sup>116</sup> the CSD in T2S and DN1, DN2 and DN3 are the technical senders that are authorised to send SStCP files for the three CSDs.

This configuration table must include all the parties authorized to send SStCP files and, for each party, the DN of the authorised technical sender.

The SStCP file is rejected by CRDM when it refers (in field 1 and 2 of the file, see below) to data provided by a party not present in the configuration table. It is also rejected if the XML message hasn’t been sent using a DN linked, in the same table, to the party providing the data.

In addition, CSDs are only allowed to send SStCP for Securities for which they have an active and open Security CSD Link with Maintenance Flag = TRUE.

Finally, all standard business validations defined in the « Create Securities Subject to Cash Penalties » and « Update Securities Subject to Cash Penalties » IDFS are applied to the individual SStCP creation/update operations.

For each row included in the file, CRDM performs a Create or Update operation depending on the value specified in the row.

114 This value is assigned to specify the type of message exchanged in the network. For SStCP files the new value „reda.xxx.securitiessubject2pen” must be used.

115 CSDs can only create Securities Subject to cash Penalties referencing Securities they are defined as Securities-Maintaining Entity (SME) for. An attempt to create an instance the requestor CSD is not defined as SME for will result in the « Requestor not allowed » error listed in section « Status and error supplementary fields ».

116 As the sending parties are only CSDs, BIC1 is always the BIC of T2S Operator.



An update in the related Securities CFI may cause a change in the Securities Subject to Penalties Financial Instrument Type. The CFI change on its own does not trigger recalculation of Penalties; this can be requested by performing a further update on each relevant instance of the Securities Subject to Penalties object. If an Update operation contains a full row with all the current attribute values, no change will be applied to the Securities Subject to Penalties, but the operation will be registered in order to trigger a recalculation of the existing Penalties within the Securities Subject to Penalties' validity period at the next occasion. This allows a recalculation of (only) the applicable business dates of existing Penalties in appeal period corresponding to the business dates within the validity period of the updated Securities Subject to Cash Penalties, at the next occasion and with a new Financial Instrument Type value, which depends on the value of the related Securities CFI. Those Securities Subject to Cash Penalties instances that the CSD does not request an update for will not trigger the recalculation of the applicable business days of existing penalties corresponding to the validity periods of such instances.

In case the file format is not aligned to the file specification or its processing is not possible because of an internal T2S technical error, the whole file is rejected and a response message is sent back to the sender.

#### 5.3.2.2 Structure

##### **XML schema for the request**

The following is the XML schema used to embed the file into a "store and forward" message:

```

<?xml version="1.0" ?>
<xs:schema xmlns="urn:T2S:SecuritiesSubjectToCashPenaltiesBulkFile"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="urn:T2S:SecuritiesSubjectToCashPenaltiesBulkFile"
elementFormDefault="qualified">
<xs:simpleType name="RestrictedFileType">
<xs:restriction base="xs:string">
<xs:pattern value="{135,135}\n}+"/>
<xs:restriction>
</xs:simpleType>
<xs:element name="File" type="File"/>
<xs:complexType name="File">
<xs:simpleContent>
<xs:extension base="RestrictedFileType">
<xs:attribute name="fileId" type="xs:string" default="" />
</xs:extension>
</xs:simpleContent>
</xs:complexType>
</xs:schema>

```

### Example of XML request

```

<?xml version="1.0" encoding="UTF-8"?>
<File fileId="T2SSStCPFile20200630" xmlns="urn:T2S:SecuritiesSubjectToCashPenalties-
BulkFile">Record1
Record2
...
Recordn
</File>

```

### XML schema for the response





### 5.3.3.2 Format of records

| Flat file column | Column Name          | Format   | Description                              | Rules  |
|------------------|----------------------|--|--|--|
| First row        |                      |  |  |  |
| 1                | Tag of start of file | CHAR(60) for the FileId (including tag), plus fixed values | " " or "<File>"                          | <p>The optional attribute FileId is a file reference that can be assigned by the sender. It is optional and it can be used to link the file returned by CRDM and the file originally sent to CRDM.</p> <p>The length of value assigned to fileId is from 0 to 54 characters.</p> |
| Rows from #2 on  |                      |  |  |  |
| 1                | Maintenance Type     | CHAR(1)  | Type of operation to be performed        | <p>Possible values:</p> <p>'C' for Create</p> <p>'U' for Update</p>  |
| 2                | Parent BIC           | CHAR(11)   | Parent BIC of the CSD providing the data | The BIC and Parent BIC must identify a Party defined as Security Maintaining Entity (SME) for the relevant ISIN (see above)  |
| 3                | BIC                  | CHAR(11)   | BIC of the CSD providing the data        | The BIC and Parent BIC must identify a Party defined as Security Maintaining Entity (SME) for the  |

