Common Reference Data Management

User Detailed Functional Specifications

V2.0.~~1~~2

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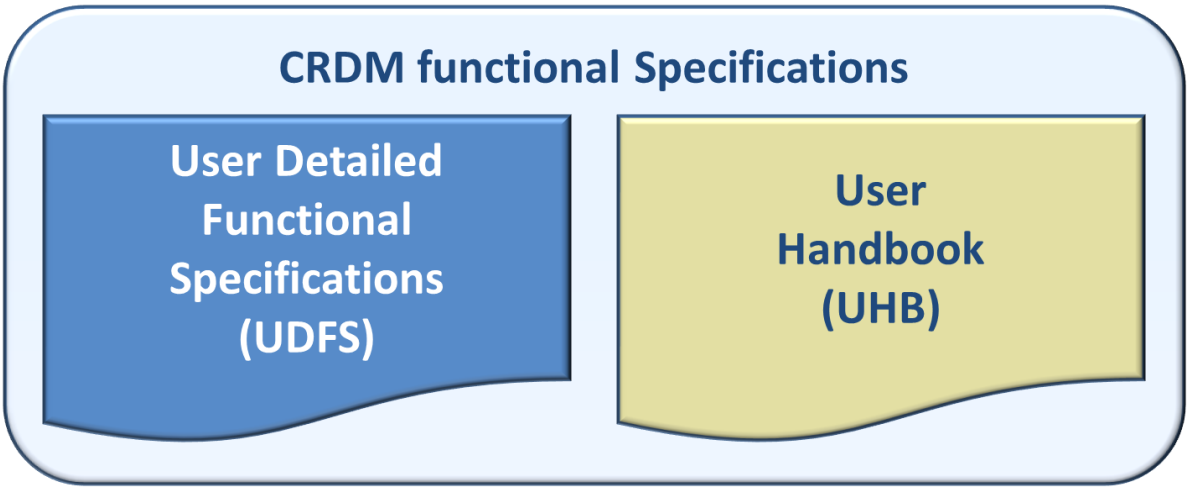
Introduction

The User Detailed Functional Specifications (UDFS) of the Common Reference Data Management (CRDM) common component are part of the documentation of the T2-T2S Consolidation project. The diagram below presents an overview of all the documents foreseen to allow CRDM Actors to understand how requirements described in the T2-T2S Consolidation User Requirements Document (URD) for the Common Reference Data Management common component are implemented.

DIAGRAM 1 - OVERVIEW OF CRDM SPECIFICATIONS



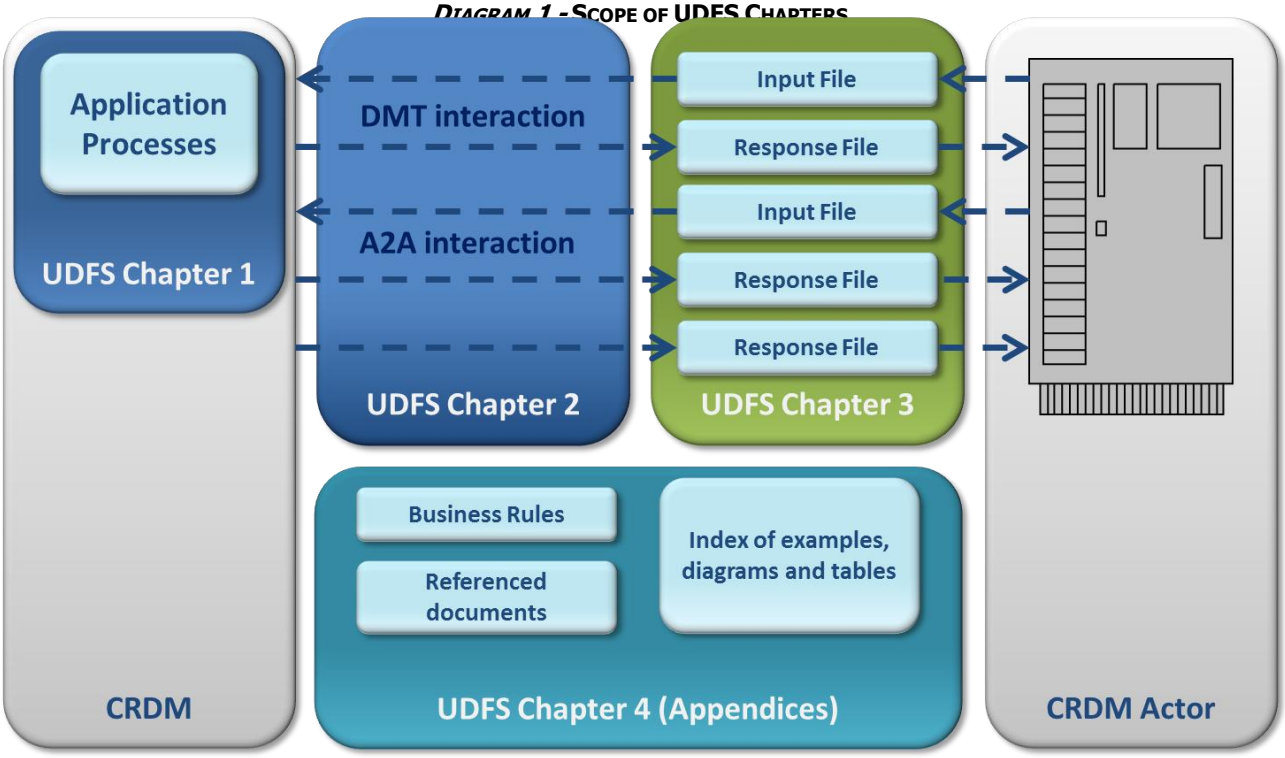
The UDFS focus on the provision of information to CRDM Actors to design and build the interface of their business applications with the Common Reference Data Management common component (A2A and Data Migration Tool), while the UHB describes the Graphical User Interface (GUI) screens in detail.

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.
1.4 CRDM features	Common reference data	To understand how reference data can

SECTION	SCOPE	USER OBJECTIVE
	maintenance	be managed in CRDM.
1.5 Interactions with other services	Interactions between CRDM an dother 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
2.1.1	A2A Common reference data maintenance process
2.1.2	A2A Common reference data query
2.2	Data Migration Tool file upload

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 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

The UDFS appendix provides information on the CRDM business rules applying to incoming messages, with the respective messages and error codes associated.

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 CBs and directly connected 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.

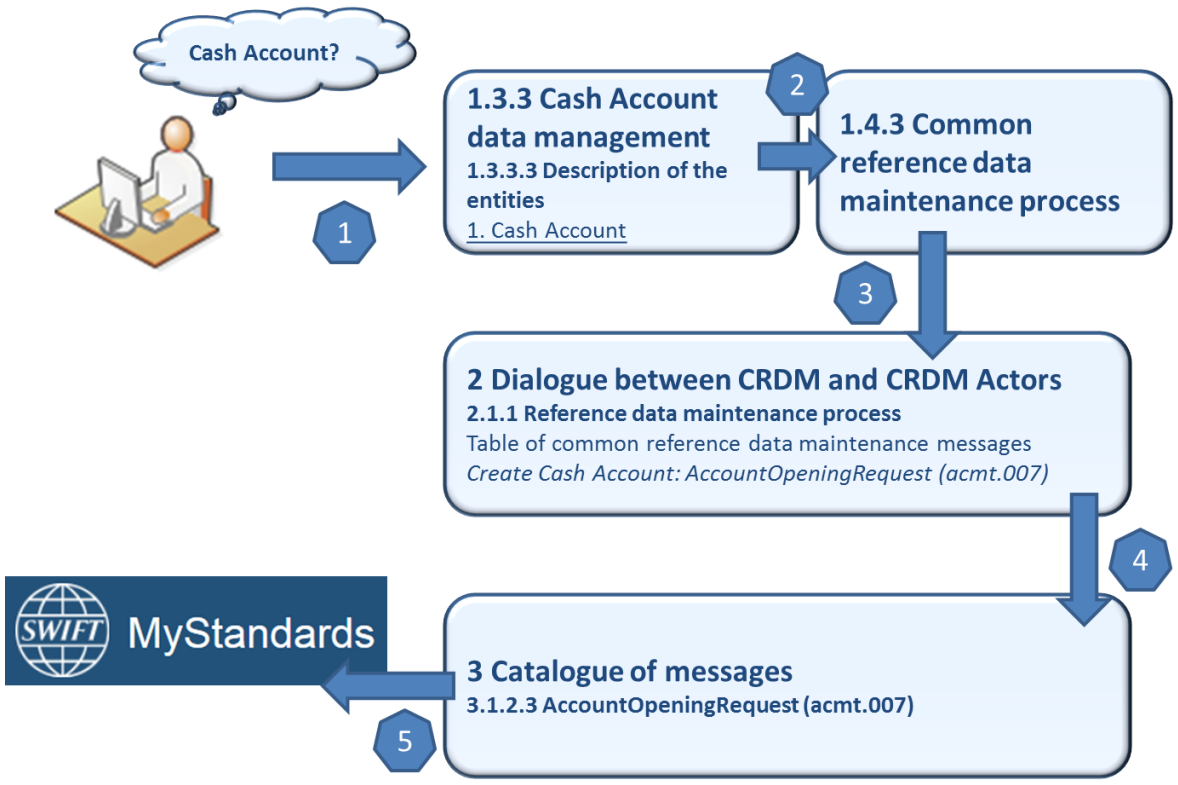
However, all readers, whether "business" or "technical", may find it useful to read the following UDFS sections, which are providing a background to the understanding of any other UDFS section:

- 1.1 "Introduction to CRDM", which is a summary providing the basis for the understanding of the main CRDM concepts.
- 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 that are 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 that aim to use CRDM for configuring data for all Services will find the entire document relevant for their purpose. 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	TIPS, CLM, RTGS	Tables 8, 9 and 10 contain privileges relevant exclusively for each Service/component.
1.2.2.2.2 Configuration of privileges	TIPS, CLM, RTGS	Clarification about granting privileges in each Service/component.
1.2.3.2 Message subscription parameter types	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)	TIPS, CLM, RTGS	Reference data model section listing Service Party Types applicable to each Service/component.
1.3.3.3 Description of the entities (Cash Account)	TIPS, CLM, RTGS	Reference data model section listing Cash Account Types applicable to each Service/component.
1.4.3.6 Common reference data propagation	TIPS, CLM, RTGS	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.
1.7 Limitations of the system	TIPS	Limitations of the system related to CRDM for TIPS.
5.1 Business Rules	TIPS, CLM, RTGS	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 0 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. Finally, section 1.7 Limitations of the system lists the current limitations present in the system. 0

~~Operations and support describes supporting the CRDM Operator in the management of the component. Finally, section 1.9 Limitations of the system lists the current limitations present in the system.Introduction to CRDM~~

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, cash accounts, rules and parameters. The following list shows the main configuration areas for common reference data in CRDM:

- Party reference data;
- Cash account reference data;
- Access rights management;
- Message subscription configuration;
- Network configuration;
- Report configuration;
- Business day management configuration;
- Restriction type management;
- Billing configuration;

- Configuration parameters.[1]

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 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 more 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. Central Banks, 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.

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);
- 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.

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

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. ~~0 Dialogue between CRDM and CRDM Actors and 0~~

~~Catalogue of Messages.~~

U2A connectivity to CRDM will be handled through the ESMIG Portal. Please refer to the ESMIG documentation for more details.

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 1.2.2.3 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 Central Bank, Ancillary System and Payment Bank, which are introduced in section 1.2.2.1.5Common reference data objects and the hierarchical party model, as well as the concept of System Entity, which is introduced in section 1.2.2.1.6 Data scope.

1.2.2.1. Access rights concepts

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

1.2.2.1.1User 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.

1.2.2.1.2Privilege

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.

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

TABLE 5 – 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	DATA SCOPE
Administer Party[2]	n/a	n/a
Create Certificate Distinguish Name	Certificate DN – New	Any Certificate DN
Create DN-BIC Routing	DN-BIC Routing - New	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).
Create Role	Role – New	Roles within own System Entity (for Central Banks).
Create User	User – New	Users within own System Entity (for Central Banks) or own Party (for Payment Banks/Ancillary Systems).
Create User Certificate Distinguish Name Link	User Certificate DN Link – New	Links within own System Entity (for Central Banks) or for own Users (for Payment Banks/Ancillary Systems).
Delete Certificate Distinguish Name	Certificate DN – Delete/Restore	Certificate DN within own System Entity.

[2] This privilege enables a User to act as Party Administrator for their own Party.

PRIVILEGE	USER FUNCTION	DATA SCOPE
Delete DN-BIC Routing	DN-BIC Routing - Delete/Restore	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	Roles within own System Entity (for Central Banks).
Delete User	User – Delete/Restore	Users within own System Entity (for Central Banks) or own Party (for Payment Banks/Ancillary Systems).
Delete User Certificate Distinguish Name Link	User Certificate DN Link – Delete/Restore	Links within own System Entity (for Central Banks) or for own Users (for Payment Banks/Ancillary Systems).
Grant Privilege	Grant Privilege	Privileges granted to Parties, Roles and Users within own System Entity (for Central Banks) or to own Users (for Payment Banks/Ancillary Systems)
Grant/Revoke Role	Grant/Revoke Role	Roles granted to Parties and Users within own System Entity (for Central Banks) or to own Users (for Payment Banks/Ancillary Systems)
Revoke Privilege	Revoke Privilege	Privileges granted to Parties, Roles and Users within own System Entity (for Central Banks) or to own Users (for Payment Banks/Ancillary Systems)
Update DN-BIC Routing	DN-BIC Routing - Edit	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).
Update Role	Role – Edit	Roles within own System Entity (for Central Banks)
Update User	User – Edit	Users within own System Entity (for Central Banks) or own Party (for Payment Banks/Ancillary Systems).