| Flat file column | Column Name       | Format            | Description  | Rules   |
|------------------|-------------------|-------------------|--|---|
|                  |                   |                   |  | relevant ISIN (see above)   |
| 4                | ISIN              | CHAR(12)          | ISIN code of the securities  |   |
| 5                | Valid From        | DATE (yyyy-mm-dd) | Start validity date  |   |
| 6                | Valid To          | DATE (yyyy-mm-dd) | End validity date  | To set an unlimited validity period, the value "9999-12-31" must be input.  |
| 7                | Liquidity         | CHAR(1)           | Liquidity attribute.<br>Possible values:<br>"L" for Liquid<br>"I" for Illiquid<br>"N" for no value | Values "L" and "I" are only allowed and are mandatory if the related ISIN defined in field 4 represents a financial instrument of type "Shares", based on the CFI code defined at ISIN level.<br><br>If "N" is used, the related optional field at database level is not populated. |
| 8                | Status            | CHAR(4)           | Status of the row  | It must be blank in the input file<br><br>This information is updated by CRDM in the file provided back to the sending CSD  |
| 9                | Error description | CHAR(75)          | Description of the error (if any) detected when the row was processed by CRDM                      | It must be blank in the input file<br><br>This information is updated by CRDM in  |

| Flat file column | Column Name        | Format  | Description     | Rules                                     |
|------------------|--------------------|---------|-----------------|---|
|                  |                    |         |                 | the file provided back to the sending CSD |
| 10               | Record separator   | CHAR(1) | Fixed value: LF | LF = Line Feed (x'0A')                    |
| Last row         |                    |         |                 |   |
| 1                | Tag of end of file | CHAR(7) | "</File>"       |   |

### 5.3.3.3 Format of "Enriched Files" from CRDM to CSDs

The format of the enriched files is based on the format of the flat files that have been submitted to CRDM. Rows are returned for each row in the input file that triggers a rejection, supplemented with "Status" and "Error description".

#### 5.3.3.3.1 Status and error supplementary fields

These data are located right to the record data.

| Flat file column | Field             | Possible values             | Description   | Rules                         |
|------------------|-------------------|-----------------------------|---|-------------------------------|
| 8                | Status            |                             | Status of the processing for the row.   | n/a                           |
|                  |                   | REJT                        | Rejected  | n/a                           |
| 9                | Error Description |                             | Description of the error.   | Occurs when Status is 'REJT'. |
|                  |                   | Requestor not allowed       | CSDs can only create Securities Subject to Cash Penalties if they are defined as Securities Maintaining Entity (SME) of the related Security. |                               |
|                  |                   | Invalid Security identifier | When performing a Securities Subject to Cash Penalties creation   |                               |

| Flat file column | Field | Possible values  | Description   | Rules |
|------------------|-------|--|---|-------|
|                  |       |  | request, the Security Identifier must refer to an existing and active Security.   |       |
|                  |       | Liquidity is only allowed and mandatory for Shares                   | When performing a Securities Subject to Cash Penalties creation request, the Liquidity attribute can only be used (and is mandatory) for Shares, as defined in the ISIN's CFI code.                           |       |
|                  |       | Valid To cannot be earlier than previous business date or Valid From | When performing a Securities Subject to Cash Penalties update request, the Valid To must be equal to or greater than the business day preceding the current date and equal to or greater than the Valid From. |       |
|                  |       | Instance already exists in the same validity period                  | When performing a Securities Subject to Cash Penalties creation request, no more than one active instance can exist for the same Security over the same validity period.                                      |       |
|                  |       | Requestor not allowed  | Securities Subject to Cash Penalties can only be updated by T2S   |       |