TABLE 6 – 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	DATA SCOPE
Create Ancillary System Bilateral Agreement	Ancillary System Bilateral Agreement – New	AS Bilateral Agreements for Parties within own System Entity (for Central Banks)
Create Ancillary System Procedure	Ancillary System Procedure – New	AS Procedures for Parties within own System Entity (for Central Banks)

PRIVILEGE	USER FUNCTION	DATA SCOPE
Create Banking Group	Banking Group – New	Banking Groups within own System Entity (for Central Banks)
Create Party	Party – New	Parties within own System Entity (for Central Bank)
Create Party-Service Link	Party-Service Link - New	Links within own System Entity (for Central Banks)
Create Technical Address Network Service Link	Technical Address Network Service Link – New	Links within own System Entity (for Central Banks)
Delete Ancillary System Bilateral Agreement	Ancillary System Bilateral Agreement – Delete/Restore	AS Bilateral Agreements for Parties within own System Entity (for Central Banks)
Delete Ancillary System Procedure	Ancillary System Procedure – Delete/Restore	AS Procedures for Parties within own System Entity (for Central Banks)
Delete Banking Group	Banking Group – Delete/Restore	Banking Groups within own System Entity (for Central Banks)
Delete Party	Party – Delete/Restore	Parties within own System Entity (for Central Bank) excluding own Party
Delete Party-Service Link	Party-Service Link - Delete/Restore	Links within own System Entity (for Central Banks)
Delete Technical Address Network Service Link	Technical Address Network Service Link - Delete/Restore	Links within own System Entity (for Central Banks)
Update Ancillary System Bilateral Agreement	Ancillary System Bilateral Agreement – Edit	AS Bilateral Agreements for Parties within own System Entity (for Central Banks)
Update Ancillary System Procedure	Ancillary System Procedure – Edit	AS Procedures for Parties within own System Entity (for Central Banks)
Update Banking Group	Banking Group – Edit	Banking Groups within own System Entity (for Central Banks)
Update Party	Party – Edit	Parties within own System Entity (for Central Bank)
Update Party-Service Link	Party-Service Link - Edit	Links within own System Entity (for Central Banks)

TABLE 7 – 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	DATA SCOPE
Create Account Monitoring	Account Monitoring Group	Account Monitoring Groups within own System Entity (for

PRIVILEGE	USER FUNCTION	DATA SCOPE
Group	– New	Central Banks) or for own Cash Accounts (for Payment Banks)
Create Authorised Account User	Authorised Account User - New	Links within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks/Ancillary Systems).
Create Cash Account	Cash Account – New	Cash Accounts within own System Entity (for Central Bank) or TIPS CMBs linked to Cash Accounts owned by own Party (for Payment Bank)
Create Direct Debit Mandate	Direct Debit Mandate – New	Direct Debit Mandates on Cash Accounts within own System Entity (for Central Bank)
Create Limit	Limit – New Standing Order for Limit – New	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)
Create Liquidity Transfer Order	Liquidity Transfer Order – New	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	Liquidity Transfer Groups within own System Entity (for Central Bank)
Create Settlement Bank Account Group	Settlement Bank Account Group – New	Settlement Bank Account Groups within own System Entity (for Central Banks)
Create Standing Order for Reservation	Standing Order for Reservation – New	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	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	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	Cash Accounts within own System Entity (for Central Bank) or TIPS CMBs linked to Cash Accounts owned by own Party (for Payment Bank)
Delete Direct Debit Mandate	Direct Debit Mandate – Delete/Restore	Direct Debit Mandates on Cash Accounts within own System Entity (for Central Bank)
Delete Limit	Limit – Delete/Restore Standing Order for Limit – Delete/Restore	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)

PRIVILEGE	USER FUNCTION	DATA SCOPE
Delete Liquidity Transfer Order	Liquidity Transfer Order – Delete/Restore	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	Liquidity Transfer Groups within own System Entity (for Central Bank)
Delete Settlement Bank Account Group	Settlement Bank Account Group – Delete/Restore	Settlement Bank Account Groups within own System Entity (for Central Banks)
Delete Standing Order for Reservation	Standing Order for Reservation – Delete/Restore	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	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	Links within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks/Ancillary Systems).
Update Cash Account	Cash Account – Edit	Cash Accounts within own System Entity (for Central Banks) or TIPS CMBs linked to Cash Accounts owned by own Party (for Payment Banks)
Update Direct Debit Mandate	Direct Debit Mandate – Edit	Direct Debit Mandates on Cash Accounts within own System Entity (for Central Bank)
Update Limit	Limit – Edit Standing Order for Limit – Edit	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)
Update Liquidity Transfer Order	Liquidity Transfer Order – Edit	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	Liquidity Transfer Groups within own System Entity (for Central Bank)
Update Settlement Bank Account Group	Settlement Bank Account Group – Edit	Settlement Bank Account Groups within own System Entity (for Central Banks)
Update Standing Order for Reservation	Standing Order for Reservation – Edit	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 8 – 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	DATA SCOPE
Create Routing	Routing – New	Routing configurations within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)
Delete Routing	Routing – Delete/Restore	Routing configurations within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)
Update Routing	Routing – Edit	Routing configurations within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)

TABLE 9 – 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	DATA SCOPE
Create Message Subscription Rule	Message Subscription Rule – New	Message Subscription Rules within own System Entity (for Central Banks) or for own Party (for Payment Banks/Ancillary Systems)
Create Message Subscription Rule Set	Message Subscription Rule Set – New	Message Subscription Rule Sets within own System Entity (for Central Banks) or for own Party (for Payment Banks/Ancillary Systems)
Delete Message Subscription Rule	Message Subscription Rule – Delete/Restore	Message Subscription Rules within own System Entity (for Central Banks) or for own Party (for Payment Banks/Ancillary Systems)
Delete Message Subscription Rule Set	Message Subscription Rule Set – Delete/Restore	Message Subscription Rule Sets within own System Entity (for Central Banks) or for own Party (for Payment Banks/Ancillary Systems)
Update Message Subscription Rule	Message Subscription Rule – Edit	Message Subscription Rules within own System Entity (for Central Banks) or for own Party (for Payment Banks/Ancillary Systems)
Update Message Subscription Rule Set	Message Subscription Rule Set – Edit	Message Subscription Rule Sets within own System Entity (for Central Banks) or for own Party (for Payment Banks/Ancillary Systems)

TABLE 10 – 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	DATA SCOPE
Create Report Configuration	Report Configuration – New	Report Configurations within own System Entity (for Central Banks) or for own Party, own Cash Account or co-managed Cash Account (for Payment Banks)
Delete Report Configuration	Report Configuration – Delete/Restore	Report Configurations within own System Entity (for Central Banks) or for own Party, own Cash Account or co-managed Cash Account (for Payment Banks)
Update Report Configuration	Report Configuration – Edit	Report Configurations within own System Entity (for Central Banks) or for own Party, own Cash Account or co-managed Cash Account (for Payment Banks)

TABLE 11 – 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	DATA SCOPE
Account Monitoring Group Query	Account Monitoring Group – List	Any Account Monitoring Group
Account Monitoring Group Details Query	Account Monitoring Group – Details	Any Account Monitoring Group
Ancillary System Bilateral Agreement Query	Ancillary System Bilateral Agreement – List	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	AS Procedures within own System Entity (for Central Banks) or for own Party (for Ancillary Systems)
Authorised Account User Query	Authorised Account User – List	Links within own System Entity (for Central Banks) or for own Cash Accounts (for Payment Banks/Ancillary Systems).
Banking Group Query	Banking Group – List	Any Banking Group
Banking Group Details Query	Banking Group – Details	Any Banking Group
BIC Query	BIC Query	Any BIC
Cash Account Audit Trail Query	Revisions - Selection Criteria + List	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	Cash Accounts within own System Entity (for Central Banks) or

PRIVILEGE	USER FUNCTION	DATA SCOPE
		owned by own Party (for Payment Banks/Ancillary Systems)
Cash Account Reference Data Query	Cash Account Reference Data Query	Cash Accounts within own System Entity (for Central Banks) or owned by own Party (for Payment Banks/Ancillary Systems)
Certificate Query	Certificate Query	Any Certificate DN
Country Query	Countries – Select + List	Any Country
Currency Query	Currencies – Select + List	Any Currency
Data Changes of a Business Object Details Query	Data Changes of a Business Object Details Query	Data within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)
Data Changes of a Business Object List Query	Data Changes of a Business Object List Query	Data within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)
Direct Debit Mandate Details Query	Direct Debit Mandate – Details	Direct Debit Mandates on Cash Accounts within own System Entity (for Central Bank) or owned by own Party (for Payment Bank/Ancillary Systems)
Direct Debit Mandate List Query	Direct Debit Mandate – List	Direct Debit Mandates on Cash Accounts within own System Entity (for Central Banks) or owned by own Party (for Payment Banks/Ancillary Systems)
Granted Roles List Query	Granted Roles – Search	Roles granted to Parties and Users within own System Entity (for Central Banks) or to own Users (for Payment Banks/Ancillary Systems)
Granted Roles List Query	Grant/Revoke Role – Details	Roles granted to Parties and Users within own System Entity (for Central Banks) or to own Users (for Payment Banks/Ancillary Systems)
Granted System Privileges List Query	Grant/Revoke System Privileges List Query	Privileges granted to Parties, Roles and Users within own System Entity (for Central Banks) or to own Users (for Payment Banks/Ancillary Systems)
Limit Query	Limit Query Standing Order for Limit Query	Limits on CMB defined on Cash Accounts within own System Entity (for Central Banks) or owned by own Party (for Payment Banks)
Liquidity Transfer Order Details Query	Liquidity Transfer Order – Details	Liquidity Transfer Orders on Cash Accounts within own System Entity (for Central Banks) or owned by own Party (for Payment Banks/Ancillary Systems)
Liquidity Transfer Order List Query	Liquidity Transfer Order – List	Liquidity Transfer Orders on Cash Accounts within own System Entity (for Central Banks) or owned by own Party (for Payment Banks/Ancillary Systems)

PRIVILEGE	USER FUNCTION	DATA SCOPE
Liquidity Transfer Group Query	Liquidity Transfer Group – List	Any Liquidity Transfer Group
Liquidity Transfer Group Details Query	Liquidity Transfer Group – Details	Any Liquidity Transfer Group
Market-specific Restriction List Query	Market-specific Restriction List Query	Restrictions defined by the Operator
Market-specific Restriction Type Rule Detail Query	Market-specific Restriction Type Rule –Detail Query	Restrictions defined by the Operator
Market-specific Restriction Type Rule Parameter Details Query	Market-specific Restriction Type Rule Parameter Details Query	Restrictions defined by the Operator
Market-specific Restriction Type Rule Set List Query	Market-specific Restriction Type Rule Set List Query	Restrictions defined by the Operator
Message Subscription Rule List Query	Message Subscription Rule List Query	Message Subscriptions within own System Entity (for Central Banks) or for own Party (for Payment Banks/Ancillary Systems)
Message Subscription Rule Set Details Query	Message Subscription Rule Sets Details Query	Message Subscriptions within own System Entity (for Central Banks) or for own Party (for Payment Banks/Ancillary Systems)
Message Subscription Rule Set List Query	Message Subscription Rule Set List Query	Message Subscriptions within own System Entity (for Central Banks) or for own Party (for Payment Banks/Ancillary Systems)
Network Service List query	Network Service List Query	Any Network Service
Party Audit Trail Query	Static Data Audit Trail Query	Data within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)
Party List Query	Party List Query	Parties within own System Entity (for Central Banks) or own Party (for Payment Banks/Ancillary Systems)
Party Reference Data Query	Party Reference Data Query	Parties within own System Entity (for Central Banks/Ancillary Systems) or own Party (for Payment Banks/Ancillary Systems)
Party-Service Link List Query	Party-Service Link List Query	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	Links within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)
Privilege Query	Privilege – Selection Criteria + List	Any Privilege
Queued Data Changes	Queued Data Changes -	Data within own System Entity (for Central Banks) or linked to

PRIVILEGE	USER FUNCTION	DATA SCOPE
Query	Select+List	own Party (for Payment Banks/Ancillary Systems)
Report Configuration Details Query	Report Configuration Details Query	Report Configurations within own System Entity (for Central Banks) or for own Party (for Payment Banks)
Report Configuration List Query	Report Configuration List Query	Report Configurations within own System Entity (for Central Banks) or for own Party (for Payment Banks)
Residual Static Data Audit Trail Query	Static Data Audit Trail Query	Data within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)
Role List Query	Role List Query	Roles created or granted to Parties and Users within own System Entity (for Central Banks) or to own Users (for Payment Banks/Ancillary Systems)
Routing List Query	Routing List Query	Routing configurations within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)
Service List Query	Service List Query	Any Service
Settlement Bank Account Group Query	Settlement Bank Account Group – List	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	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	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)
Standing Order for Reservation List Query	Standing Order for Reservation – List	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	Own System Entity (for Central Banks)
System User Link Query	System User Link Query	Links within own System Entity (for Central Banks) or linked to own Users (for Payment Banks/Ancillary Systems)
Technical Address Network Service Link Details Query	Technical Address Network Service Link Details Query	Links within own System Entity (for Central Banks) or linked to own Party (for Payment Banks/Ancillary Systems)
Service Items List Query	Service Items – Select+List	Any Service Item
Service Items Details Query	Service Item – Details	Any Service Item
Invoice Configuration List	Invoice Configuration –	Invoice Configurations within own System Entity (for Central