| Flat file column | Field | Possible values   | Description   | Rules |
|------------------|-------|---|---|-------|
|                  |       |   | Operator or CSDs.<br>CSDs can only update Securities Subject to Cash Penalties if they are defined as Securities Maintaining Entity (SME) of the related Security.  |       |
|                  |       | Invalid instance to be updated  | When performing a Securities Subject to Cash Penalties update request, it must refer to an existing and active instance.  |       |
|                  |       | Liquidity can only be input for Shares.                                     | When performing a Securities Subject to Cash Penalties update request, the Liquidity attribute can only be used for ISINs with financial instrument type = "SHRS".  |       |
|                  |       | Valid To cannot be set to earlier than previous business date or Valid From | When performing a Securities Subject to Cash Penalties update request, the Valid To must be equal to or greater than the business day preceding the current date and equal to or greater than the Valid From. |       |
|                  |       | Past Valid To cannot be updated   | When performing a Securities Subject to   |       |

| Flat file column | Field | Possible values                                     | Description  | Rules |
|------------------|-------|---|--|-------|
|                  |       |   | Cash Penalties update request, the Valid To can be updated only if the current value is equal to or greater than the business day preceding the current business date.   |       |
|                  |       | Instance already exists in the same validity period | When performing a Securities Subject to Cash Penalties update request, no more than one active instance can exist for the same Security over the same validity period.   |       |
|                  |       | Invalid CFI-Liquidity Indicator combination         | Securities Subject to Cash Penalties cannot be updated in any way if the Liquidity Indicator is present with CFI Code not equivalent to a 'Shares' Financial Instrument Type, or if the Liquidity Indicator is not present with CFI Code equivalent to a 'Shares' Financial Instrument Type. <b>{T2S CR0819}</b> |       |

The following errors refer to situations where the file is rejected due to format errors or internal technical errors.

| Flat file column | Field             | Possible values                                   | Description  | Rules |
|------------------|-------------------|---|--|-------|
| 11               | Status            |   | Status of the processing for the file.                               | n/a   |
|                  |                   | FERR  | File format error  | n/a   |
| 12               | Error Description | File not processed because of invalid file format | When sending the bulk file, it must be according to the file format. | n/a   |

| Flat file column | Field             | Possible values                                   | Description   | Rules |
|------------------|-------------------|---|---|-------|
| 11               | Status            |   | Status of the processing for the file.  | n/a   |
|                  |                   | TERR  | Internal technical error  | n/a   |
| 12               | Error Description | File not processed because of T2S technical error | When an internal technical error prevents the processing of the bulk file, a message is sent back to the sender | n/a   |

## 5.4 Daily prices bulk file format specifications

### 5.4.1 Introduction

#### 5.4.1.1 Context

The Daily Prices data (from here on DP) is communicated by CSDs to T2S through CRDM on a daily basis, in time for the daily computation of new penalties for the previous business date. In addition, data can be provided for previous business dates if missing.

CSDs provide DPs via “flat files” for creation and update operations, while U2A screens are used for the creation, update and deletion of specific individual instances.

### 5.4.1.2 Purpose

The document provides a description of the structure of the “flat file” used by CSDs to send DPs to CRDM. The same structure applies to the file (so called “enriched” file) sent back from CRDM to the original sender and containing status and error information.

## 5.4.2 Files technical Specification

The file has a simple XML format (in order to allow the network signature). All the records are included into a single “store and forward” message conveyed by the VAN provider. No business signature of the message is needed.

Within the message, the whole file is embedded in a single XML tag (<File> </File>).

Between these tags the file has fixed-length records, with no header and footer. Each record has a length of 197 characters/bytes, plus one last character as record separator (LF).

### 5.4.2.1 Identification and routing

The messages transporting DP files are identified by a specific RequestType <sup>117</sup>.

Only authorized CSDs <sup>118</sup> included in a “white list” are allowed to send the DP files.

They must be known in advance by CRDM and, moreover, CRDM must know in advance the technical addresses, expressed in form of standard “Distinguished Names”, used when sending the messages by each authorized party.