PRIVILEGE	USER FUNCTION	DATA SCOPE
Query	Select+List	Banks)
Invoice Configuration Details Query	Invoice Configuration – Details	Invoice Configurations within own System Entity (for Central Banks)
VAT List Query	VAT – Select+List	VAT configurations within own System Entity (for Central Banks)

TABLE 12 –TIPS FUNCTIONS

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

PRIVILEGE	USER FUNCTION	DATA SCOPE
Adjust CMB Limit	Adjust CMB Limit	Data within own System Entity (for Central Bank) or linked to own Party (for Payment Bank)
Instruct Instant Payment	Initiate Instant Payment Confirm/reject Instant Payment Request Instant Payment recall Confirm Instant Payment recall Reject Instant Payment recall Instant Payment Status Investigation Request Recall Status Update	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 Liquidity Transfer	Initiate Outbound Liquidity Transfer	Accounts within own System Entity (for Central Bank) or owned by own Party (for Payment Bank)
Modify All Blocking Status	Block/unblock Participant Block/unblock Account Block/unblock CMB	Data within own System Entity (for Central Bank)
Modify CMB Blocking Status	Block/unblock CMB	Data within own System Entity (for Central Bank) or linked to own Party (for Payment Bank)
Query All	Query Account Balance and Status	Data related to Accounts within own System Entity (for Central Bank) or owned by own Party (for Payment Bank)

PRIVILEGE	USER FUNCTION	DATA SCOPE
	Query CMB Limit and Status Query Instant Payment Transaction	
Query as Reachable Party	Query CMB Limit and Status Query Instant Payment Transaction	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	Data under responsibility of requestor
MPL Lookup and Reachability Check	Look-up request Reachability check	All data in MPL
MPL Proxy-IBAN Mapping Table Maintenance	Create Proxy-IBAN Mapping Table entry Delete Proxy-IBAN Mapping Table entry Update Proxy-IBAN Mapping Table entry	Data under responsibility of requestor

TABLE 13 – 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	DATA SCOPE
Account Balance Query	Account Balance Query	Cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)
Account Statement Query	Account Statement Query	Reports relevant for requesting party.
Current Reservations Query	Current Reservations Query	Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)
Delete Current Reservation	Delete Current Reservation	Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)
Modify payment	Modify payment	All payments on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Modify Current Reservation	Modify Current Reservation	Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)
Payment Audit Trail Query	Payment Audit Trail Query	All payments on cash accounts within own System Entity (for

PRIVILEGE	USER FUNCTION	DATA SCOPE
		CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Payment Query	Payment Query	All payments on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Query available liquidity	Query available liquidity	Parties within own System Entity (for CB) or own Party (for Payment Bank)
Query file	Query file	Files relevant for requesting party.
Query message	Query message	Messages relevant for requesting party.
Query task queue	Query task queue	Tasks relevant for requesting party.
Revoke payment	Revoke payment	All payments on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Send credit line update	Send credit line update	Cash accounts within own System Entity (for CB)
Send Direct Debit payment (except connected)	Send Direct Debit payment (except connected)	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder)
Send interbank payment (except connected)	Send interbank payment (except connected)	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Send connected payment	Send connected payment	Cash accounts within own System Entity (for CB)
Send Liquidity Transfer	Send Liquidity Transfer	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder)
Send Liquidity Transfer to/from sub-account	Send Liquidity Transfer to/from sub-account	Cash accounts within own System Entity (for CB) or owned by own Party (for CLM Account Holder)
Send marginal lending on request	Send marginal lending on request	Cash accounts within own System Entity (for CB)
Send overnight deposit	Send overnight deposit	Cash accounts within own System Entity (for CB) or owned by own Party (for CLM account holder)
Send overnight deposit reversal	Send overnight deposit reversal	Cash accounts within own System Entity (for CB) or owned by own Party (for CLM account holder)
System Time Query	System Time Query	Current time of the system

PRIVILEGE	USER FUNCTION	DATA SCOPE
U2A Query Cash Transfer CLM	Query Cash Transfer, List Cash Transfer, Details of Cash Transfer, Query Account Postings, List Account Postings	All cash transfers on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Agree/Disagree Cash Transfers	Agree/Disagree earmarked Cash Trasnfers	All cash transfers on Cash Accounts within own System Entity (for CB)
U2A Revoke Cash Transfer	U2A Revoke Cash Transfer	All cash transfers on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Modify Cash Transfer	Increase, decrease Cash Transfer, Modify earliest and laltest Debit Time	All cash transfers on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query Business Case	Query Business Case, List Business Case,	All cash transfers on Cash Accounts within own System Entity (for CB)
U2A Query Message	Query Messages, List Messages, Details of Messages	All messages on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query of Account Statement	Query/Download Statement of Account	All Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query Cash Account Liquidity	Query Cash Account Liquidity, Display Cash Account Liquidity of all services with balances, credit line, projected Liquidity etc.	All Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Create Liquidity Transfer	create a new liquidity transfer order in CLM	Liquidity Transfers on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) or co-managed Cash Account (for Payment Bank)
U2A Modify credit line	create, update or delete a	All credit lines belonging to Cash Accounts within own System

PRIVILEGE	USER FUNCTION	DATA SCOPE
	credit line	Entity (for CB)
U2A Query/ Modify Current Reservations	Query Reservation, Display, modify and delete current reservation for central bank operations	Reservations on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank), co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query Standing Facilities	Query, display Standing facilities	All cash transfers on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query Minimum Reserve	Query, display minimum reserve, Running Average, Adjustment Balance etc.	Data within own System Entity (for CB) or own MFI (for Payment Bank)
U2A Query/Modify Minimum Reserve Value and fulfilment	Query, list and modify minimum reserve value and fulfilment	Cash Accounts within own System Entity (for CB).
U2A Query of Minimum Reserve Infrigements	Query and list minimum reserve infrigements	Cash Accounts within own System Entity (for CB).
U2A Modify Minimum Reserve Infrigement Penalty	Modify Minimum Reserve Infrigement Penalty	Cash Accounts within own System Entity (for CB).
U2A Query local reference data	Query, list party reference data, cash account reference data and RTGS directory	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)
U2A Query local reference data by MFI	Query, list of local reference data by MFI	Reference data within own System Entity (for CB)
U2A Query Task Queue	Query, list and display detail tasks of task queue	All tasks on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) or co-managed Cash Account (for Payment Bank)
U2A Query broadcast	Query, list and dsiplay details of broadcast	All broadcasts for Parties within own System Entity (for CB) or own Party (for Ancillary System/Payment Bank)
U2A New broadcast	create a new broadcast	Normal and alert broadcasts
U2A New Overnight Deposit	create a new liquidity transfer order from or to the Overnight deposit	Cash Accounts within own System Entity (for CB) or own or co-managed Cash Account (for Payment Bank)

PRIVILEGE	USER FUNCTION	DATA SCOPE
	account	
U2A New Marginal Lending from Marginal Lending Account	create a new liquidity transfer order from the Marginal Lending account	Cash Accounts within own System Entity (for CB)
U2A New Marginal Lending to Marginal Lending Account	create a new liquidity transfer order to the Marginal Lending account	Cash Accounts within own System Entity (for CB) or own or co-managed Cash Account (for Payment Bank)
U2A Query Monitoring Screens	Query, list and display details of the CB monitoring screens	Cash Accounts within own System Enitity (for CB), own Cash Accounts or co-managed Cash Accounts (for Payment Bank) Payment Bank only needs to be granted one of this privilege or U2A new back-up payment; Operator and CBs need both privileges
U2A Query Monitoring Screens Crisis Situation	Query, list and display details of the CB monitoring screens european wide	Cash Accounts within own System Enitity (for CB), own Cash Accounts or co-managed Cash Accounts (for Payment Bank) Payment Bank only needs to be granted one of this privilege or U2A new Financial institution credit transfer. Operator and CBs need both privileges.
U2A Upload A2A File or message in U2A	Upload A2A File or message in U2A	Cash Accounts within own System Entity (for CB).
U2A New central bank operation	enter a new pacs.009 for a central bank operation	Cash Accounts within own System Entity (for CB).
U2A New direct debit	enter a new pacs.010 direct debit	Cash Accounts within own System Entity (for CB).
Activate Monitoring Screens for Crisis Situations	activation on Screens in crisis situation from the operator	Operator only

TABLE 14 – 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	DATA SCOPE
Account Balance Query	Account Balance Query	Cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)

PRIVILEGE	USER FUNCTION	DATA SCOPE
Account Statement Query	Account Statement Query	Reports relevant for requesting party.
Ancillary System Procedure C Cycle – Start of Cycle (ReturnGeneralBusinessInformation)	Ancillary System Procedure C Cycle – Start of Cycle (ReturnGeneralBusinessInformation)	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Ancillary System Procedure D Cycle – Start of Cycle (ReturnGeneralBusinessInformation)	Ancillary System Procedure D Cycle – Start of Cycle (ReturnGeneralBusinessInformation)	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
AS Procedure C and D – Start Procedure (ReturnGeneralBusinessInformation)	AS Procedure C and D – Start Procedure (ReturnGeneralBusinessInformation)	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Current Limits Query	Current Limits Query	Limits defined on RTGS Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Current Reservations Query	Current Reservations Query	Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)
Delete Current Limit	Delete Current Limit	Limits defined on RTGS Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Delete Current Reservation	Delete Current Reservation	Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)
Invoke Guarantee Processing	Invoke Guarantee Processing	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Liquidity Adjustment (Ancillary System Settlement Procedure C and D)	Liquidity Adjustment (Ancillary System Settlement Procedure C and D)	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Modify payment	Modify payment	All payments on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Modify Current Reservation	Modify Current Reservation	Reservations defined on cash accounts within own System Entity (for CB) or owned by own Party (for Payment Bank)
Payment Audit Trail Query	Payment Audit Trail Query	All payments on cash accounts within own System Entity (for

PRIVILEGE	USER FUNCTION	DATA SCOPE
		CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Payment Query	Payment Query	All payments on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Query file	Query file	Files relevant for requesting party.
Query message	Query message	Messages relevant for requesting party.
Query task queue	Query task queue	Tasks relevant for requesting party.
Respond as counterparty to recall request	Respond as counterparty to recall request	n/a
Revoke or recall payment	Revoke or recall payment	All payments on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Send customer payment (except mandated)	Send customer payment (except mandated)	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Send Direct Debit payment	Send Direct Debit payment	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder)
Send interbank payment (except mandated)	Send interbank payment (except mandated)	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder or Ancillary System)
Send Liquidity Transfer	Send Liquidity Transfer	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CLM account holder or CB account holder)
Send liquidity transfer to/from sub-account	Send liquidity transfer to/from sub-account	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Send SBTI	Send Settlement Bank Transfer Initiation	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Send mandated payment	Send mandated payment	Cash accounts within own System Entity (for CB)
Send overnight deposit	Send overnight deposit	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
Send new AS Transfer Initiation	Send new AS Transfer Initiation	Cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)

PRIVILEGE	USER FUNCTION	DATA SCOPE
Send Payment Return	Send Payment Return	All payments on cash accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder or CB account holder)
System Time Query	System Time Query	Current time of the system
Modify Current Limit	Modify Current Limit	Limits defined on RTGS Dedicated Cash Accounts within own System Entity (for CB) or owned by own Party (for RTGS account holder)
U2A Query Cash Transfer RTGS	Query Cash Transfer, List Cash Transfer, Details of Cash Transfer, Query Account Postings, List Account Postings	All cash transfers on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Agree/Disagree Cash Transfers	Agree/Disagree earmarked Cash Trasnfers	All cash transfers on Cash Accounts within own System Entity (for CB)
U2A Revoke Cash Transfer	U2A Revoke Cash Transfer	All cash transfers on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Modify Cash Transfer	Increase, decrease Cash Transfer, Modify earliest and laltest Debit Time, change priority	All cash transfers on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query Business Case	Query Business Case, List Business Case,	All cash transfers on Cash Accounts within own System Entity (for CB)
U2A Query Message	Query Messages, List Messages, Details of Messages	All messages on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query of Account Statement	Query/Download Statement of Account	All Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query Cash Account Liquidity	Query Cash Account Liquidity, Display Cash	All Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) co-managed