Therefore CRDM must have a pre-loaded configuration table, a “White list”, structured as follows:

| Parent BIC | BIC  | Sending DN |
|------------|------|------------|
| BIC1       | BIC2 | DN1        |
| BIC1       | BIC3 | DN2        |
| BIC1       | BIC4 | DN3        |
| ...        | ...  | ...        |

BIC2, BIC3 and BIC4 are the BICs identifying <sup>119</sup> the CSD in T2S and DN1, DN2 and DN3 are the technical senders that are authorised to send DP files for the three CSDs.

<sup>117</sup> This value is assigned to specify the type of message exchanged in the network. For DP files the new value „reda.xxx.dailyprice” must be used.

<sup>118</sup> CSDs can only create Daily Prices for Securities they are defined as Securities-Maintaining Entity (SME) for. An attempt to create an instance the requestor CSD is not defined as SME for will result in the « Requestor not allowed » error listed in section « Status and error supplementary fields ».

<sup>119</sup> As the sending parties are only CSDs, BIC1 is always the BIC of T2S Operator.

This configuration table must include all the parties authorized to send DP files and, for each party, the DN of the authorised technical sender.

The DP file is rejected by CRDM when it refers (in field 1 and 2 of the file, see below) to data provided by a party not present in the configuration table. It is also rejected if the XML message hasn't been sent using a DN linked, in the same table, to the party providing the data.

In addition, CSDs are only allowed to send DPs for Securities for which they have an active and open Security CSD Link with Maintenance Flag = TRUE.

Finally, all standard business validations defined in the « Create Daily Prices » and « Update Daily Prices » IDFS are applied to the individual DP creation/update operations.

For each row included in the file, CRDM performs a Create or Update operation depending on the value specified in the row.

In case the file format is not aligned to the file specification or its processing is not possible because of an internal T2S technical error, the whole file is rejected and a response message is sent back to the sender.

#### 5.4.2.2 Structure

##### **XML schema**

The following is the XML schema used to embed the file into a "store and forward" message:

```

<?xml version="1.0" ?>
<xs:schema xmlns="urn:T2S:DailyPriceBulkFile"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="urn:T2S:DailyPriceBulkFile"
elementFormDefault="qualified">
<xs:simpleType name="RestrictedFileType">
<xs:restriction base="xs:string">
<xs:pattern value="(.{197,197}\n)+"/>
</xs:restriction>
</xs:simpleType>
<xs:element name="File" type="File"/>
<xs:complexType name="File">
<xs:simpleContent>
<xs:extension base="RestrictedFileType">
<xs:attribute name="fileId" type="xs:string" default="" />
</xs:extension>
</xs:simpleContent>
</xs:complexType>
</xs:schema>

```

**Example of XML request:**

```

<?xml version="1.0" encoding="UTF-8"?>
<File fileId="T2SDPFile20200630" xmlns="urn:T2S:DailyPriceBulkFile">
Record1
Record2
...
Recordn
</File>

```

**XML schema for the response**

```

<?xml version="1.0" ?>
<xs:schema xmlns="urn:T2S:DailyPriceBulkFileResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="urn:T2S:DailyPriceBulkFileResponse"
elementFormDefault="qualified">
<xs:simpleType name="RestrictedFileType">
<xs:restriction base="xs:string">
<xs:pattern value="(.{197,197}\n)*"/>
</xs:restriction>
</xs:simpleType>
<xs:element name="File" type="File"/>
<xs:complexType name="File">
<xs:simpleContent>
<xs:extension base="RestrictedFileType">
<xs:attribute name="fileId" type="xs:string" default="" />
</xs:extension>
</xs:simpleContent>
</xs:complexType>
</xs:schema>

```

When the XML is sent back from CRDM to the CSD ("enriched" file) and no records have been rejected, the embedded file is empty:

**Example of empty XML response:**

```

<?xml version="1.0" encoding="UTF-8"?>
<File fileId="T2SDPFile20200630" xmlns="urn:T2S:DailyPriceBulkFileResponse"></File>

```

If the flat file cannot be processed due to an invalid format, the response message will have the following format:

**Example of rejection for invalid file format reason XML response:**





| Format Type | Format  | Default value                                      |
|-------------|---|--|
| DATE        | The format is « yyyy-mm-dd » with no timezone indication. Example: „2020-06-30“ | 0001-01-01   |
| CHAR(n)     | String with exactly n characters.   | <space> (string of <space> characters of length n) |
| NUMERIC(p)  | Number with maximum p integer places and no decimal places.                     | 0 (sequence of 0 characters of length p)           |