PRIVILEGE	USER FUNCTION	DATA SCOPE
	Account Liquidity of all services with balances, credit line, projected Liquidity etc.	Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Create Liquidity Transfer	create a new liquidity transfer order in CLM	Liquidity Transfers on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) or co-managed Cash Account (for Payment Bank)
U2A Query/ Modify Currrent Limit	Query, list and modify current multilateral and bilateral limits (inclusding change all to zero)	Limits on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank), co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query/ Modify Current Reservations	Query Reservation, Display, modify and delete current reservation for central bank operations	Reservations on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank), co-managed Cash Account or Cash Account within own Account Monitoring Group (for Payment Bank)
U2A Query AS Batches	Query, list and display details of AS batches	Ancillary System Parties within own System Entity (for CB) or own Party (for Ancillary System)
U2A Modify End of Settlement period of AS Batch	Modify End of Settlement Period of AS batch	Ancillary System Parties and Cash Accounts within own System Entity (for CB) or own Party (for Ancillary System)
U2A Revoke AS Batch	Revoke AS Batch	Ancillary System Parties and Cash Accounts within own System Entity (for CB) or own Party (for Ancillary System)
U2A Query of AS procedures and cycles	Query and list of AS Procedure and Cycles	Ancillary System Parties and Cash Accounts within own System Entity (for CB) or own Party (for Ancillary System)
U2A AS procedure C and D Stop/Start of procedure and Cycles	Stop and Start procedure and Cycle of procedure C and D	Ancillary System Parties and Cash Accounts within own System Entity (for CB) or own Party (for Ancillary System)
U2A Query Task Queue	Query, list and display detail tasks of task queue	All tasks on Cash Accounts within own System Entity (for CB), own Cash Account (for Ancillary System/Payment Bank) or co-managed Cash Account (for Payment Bank)
U2A Query broadcast	Query, list and dsiplay details of broadcast	All broadcasts for Parties within own System Entity (for CB) or own Party (for Ancillary System/Payment Bank)
U2A New broadcast	create a new broadcast	Normal and alert broadcasts
U2A Query local reference data	Query, list party reference data, cash account	Reference data within own System Entity (for CB) or belonging to own Cash Accounts, co-managed Cash Accounts or Cash

PRIVILEGE	USER FUNCTION	DATA SCOPE
	reference data and RTGS directory	Accounts within own Account Monitoring Group (for Payment Bank)
U2A Upload A2A File or message in U2A	Upload A2A File or message in U2A	Cash Accounts within own System Enitity (for CB)
U2A Query Monitoring Screens	Query, list and display details of the CB monitoring screens	Cash Accounts within own System Enitity (for CB)
U2A New customer credit transfer	Enter a new customer credit transfer (pacs.008) including mandated payment	Cash Accounts within own System Enitity (for CB), own Cash Accounts or co-managed Cash Accounts (for Payment Bank) Payment Bank only needs to be granted one of this privilege or U2A new back-up payment; Operator and CBs need both privileges
U2A New Financial institution credit transfer	Enter a new Financial institution credit transfer (pacs.009) including mandated payment	Cash Accounts within own System Enitity (for CB), own Cash Accounts or co-managed Cash Accounts (for Payment Bank) Payment Bank only needs to be granted one of this privilege or U2A new back-up payment; Operator and CBs need both privileges
U2A New Return Payment	Enter a new Return Payment	Cash Accounts within own System Enitity (for CB), own Cash Accounts or co-managed Cash Accounts (for Payment Bank) Payment Bank only needs to be granted one of this privilege or U2A new back-up payment; Operator and CBs need both privileges
U2A New Back-up Payment	Enter new Back-up Payment	Cash Accounts within own System Enitity (for CB), own Cash Accounts or co-managed Cash Accounts (for Payment Bank) Payment Bank only needs to be granted one of this privilege or U2A new Financial institution credit transfer. Operator and CBs need both privileges.
U2A Activate/Deactivate Back-up Functionality	Activate/deactivate back-up functionality	Cash Accounts within own System Entity (for CB).
U2A Activate/Deactivate Value Date Check	Activate/deactivate value date check	Cash Accounts within own System Entity (for CB).

TABLE 15 – BILLING

PRIVILEGE	USER FUNCTION	DATA SCOPE
Cumulative Billing Data Query	Cumulative Billing Data Query	Billing information for CSD and CB

PRIVILEGE	USER FUNCTION	DATA SCOPE
Itemised Billing Data Query	Itemised Billing Data Query and Invoice Data query	Itemised Billing Data under own System Entity
PDF Invoice List Query	PDF Invoice - Select + List	Invoices under own System Entity (for Central Banks) or related to own Party (for Payment Banks/Ancillary Systems)
PDF Invoice Details Query	PDF Invoice - Details	Invoices under own System Entity (for Central Banks) or related to own Party (for Payment Banks/Ancillary Systems)
Manual Correction List Query	Manual Correction List Query	Manual corrections for nvoices under own System Entity (for Central Banks)
Create Manual Correction	Manual Correction - New	Manual corrections for invoices under own System Entity (for Central Banks)
Update Manual Correction	Manual Correction - Edit	Manual corrections for invoices under own System Entity (for Central Banks)
Delete Manual Correction	Manual Correction – Delete/Restore	Manual corrections for invoices under own System Entity (for Central Banks)

TABLE 16 – BILLING CONFIGURATION

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

PRIVILEGE	USER FUNCTION	DATA SCOPE
Delete VAT	VAT – Delete	VAT configurations within own System Entity (for Central Banks)

TABLE 17 – DATA WAREHOUSE FUNCTIONS

PRIVILEGE	USER FUNCTION	DATA SCOPE
Data Warehouse Normal User	Data Warehouse Normal User	Execution of predefined queries and reports (for Payment Bank, Ancillary System and Central Bank)
Data Warehouse Advanced User	Data Warehouse Advanced User	Execution of predefined, adaptable and user-defined queries and reports (for Central Bank)
Data Warehouse Operator User	Data Warehouse Operator User	Only applicable for Operator

TABLE 18 – OTHER

PRIVILEGE	USER FUNCTION	DATA SCOPE
Data Migration Tool Access	n/a	n/a

See section 1.2.2.2.2 Configuration of privileges for information on the configuration of privileges.

1.2.2.1.3Role

A role is a set of privileges. See section 1.2.2.2.3 Configuration of roles for information on the configuration of roles.

1.2.2.1.4User

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.

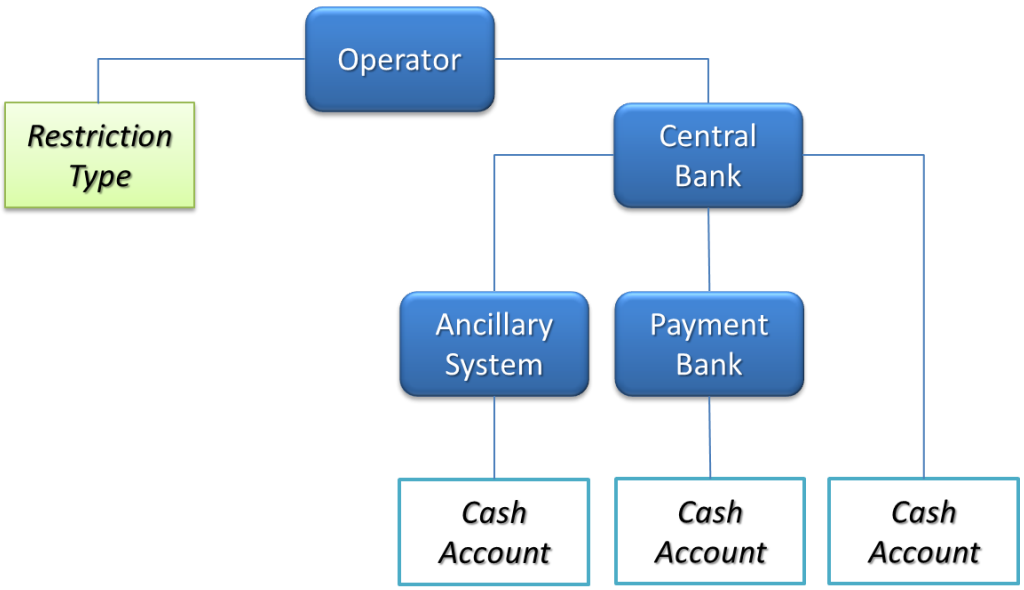
1.2.2.1.5Common reference data objects and the hierarchical party model

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 Central Banks are level 2 parties, all payment banks and ancillary systems are level 3 parties[3]. 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 restriction type is linked to the Operator.

3 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.

DIAGRAM 2 – COMMON REFERENCE DATA OBJECTS AND THE HIERARCHICAL PARTY MODEL



1.2.2.1.6Data 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 Central Banks have visibility on all reference data objects belonging to the same system entity;[4]
- users of the payment banks and ancillary systems have visibility on reference data objects that are (directly or indirectly) linked to the same party.

The following example describes the concept of data scope.[5]

EXAMPLE 2 - 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:

4 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.

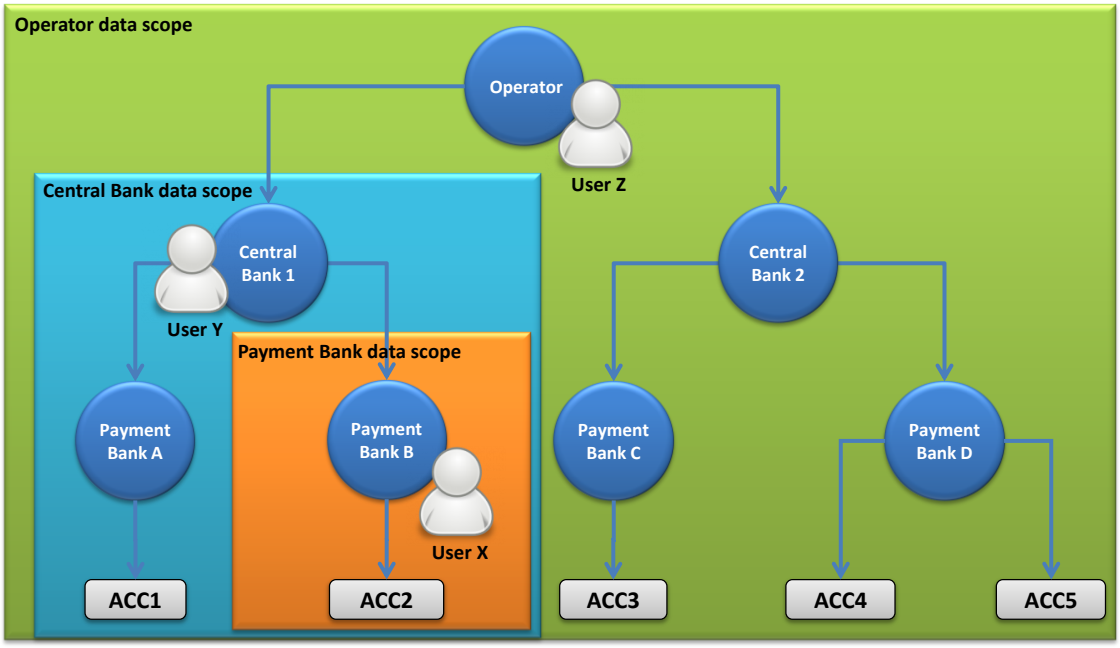
5 The following example presents only the configuration data that are relevant for the example. All the possible configuration options are defined in the following sections.

TABLE 19 - 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 data scopes stemming from this access rights configuration for the three users.

DIAGRAM 3 - DATA SCOPES



The diagram shows that users X, Y and Z are given different 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 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 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 data scope including all cash accounts in CRDM, as the Operator is at the top level of the hierarchical party model.

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.

1.2.2.2.1Configuration 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.

- when a CRDM Operator system administrator creates a new system administrator for a Central Bank;
- when a Central Bank system administrator creates a new system 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 1.2.2.1.6Data 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.

1.2.2.2.2Configuration 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.

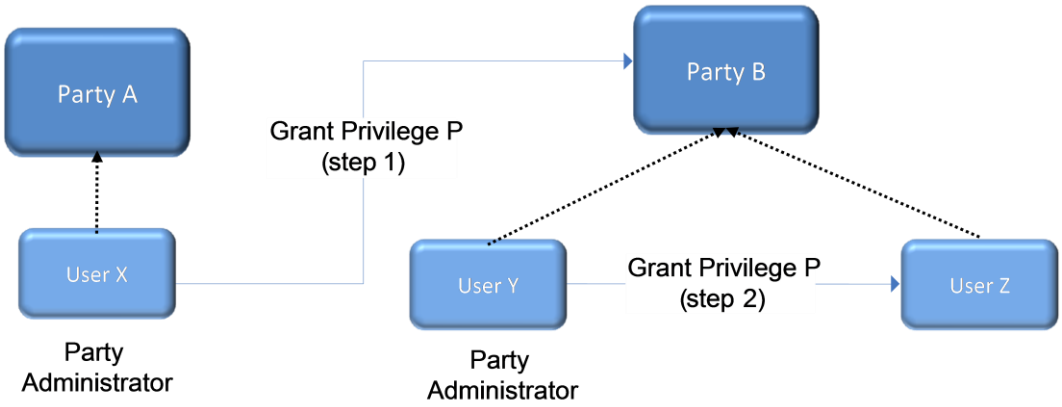
A privilege becomes available to a party administrator of a party different from the CRDM Operator only after this privilege has been granted to this party. From this moment on, the party administrator can grant this privilege, according to the rules defined in the following sections.

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.[6]

6 Party A may be the Operator or any other party which was previously granted privilege P.

DIAGRAM 4 - ACCESS RIGHTS CONFIGURATION STEPS



The two configuration steps are as follows:

- 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.
- 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 which in turn propagate them to their Payment Banks and Ancillary Systems. If necessary, the Operator can act on behalf of a Central Bank following a specific request to propagate access rights directly to its Payment Banks or Ancillary Systems.

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 1.2.2.2.3Configuration of roles.

Granting privileges

Most privileges can be granted to roles, users and parties, whereas CLM, RTGS and TIPS privileges that 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 20 - 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	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). 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).
Four-Eyes	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. This option is relevant only when the Deny option is set to False and it is always not relevant for privileges related to queries.

EXAMPLE 3 - ASSIGNMENT OF PRIVILEGES TO ROLES

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

TABLE 21 - 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 [7];

7 In this case the setting for the Four Eyes assignment option is not applicable, as the privilege refers to a query.

- 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 4 - ASSIGNMENT OF PRIVILEGES TO USERS

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

TABLE 22 - ASSIGNMENT OF PRIVILEGES TO USERS

ROW	PRIVILEGE	USER	DENY	ADMIN	FOUR-EYES
1	Create Cash Account	U_X	False	False	False
2	Create Cash Account	U_Y	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_x:

- without Deny, i.e. user U_X can create cash accounts according to the Two-Eyes principle (as the privilege is assigned without Four-Eyes);
- without Admin, i.e. user U_X 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_Y:

- with Deny, i.e. user U_Y cannot create cash accounts;
- with Admin, i.e. user U_Y 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_X can create cash accounts, but without having the possibility to grant the same privilege to any other user. Vice versa, user U_Y can configure this privilege for other users, but without having the possibility to use it.

EXAMPLE 5 - ASSIGNMENT OF PRIVILEGES TO PARTIES

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

TABLE 23 - 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.

Revoking privileges

Privileges can be revoked from roles, users and parties.

When revoking a 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 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 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 24 – 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	If the party administrator of the Payment Bank/Ancillary System granted a privilege included in the role directly to other users of the Payment Bank/Ancillary System, then the removal of this privilege from the role would not revoke the same privilege from these users. 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 Payment Bank/Ancillary System. For example, even a simple movement of a privilege between two roles assigned to the same 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 Payment Bank/Ancillary System and this would oblige the party administra-tor of the Payment Bank/Ancillary System to grant again this privileges to all the impacted users. In order to ensure that the relevant privilege is revoked also from the users of the Payment Bank/Ancillary System (if this is the intended goal), the party administrator of the Central Bank should grant directly this privilege to the 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).
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 6 – REVOKE PRIVILEGE CASCADE EFFECT

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

TABLE 25 - 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
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 Payemnt 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.

1.2.2.2.3Configuration 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 26 – 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 Payment Bank/Ancillary System granted the role (or a privilege included in the role) directly to other users of the Payment Bank/Ancillary System, 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. 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 Payment Bank/Ancillary System. In order to ensure that the relevant role is revoked also from the users of the Payment Bank/Ancillary System, the party administrator of the Central Bank 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 Payment Banks/Ancillary System only if the role was specifically created for (and assigned to) the relevant Payment Bank/Ancillary System only, otherwise the procedure just described would also have an effect on all Payment Banks/Ancillary System (and on all their users) being granted with the same role. Furthermore, in order to ensure that any privilege belonging to the role and that was granted directly to users of the Payment Bank/Ancillary System is also revoked from these users, the party administrator of the Central Bank should grant directly this privilege to the 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).

EXAMPLE 7 – 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 27 - 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 28 - ASSIGNMENT OF ROLES TO USERS

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

TABLE 29 - 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:

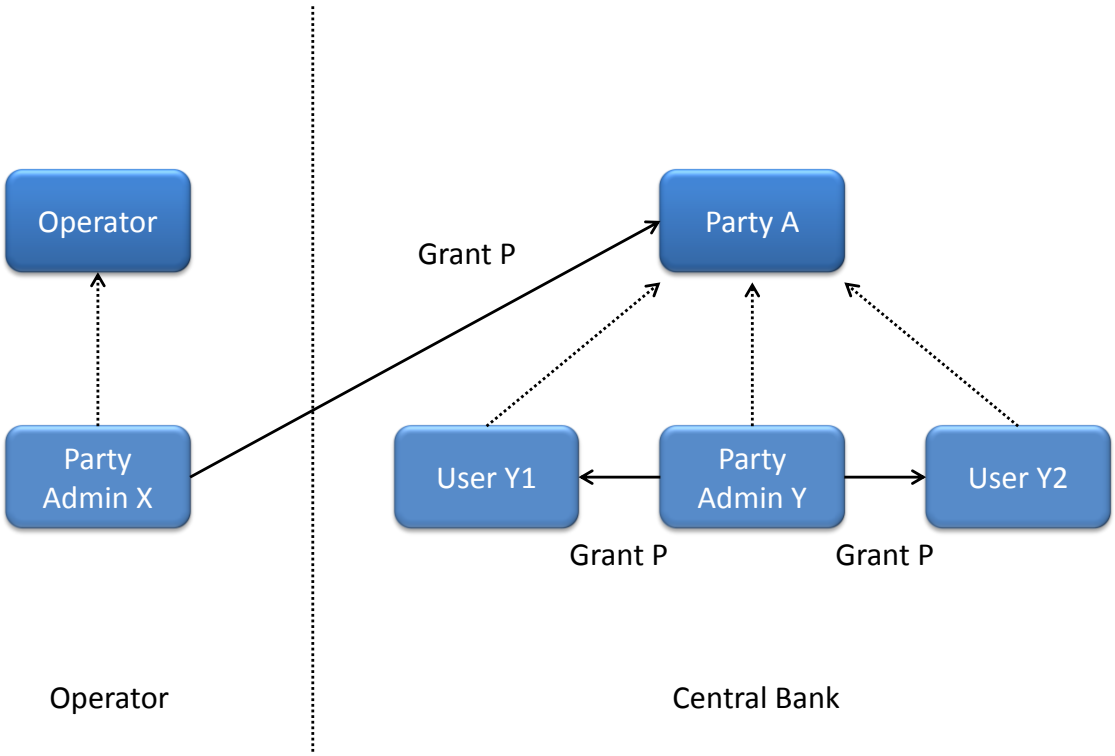
- Revoke all Privileges from the Role, then delete the Role: this renders the Role useless and prevents other Party Administrators from granting privileges to it again for any reason. As a consequence, User A1 can no longer use the privileges contained in the Role;
- Grant the "Update Party" Privilege 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. Access rights configuration process

As described in section 1.2.2.2Configuration 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 5 - ACCESS RIGHTS CONFIGURATION PROCESS (A)

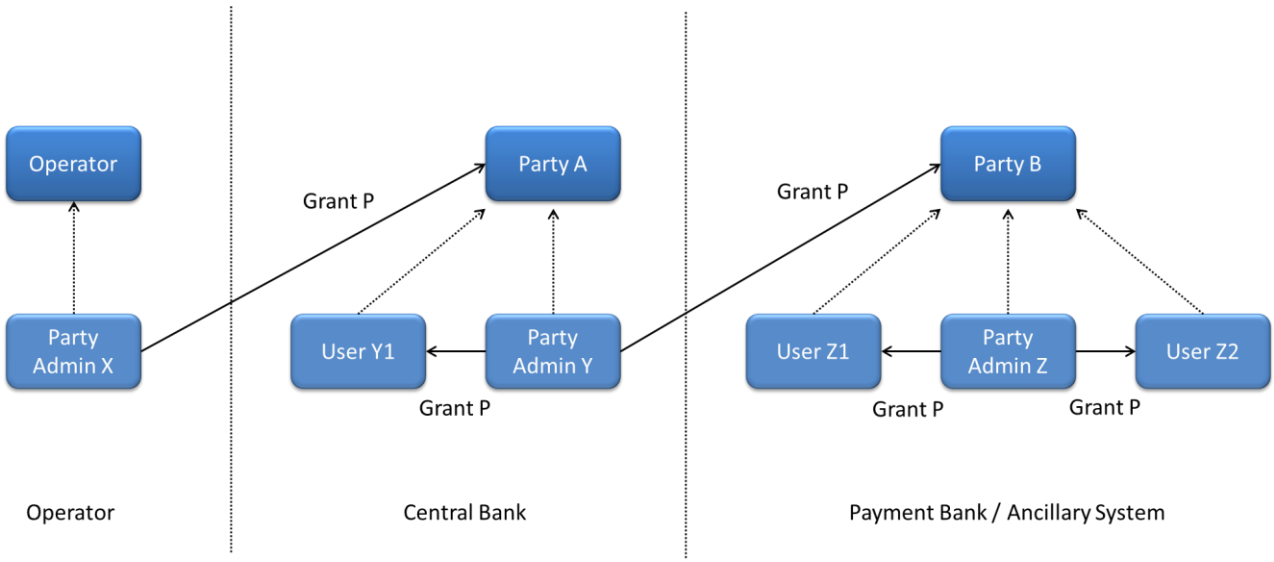


The diagram shows that the two required steps are as follows:

- 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 Y_1 and Y_2).

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 6 - 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);
- User Y, as a party administrator of the party A, grants the privilege P to the party B (i.e. to a 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_1 and Z_2).

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_1, 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.

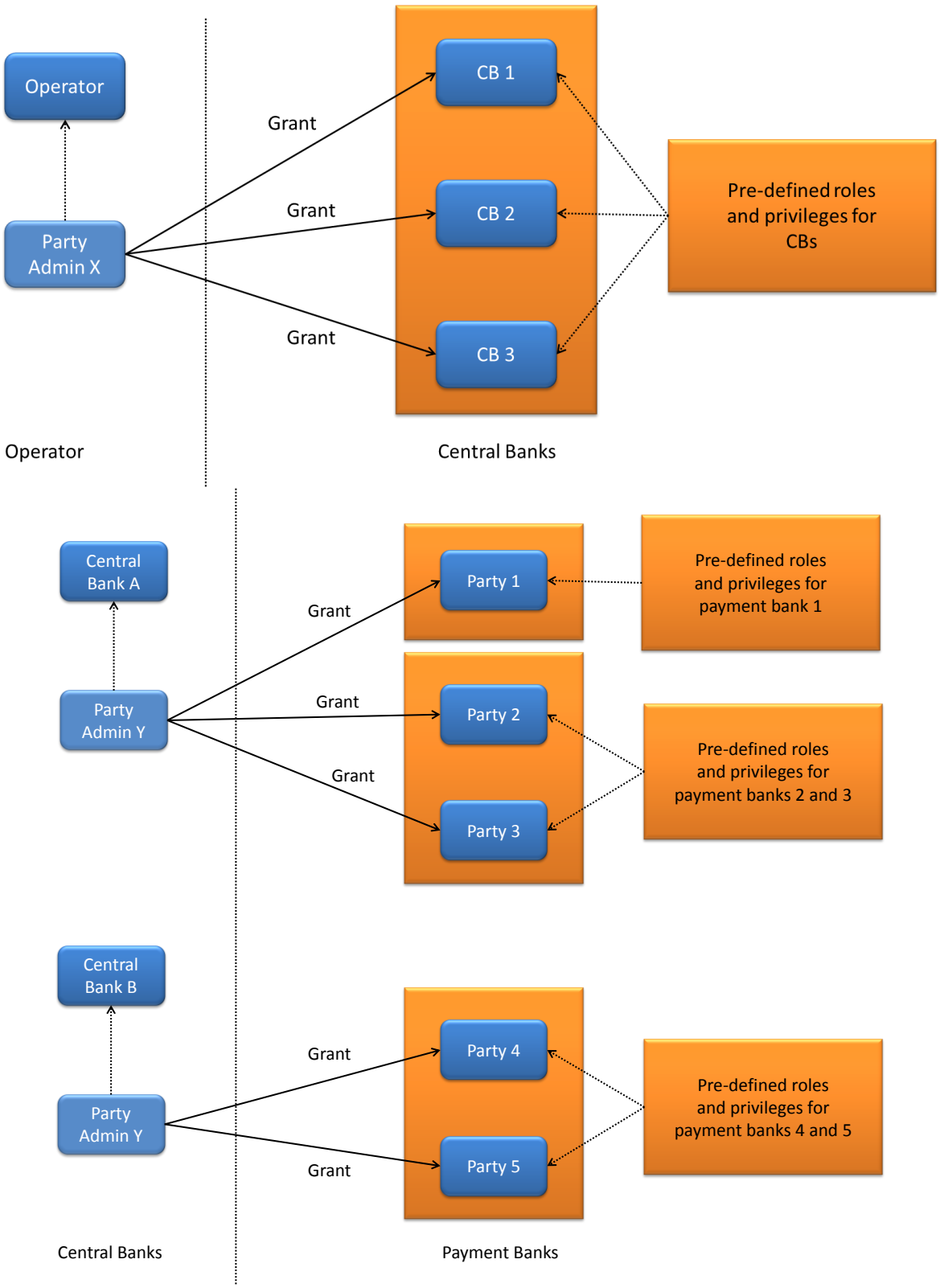
As stated in section 1.2.2.2.2Configuration of privileges, the above process is not directly applicable for TIPS Privileges; in this case Privileges have to be granted to Roles in the first place and then Roles can be granted to Parties and Users. For details on the configuration of Roles see section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

1.2.2.3.1Configuration 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 Central Banks.