#### 5.4.3.2 Format of records

| Flat file column | Column Name          | Format   | Description                              | Rules   |
|------------------|----------------------|--|--|---|
| First row        |                      |  |  |   |
| 1                | Tag of start of file | CHAR(60) for the FileId (including tag), plus fixed values | “ ” or “<File>”                          | The optional attribute FileId is a file reference that can be assigned by the sender. It is optional and it can be used to link the file returned by CRDM and the file originally sent to CRDM.<br><br>The length of value assigned to fileId is from 0 to 54 characters. |
| Rows from #2 on  |                      |  |  |   |
| 1                | Maintenance Type     | CHAR(1)  | Type of operation to be performed        | Possible values:<br>'C' for Create<br>'U' for Update  |
| 2                | Parent BIC           | CHAR(11)   | Parent BIC of the CSD providing the data | The BIC and Parent BIC must identify a Party defined as   |

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| Flat file column | Column Name   | Format   | Description                       | Rules   |
|------------------|---------------|----------|-----------------------------------|---|
|                  |               |          |                                   | Security Maintaining Entity (SME) for the relevant ISIN (see above)   |
| 3                | BIC           | CHAR(11) | BIC of the CSD providing the data | The BIC and Parent BIC must identify a Party defined as Security Maintaining Entity (SME) for the relevant ISIN (see above)   |
| 4                | ISIN          | CHAR(12) | ISIN code of the securities       |   |
| 5                | Currency Code | CHAR(3)  | Price currency                    | <p>If the Price is linked to a Security with Settlement Type "Face Amount", the Currency must correspond to the Security denomination currency.</p> <p>Currency code of the security is relevant only when the related security settlement type is nominal, and the currency code of the price is relevant only when the security settlement type is unit.</p> <p>Currency code of the price is mandatory in case the Price Amount is informed.</p> |

| Flat file column | Column Name          | Format            | Description  | Rules   |
|------------------|----------------------|-------------------|--|---|
| 6                | Price Date           | DATE (yyyy-mm-dd) | Validity date for the price                          |   |
| 7                | Price as coefficient | NUMERIC(31)       | Price as coefficient without any decimal point/comma | <p>Price Coefficient is mandatory for securities with settlement type = Face Amount</p> <p>Currency Code of the security is mandatory in case the Price Coefficient is informed.</p> <p>For securities with settlement type nominal, price as coefficient should be provided as "BaseOneRate", as per their example, 0.7 to express 70%, indicating also the currency of the security, which is mandatory.</p> <p>Example:</p> <p>If the price is 123,45 the following value must be provided:</p> <p>000...00012345<br/>(number of leading zeroes is 26)</p> <p>If "Price as amount" is used this field must</p> |

| Flat file column | Column Name                                       | Format      | Description   | Rules  |
|------------------|---|-------------|---|--|
|                  |   |             |   | <p>contain a sequence of zeroes.</p> <p>By definition, not both prices (i.e. Price Amount and Price coefficient) can be informed.</p>  |
| 8                | Number of decimal digits for price as coefficient | NUMERIC(4)  | Number of decimal digits for the price as coefficient (i.e. without currency) | <p>Example:</p> <p>If the price is 123,45 the following value must be provided:</p> <p>0002</p> <p>If "Price as amount" is used this field must contain a sequence of zeroes.</p>  |
| 9                | Price as amount                                   | NUMERIC(31) | Price as amount (i.e. with currency) without any decimal point/comma          | <p>Price Amount is mandatory for securities with settlement type = Unit.</p> <p>For securities with settlement type Unit, price as an amount, including the price currency, which is mandatory.</p> <p>Example as above</p> <p>If "Price as coefficient" is used this field must contain a sequence of zeroes.</p> <p>By definition, not both prices (i.e. Price</p> |

| Flat file column | Column Name                                  | Format     | Description   | Rules   |
|------------------|--|------------|---|---|
|                  |  |            |   | Amount and Price coefficient) can be informed.  |
| 10               | Number of decimal digits for price as amount | NUMERIC(4) | Number of decimal digits for the price as amount (i.e. with currency)         | Example as above<br>If "Price as coefficient" is used this field must contain a sequence of zeroes.                     |
| 11               | Status                                       | CHAR(4)    | Status of the row   | It must be blank in the input file.<br>This information is updated by CRDM in the file provided back to the sending CSD |
| 12               | Error description                            | CHAR(75)   | Description of the error (if any) detected when the row was processed by CRDM | It must be blank in the input file.<br>This information is updated by CRDM in the file provided back to the sending CSD |
| 13               | Record separator                             | CHAR(1)    | Fixed value: LF   | LF = Line Feed (x'0A')  |
| Last row         |  |            |   |   |
| 1                | Tag of end of file                           | CHAR(7)    | "</File>"   |   |