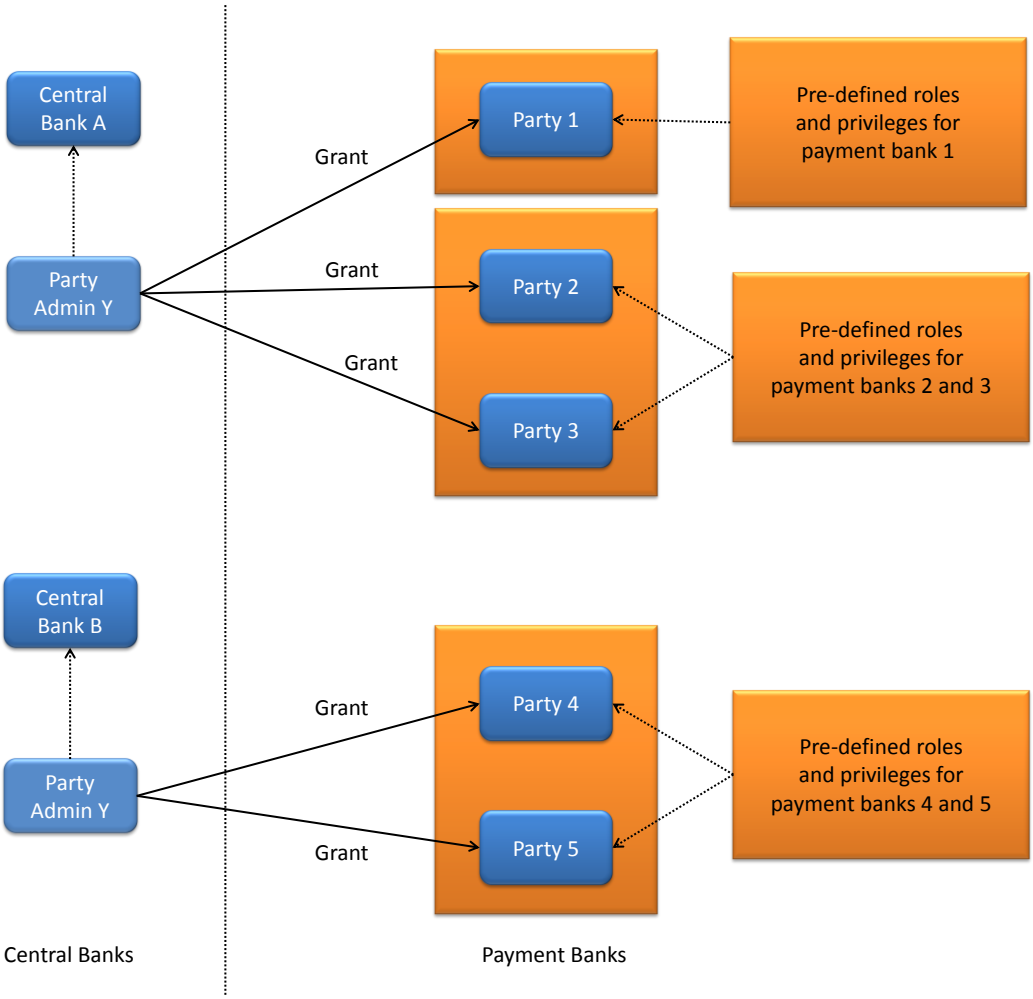
The following diagram shows an example in which the party administrator of the Operator grants to all the Central Banks the same set of roles and privileges. This set includes all the privileges needed by the Central Banks and all the privileges needed by the Payment Banks and Ancillary Systems.

EXAMPLE 8 - CONFIGURATION OF ACCESS RIGHTS AT PARTY LEVEL BY THE OPERATOR



A party administrator of each Central Bank assigns the relevant set of roles[8] 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 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 9 - CONFIGURATION OF ACCESS RIGHTS AT PARTY LEVEL BY PARTY ADMINISTRATOR OF A CB

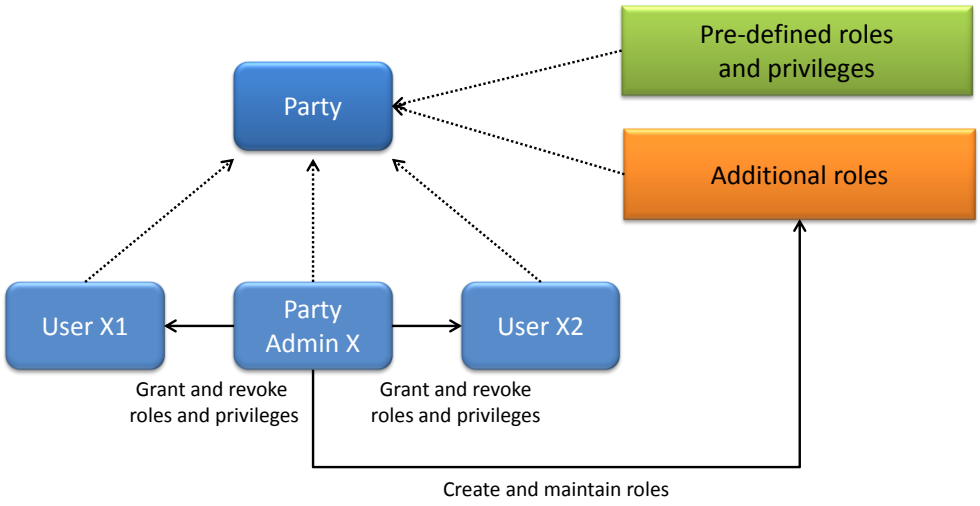


1.2.2.3.2Configuration of access rights at user level

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.

[8] 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.

DIAGRAM 7 - 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[9] additional roles, besides the ones previously granted at party level[10]
- by granting (and revoking) the (default and additional) roles and the (default) privileges to the users of the same party.

1.2.3. Message subscription

1.2.3.1. Message subscription configuration

Central Banks can configure, for themselves and for payment banks and ancillary systems they are responsible for, the specific set 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 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

9 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.

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

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 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 Central Banks can use for configuring their message subscription rule sets.

TABLE 30 - MESSAGE SUBSCRIPTION PARAMETER TYPES

PARAMETER TYPE	APPLICABLE SERVICE	DESCRIPTION
Message Type	TIPS, T2	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. For TIPS: • BankToCustomerDebitCreditNotification (camt.054) • BillingReport (camt.077) For CLM: • SystemEventNotification (admi.004) • ReturnBusinessDayInformation (camt.019) • BankToCustomerDebitCreditNotification (camt.054) • BillingReport (camt.077) • PaymentStatusReport (pacs.002) For RTGS: • SystemEventNotification (admi.004) • ReturnBusinessDayInformation (camt.019) • ResolutionOfInvestigation (camt.029) • BankToCustomerDebitCreditNotification (camt.054) • BillingReport (camt.077) • PaymentStatusReport (pacs.002)
Cash Account	TIPS, T2	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	It specifies the BIC11 of the Multi-addressee that sent the related

PARAMETER TYPE	APPLICABLE SERVICE	DESCRIPTION
		instruction/cancellation.
Business case	T2	It specifies the business case for which the message is subscribed.
Priority	T2	It specifies the priority of the original payment instruction.
Underlying message type	T2	It specifies the message type of the original message sent to the service.

The following table provides the mapping between the outgoing message types subject to subscription and the applicable parameter types.

TABLE 31 - MESSAGE SUBSCRIPTION PARAMETER TYPES

MESSAGE TYPE	CASH ACCOUNT	MULTI-ADDRESSEE BIC	BUSINESS CASE	PRIORITY	UNDERLYING MESSAGE TYPE
SystemEventNotification (admi.004)	No	No	No	No	No
ReturnBusinessDayInformation (camt.019)	No	No	No	No	No
ResolutionOfInvestigation (camt.029)	Yes	Yes	No	No	No
BankToCustomerDebitCreditNotification (camt.054)	Yes	No	Yes	No	No
PaymentStatusReport (pacs.002)	Yes	Yes	No	Yes	Yes

1.2.3.3. Message subscription examples

The above described message subscription configuration is illustrated below.

EXAMPLE 10 - 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 1st 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 32 - 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 33 - 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	-	BankToCustomerDebitCreditNotification	ACCOUNT A	CRDT

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 34 – CRDM U2A FUNCTIONS

Function	Actor[11]
Create Party	Operator, Central Bank
Update Party	Operator, Central Bank
Delete/Restore Party	Operator, Central Bank
Query Party List	Operator, Central Bank, Payment Bank, Ancillary System
Query Party Details	Operator, Central Bank, Payment Bank, Ancillary System
Create Party Service Link	Operator, Central Bank
Update Party Service Link	Operator, Central Bank

[11] 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.

Delete/Restore Party Service Link	Operator, Central Bank
Query Party Service Link List	Operator, Central Bank, Payment Bank, Ancillary System
Create Banking Group	Central Bank
Update Banking Group	Central Bank
Delete/Restore Banking Group	Central Bank
Query Banking Group List	Central Bank, Payment Bank
Query Banking Group Details	Central Bank, Payment Bank
Create Cash Account	Operator, Central Bank, Payment Bank[12]
Update Cash Account	Operator, Central Bank, Payment Bank[12]
Delete/Restore Cash Account	Operator, Central Bank, Payment Bank[12]
Query Cash Account List	Operator, Central Bank, Payment Bank, Ancillary System
Query Cash Account Details	Operator, Central Bank, Payment Bank, Ancillary System
Create Limit	Payment Bank
Update Limit	Payment Bank
Delete/Restore Limit	Payment Bank
Query Limit List	Payment Bank
Query Limit Details	Payment Bank
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
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

[12] Payment Banks are only allowed to Create/Update/Delete/Restore Cash Accounts of type "TIPS Credit Memorandum Balance".

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	Payment Bank, Ancillary System
Update Liquidity Transfer Order	Payment Bank, Ancillary System
Delete/Restore Liquidity Transfer Order	Payment Bank, Ancillary System
Query Liquidity Transfer Order List	Payment Bank, Ancillary System
Query Liquidity Transfer Order Details	Payment Bank, Ancillary System
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
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
Query Direct Debit Mandate Details	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 User	Operator, Central Bank, Payment Bank
Update User	Operator, Central Bank, Payment Bank, Ancillary System
Delete/Restore User	Operator, Central Bank, Payment Bank, Ancillary System
Query User List	Operator, Central Bank, Payment Bank, Ancillary System
Query User Details	Operator, Central Bank, Payment Bank, Ancillary System
Create Role	Operator, Central Bank
Update Role	Operator, Central Bank
Delete/Restore Role	Operator, Central Bank
Query Role List	Operator, Central Bank
Create Certificate DN	Operator, Central Bank, Payment Bank, Ancillary System
Delete/Restore Certificate DN	Operator, Central Bank, Payment Bank, Ancillary System
Query Certificate DN List	Operator, Central Bank, Payment Bank, Ancillary System
Create User Certificate DN Link	Operator, Central Bank, Payment Bank, Ancillary System
Delete/Restore User Certificate DN Link	Operator, Central Bank, Payment Bank, Ancillary System
Query User Certificate DN Link List	Operator, Central Bank, Payment Bank, Ancillary System
Grant Privilege	Operator, Central Bank, Payment Bank, Ancillary System
Revoke Privilege	Operator, Central Bank, Payment Bank, Ancillary System
Query Granted Privilege List	Operator, Central Bank, Payment Bank, Ancillary

	System
Query Granted Privilege Details	Operator, Central Bank, Payment Bank, Ancillary System
Grant Role	Operator, Central Bank, Payment Bank, Ancillary System
Revoke Role	Operator, Central Bank, Payment Bank, Ancillary System
Query Granted Role List	Operator, Central Bank, Payment Bank, Ancillary System
Query Granted Role Details	Operator, Central Bank, Payment Bank, Ancillary System
Create Message Subscription Rule	Central Bank, Payment Bank, Ancillary System
Update Message Subscription Rule	Central Bank, Payment Bank, Ancillary System
Delete/Restore Message Subscription Rule	Central Bank, Payment Bank, Ancillary System
Query Message Subscription Rule List	Central Bank, Payment Bank, Ancillary System
Query Message Subscription Rule Details	Central Bank, Payment Bank, Ancillary System
Create Message Subscription Rule Set	Central Bank, Payment Bank, Ancillary System
Update Message Subscription Rule Set	Central Bank, Payment Bank, Ancillary System
Delete/Restore Message Subscription Rule Set	Central Bank, Payment Bank, Ancillary System
Query Message Subscription Rule Set List	Central Bank, Payment Bank, Ancillary System
Query Message Subscription Rule Set Details	Central Bank, Payment Bank, Ancillary System
Create Technical Address Network Service Link	Operator, Central Bank, Ancillary System
Delete/Restore Technical Address Network Service Link	Operator, Central Bank, Ancillary System
Query Technical Address Network Service Link List	Operator, Central Bank, Payment Bank, Ancillary System
Create Routing	Operator, Central Bank, Payment Bank, Ancillary System
Delete/Restore Routing	Operator, Central Bank, Payment Bank, Ancillary System
Update Routing	Operator, Central Bank, Payment Bank, Ancillary System
Query Routing List	Operator, Central Bank, 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	Payment Bank
Update Report Configuration	Payment Bank
Delete/Restore Report Configuration	Payment Bank
Query Report Configuration List	Payment Bank
Query Report Configuration Details	Payment Bank
Query Service Items List	Operator, Central Bank, Payment Bank, Ancillary System
Query Service Items Details	Operator, Central Bank, 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
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[13] 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 CBs 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.

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.