### 5.4.3.3 Format of "Enriched Files" from CRDM to CSDs

The format of the enriched files is based on the format of the flat files that have been submitted to CRDM. Rows are returned for each row in the input file that triggers a rejection, supplemented with "Status" and "Error description".

#### 5.4.3.3.1 Status and error supplementary fields

These data are located right to the record data.

| Flat file column | Field             | Possible values         | Description   | Rules                         |
|------------------|-------------------|-------------------------|---|-------------------------------|
| 11               | Status            |                         | Status of the processing for the row.   | n/a                           |
|                  |                   | REJT                    | Rejected  | n/a                           |
|                  |                   |                         |   |                               |
| 12               | Error Description |                         | Description of the error.   | Occurs when Status is 'REJT'. |
|                  |                   | Requestor not allowed   | CSDs can only create Daily Prices for Securities for which they are defined as Securities-Maintaining Entity (SME).                 | Occurs when Status is 'REJT'. |
|                  |                   | Invalid Security        | When performing a Daily Price creation request, the Security Identifier must refer to an existing and active Security.              |                               |
|                  |                   | Invalid Currency Code   | When performing a Daily Price creation request, the Currency Code must refer to an existing and active Currency in T2S.             |                               |
|                  |                   | Instance already exists | When performing a Daily Price creation request, there can be no more than one active instance for the same Security and Price Date. |                               |

| Flat file column | Field | Possible values                                  | Description   | Rules |
|------------------|-------|--|---|-------|
|                  |       | Invalid number of decimals                       | When performing a Daily Price creation request, the number of decimals provided for the Price must be compliant with the specified Currency.                                  |       |
|                  |       | Data not compliant with Security Settlement Type | When performing a Daily Price creation request, the value provided for the Price must be compliant with the Securities Settlement Type.                                       |       |
|                  |       | Requestor not allowed                            | Daily Prices can only be updated by T2S Operator and CSD. CSDs can only update Daily Prices for Securities for which they are defined as Securities-Maintaining Entity (SME). |       |
|                  |       | Invalid instance to be updated                   | When performing a Daily Price update request, it must refer to an existing and active instance.   |       |
|                  |       | Invalid Currency Code                            | When performing a Daily Price update request, it must refer to an existing and active instance.   |       |

| Flat file column | Field | Possible values                                  | Description  | Rules |
|------------------|-------|--|--|-------|
|                  |       | Instance already exists                          | When performing a Daily Price update request, there can be no more than one active instance for the same Security and Price Date.            |       |
|                  |       | Invalid number of decimals                       | When performing a Daily Price creation request, the number of decimals provided for the Price must be compliant with the specified Currency. |       |
|                  |       | Data not compliant with Security Settlement Type | When performing a Daily Price update request, the value provided for the Price must be compliant with the Securities Settlement Type.        |       |

The following errors refer to situations where the file is rejected due to format errors or internal technical errors.

| Flat file colmn | Field             | Possible values                                   | Description  | Rules |
|-----------------|-------------------|---|--|-------|
| 11              | Status            |   | Status of the processing for the file.                               | n/a   |
|                 |                   | FERR  | File format error  | n/a   |
| 12              | Error Description | File not processed because of invalid file format | When sending the bulk file, it must be according to the file format. | n/a   |



| Flat file column | Field             | Possible values                                   | Description   | Rules |
|------------------|-------------------|---|---|-------|
| 11               | Status            |   | Status of the processing for the file.  | n/a   |
|                  |                   | TERR  | Internal technical error  | n/a   |
| 12               | Error Description | File not processed because of T2S technical error | When an internal technical error prevents the processing of the bulk file, a message is sent back to the sender | n/a   |