13 Authentication means determining whether someone or something (function, component...) is who or what it is declared to be

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 (§.0)
- access rights management (§.1.3.4)
- message subscription configuration (§.1.3.5)
- network configuration (§.1.3.6)
- report configuration (§.1.3.7)
- restriction type management (§.1.3.8)
- configuration parameters (§.1.3.9)
- business day management configuration (§.1.3.9)

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 35 – 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 so as 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: • Active • Deleted The reference data item is available for processing only if its deletion status is “Active” and it 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: • Approved • Awaiting Approval • Rejected • Revoked. 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 36 – VALIDITY PERIOD ATTRIBUTES

Attribute	Description
Valid From[14]	It specifies the date (inclusive) from which the reference data item is valid.
Valid To[15]	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 37 – 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.

[14] Opening Date for certain items.

[15] Closing Date for certain items.

Some examples below illustrate the concepts of revision and history in combination with the status transitions related to the attribute 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 38 – BEFORE THE PROCESSING

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

When processed 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 39 – 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 maintenance, 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.

TABLE 40 – AFTER THE PROCESSING

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 41 – BEFORE THE PROCESSING

Technical Identifier	Revision	Valid From	Attributes	Deletion Status	Approval Status	Ref. 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. As a result, two different items exist for the same object, but with different validity periods.

TABLE 42 – AFTER THE PROCESSING

Technical Identifier	Revision	Valid From	Attributes	Deletion Status	Approval Status	Ref. 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 43 – BEFORE THE PROCESSING

Technical Identifier	Revision	Valid From	Attributes	Deletion Status	Approval Status	Ref. 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.

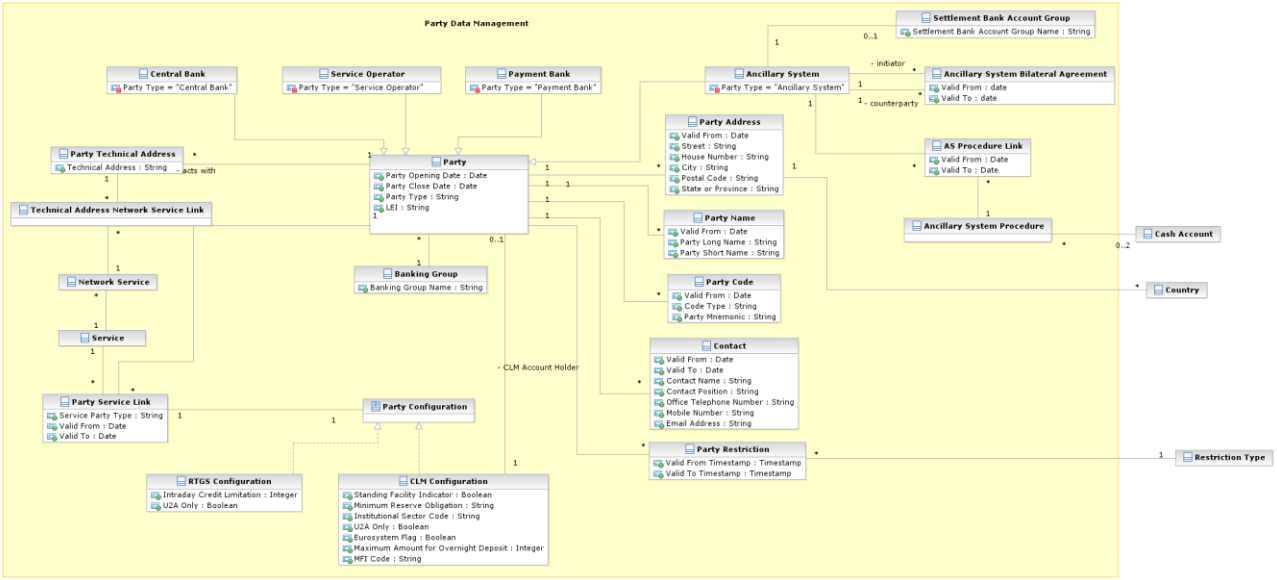
TABLE 44 – AFTER THE PROCESSING

Technical Identifier	Revision	Valid From	Attributes	Deletion Status	Approval Status	Ref. 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 1.2.2.1.5.

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. Similarly, each party belonging to the second level (i.e. a Central Bank) is responsible for the setup of all parties of its community (i.e. Payment Banks, Ancillary Systems), represented by parties of the third level. Finally, the lowest level of the hierarchy describes the links between each payment bank and its cash account(s).

The Party Data Management component allows the managements of all the relationships between all the parties belonging to the first three levels of the hierarchy, but not the links between a party and its cash accounts. The management of these links is performed within the Cash Account Data Management component (see section 1.3.3).

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

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: - Operator - Payment Bank - Central Bank - Ancillary System
LEI	It specifies the Legal Entity Identifier associated to the party. 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 *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*.

A party may be referenced in several *Banking Groups* while an Ancillary System may act as the leader of a *Settlement Bank Account Group*. Both are identified by a name.

Participation to Banking 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*[16].

2. Party Code

This entity includes the information used to identify a *Party* from a business perspective. Each legal entity is identified in the financial market by its primary BIC, based on ISO 9362 standard. A legal entity may establish multiple legal relationships with several Central Banks 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. The combination of <Central Bank 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 1.3.9).

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*.

3. Party Name

This entity includes a Party Long Name and Party Short Name in a chronological basis. 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.

[16] For each party restriction, a period of validity and a restriction type must be specified.

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. 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 1.3.6).

7. Party Service Link

This entity links *Parties* to *Services* on a many-to-many basis. Each *Party-Service Link* uniquely identifies a link between a single *Party* and a single *Service*, but multiple links can be defined in order to allow the same *Party* to access different *Services* and the same *Service* to be accessed by different *Parties*.

ATTRIBUTE	DESCRIPTION
Service Party Type	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. The exhaustive list of possible values for the TIPS Service is as follows: - TIPS Operator - TIPS Central Bank - TIPS Participant - TIPS Reachable Party - MPL-Only Participant The exhaustive list of possible values for the CLM Service is as follows: - Operator - CLM CB Account Holder - CLM CB Technical Account Holder - CLM Transit Account Holder - CLM Account Holder - Institution managing minimum reserve without account in CLM The exhaustive list of possible values for the RTGS Service is as follows: - Operator - RTGS CB Account Holder - RTGS Transit Account Holder - RTGS Account Holder - Ancillary System
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.

8. 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.

8.1 RTGS Configuration

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

ATTRIBUTE	DESCRIPTION
Intraday Credit Limitation	It specifies the maximum intraday credit authorised to a party.
U2A Only	It specifies whether the party can interact with the RTGS Service in U2A mode only. If so, service related push report configurations and message subscriptions will not be available.

8.2 CLM Configuration

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

ATTRIBUTE	DESCRIPTION
Standing Facility Indicator	It specifies whether the party is enabled for Standing Facilities.
Minimum Reserve Obligation	Indicates if an institution is subject to minimum reserve requirement or not and the type of the minimum reserve calculation. Exhaustive list of possible values is as follows: - Direct - Pool - Indirect - No
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. 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.

9. Ancillary System Bilateral Agreement

This entity includes information related to all the bilateral agreements defined for an *Ancillary System* 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 *Ancillary System* for the bilateral agreement.
Counterparty	It specifies the counterparty *Ancillary System* for the bilateral agreement.

10. Ancillary System Procedure Link

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

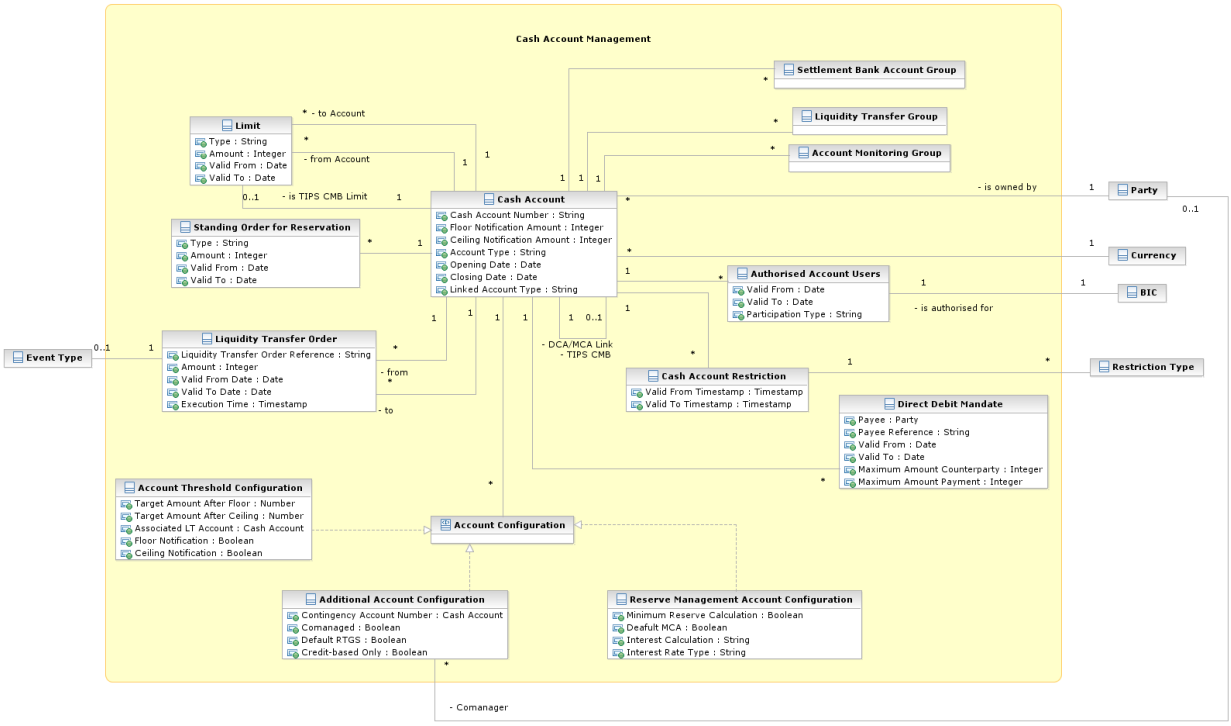
ATTRIBUTE	DESCRIPTION
Valid From	Starting validity date for the ancillary system procedure link.
Valid To	Ending validity date for the ancillary system procedure link.

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

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.

Authorised RTGS and CLM Account Holders can create and maintain Cash Accounts for 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 Notification Amount	It specifies the lower threshold for notifying the cash manager.
Ceiling Notification Amount	It specifies the upper threshold for notifying the cash manager.

Account Type	It specifies a classification for the cash account. The exhaustive list of possible values for the TIPS Service is as follows: - TIPS Account - TIPS Transit Account[17] - TIPS Credit Memorandum Balance The exhaustive list of possible values for the RTGS Service is as follows: - RTGS DCA - Ancillary System Guarantee Funds Account - RTGS Sub-account - RTGS CB Account - RTGS Dedicated Transit Account - AS Technical Account The exhaustive list of possible values for the CLM Service is as follows: - Main Cash Account - Overnight Deposit Account - CLM CB Account - CB ECB Account - ECB Mirror Account - CLM Dedicated Transit Account for T2S - CLM Dedicated Transit Account for TIPS - CLM Dedicated Transit Account for RTGS - Marginal Lending Account
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*[18] and one or many *Account Configuration* entities. Certain types of *Cash Account* are additionally linked to other Cash Accounts e.g. for liquidity management purposes. Each Cash Account may be linked to one or many BICs defined as "Authorised Account Users"[19]. Each TIPS Credit Memorandum Balance may be linked to only one "Authorised Account User".

[17] 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.

[18] For each cash account restriction, a period of validity and a restriction type must be specified.

[19] For each Authorised Account User 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 or Indirect Participant or Correspondent)

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

2. Limit

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

ATTRIBUTE	DESCRIPTION
Limit Type	It specifies a classification for the limit. The exhaustive list of possible values is as follows: - TIPS CMB Limit - T2 Bilateral Limit - T2 Multilateral Limit
Limit Amount	It specifies the value set for the limit amount. If set to zero, the relevant Cash Account cannot be debited.
Valid From Timestamp	It specifies the date from which the limit is valid.

Each *Limit* is linked to its relevant *Cash Account.*

3. 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. The exhaustive list of possible types is as follows: - Bilateral - Multilateral
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.

4. 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. The exhaustive list of possible types is as follows: - Blocked - High - Urgent
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.

5. 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.
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.
Execution Time	It specifies the execution time of the liquidity transfer order, if it is not based on a specific event.

Each Liquidity transfer Order is linked to the related Cash Account and may be linked to an Event Type if an execution time has not been defined.

6. Direct Debit Mandate

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

ATTRIBUTE	DESCRIPTION
Payee	It specifies the Party allowed to debit the Cash Account.
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 and Party allowed to debit the account.

7. 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 to be used when generating automatic liquidity transfers in case floor or ceiling amount are breached.
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.

8. Reserve Management Account Configuration

This specific *Account Configuration* includes the attributes required by CLM for Reserve Management processing for the related *Cash Account*.

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 whethere interest is calculated in the related account balance.
Interest Rate Type	It specifies the rate type used for interest calculation. The exhaustive list of possible values is as follows: - Minimum Reserve Interest Rate - Minimum Reserve Penalty Rate type 1 - Minimum Reserve Penalty Rate type 2 - Excess Reserve Interest Rate - Overnight Deposit Interest Rate - Marginal Lending Interest Rate - No Interest Rate Applicable

9. Additional Account Configuration

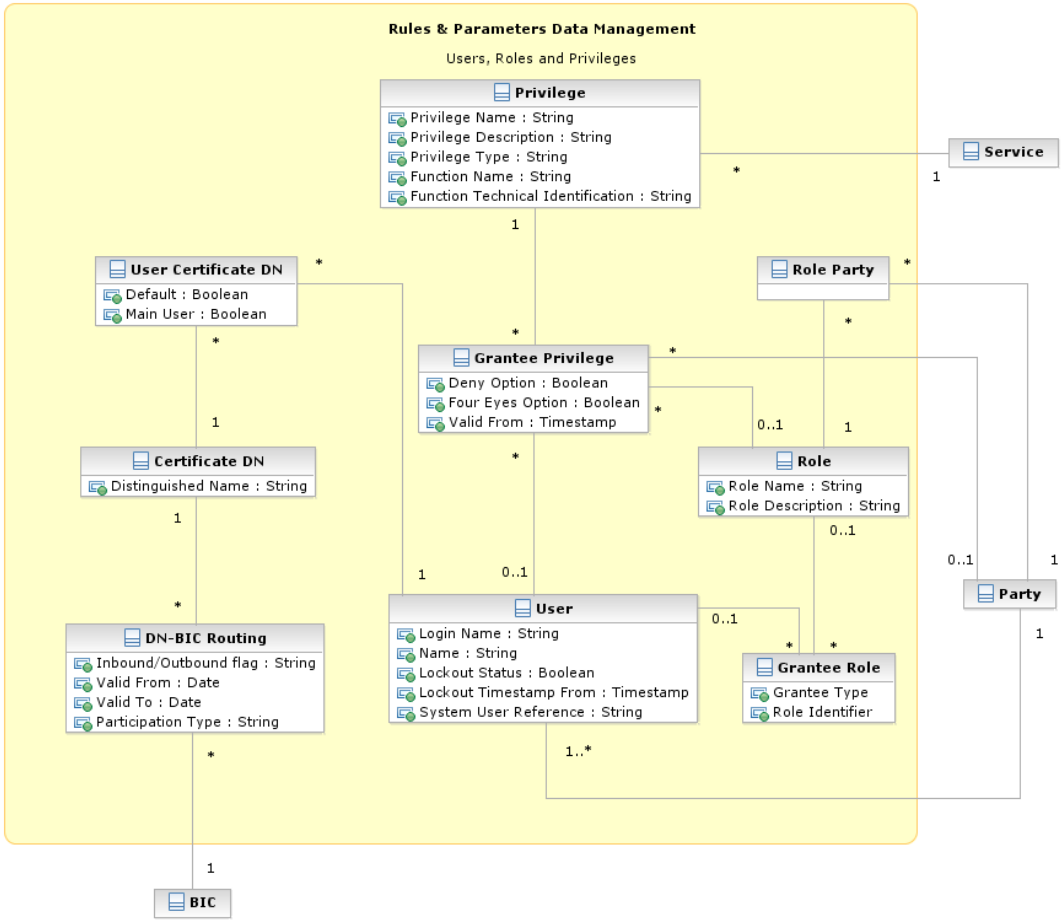
This specific *Account Configuration* includes additional attributes that may be required for the complete configuration of settlement Services for the related *Cash Account*.

ATTRIBUTE	DESCRIPTION
Contingency Account Number	It specifies the account number of the corresponding contingency account.
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.

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

1.3.4. 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 possibly data) to selected *Parties*, *Users* and *Roles*.

Privileges are created and maintained by the CRDM Operator. *Privileges* can be granted or revoked by a system 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 and Central Bank system 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, system 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 the DMT and using functions via 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.
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*[20].

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*[21].

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: - System, i.e. the associated function does not apply to a specific static data object type. - Object, i.e. the associated function applies to a specific static data object type.
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

[20] 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.

[21] 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.

	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) .

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*.

System 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. DN-BIC Routing

This entity includes all reference data for DN-BIC Routing, 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.

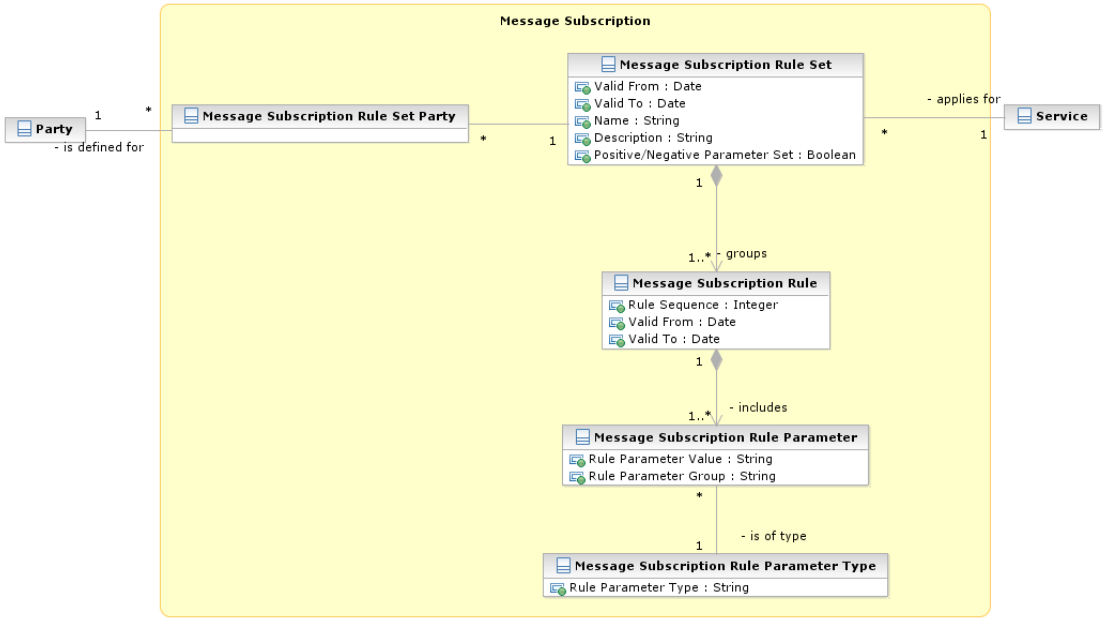
ATTRIBUTE	DESCRIPTION
Inbound/Outbound flag	Attribute specifying whether the routing relationship is for inbound or outbound communications. If set to Outbound, a DN can only be linked to no more than one BIC.
Valid From	Date from which the DN-BIC Routing is valid.

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.*

1.3.5. 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

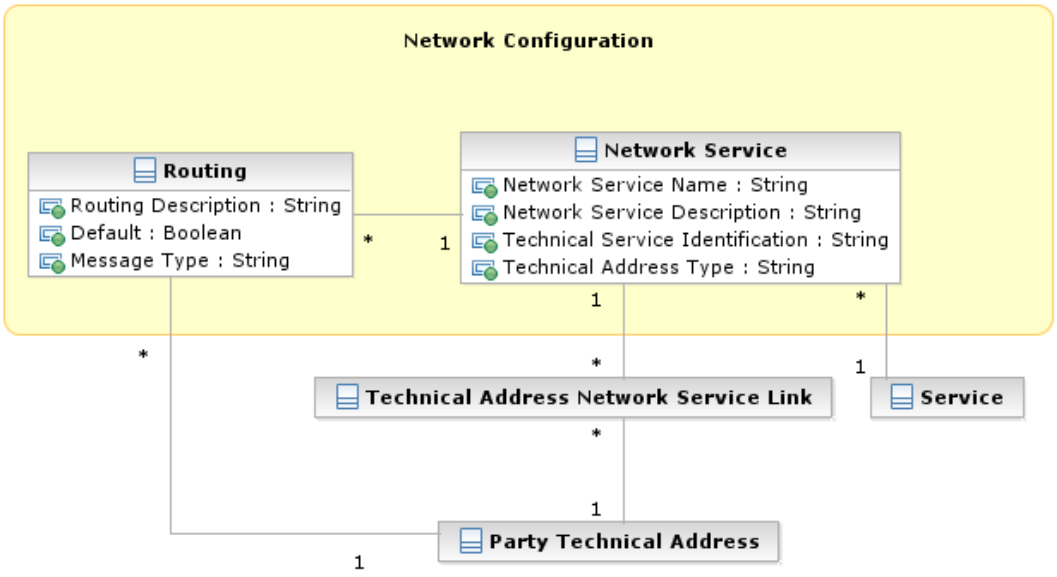
This entity defines all message subscription rule parameters types.

ATTRIBUTE	DESCRIPTION
Rule Parameter Type	It specifies a classification for the message subscription rule parameters.

	The exhaustive list of possible values is as follows: - Message type - Cash account number - Debit/Credit indicator - Multi-addressee BIC - Business case - Priority - Underlying message type

1.3.6. 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[22].
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 TIPS uses 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.

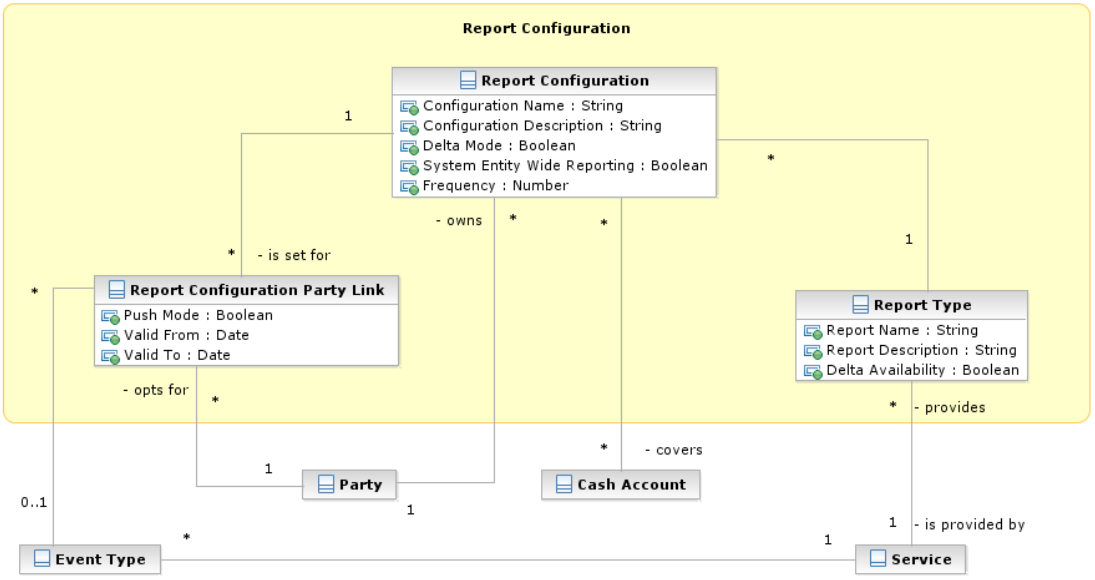
ATTRIBUTE	DESCRIPTION
Routing Description	Description of the routing configuration.
Default	Identifies the default routing configuration for a given Party.
Message Type	Specifies the message type for which a specific routing configuration applies.

Each *Routing* configuration is linked to the relevant *Party Technical Address* and *Network Service*.

1.3.7. Report configuration

The following diagram shows the conceptual data model for report configuration.

[22] The actual data to be stored for the technical identification of a network service is clarified during the detailed specification phase.



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* and 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).

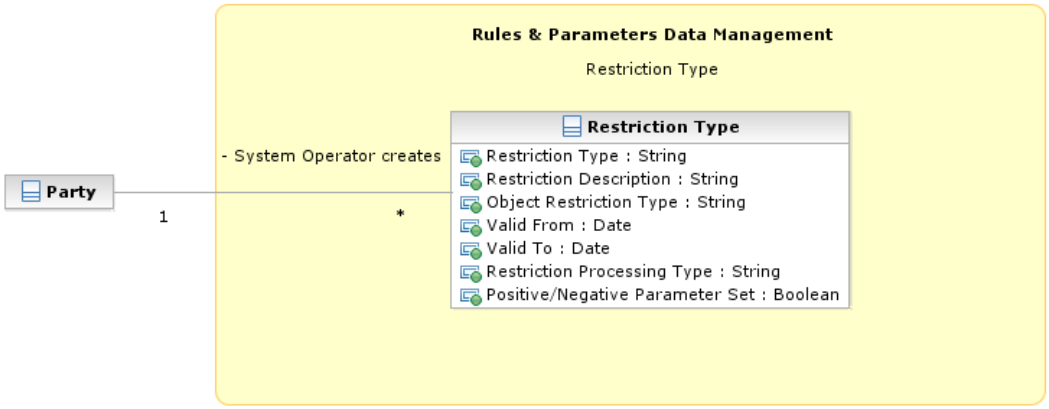
ATTRIBUTE	DESCRIPTION
Configuration Name	Name of the report configuration.
Configuration Description	Description of the report configuration.
Delta Mode	Boolean attribute specifying whether the recipient gets the report linked to the report configuration in delta mode or in full mode.
System Entity Wide 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 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: - 3 hours - 6 hours - 12 hours

Each *Report Configuration* is linked to the relevant *Report Type* and to one or many *Parties* entitled to get the same *Report Type*[23].

Additionally, for specific reports[24] a Report Configuration may be linked to a Cash Account.

1.3.8. Restriction type management

The following diagram shows the conceptual data model for *Restriction Types* management.



It is possible for the CRDM Operator to define restriction types. A restriction type is a set of attributes that define specific processing characteristics for *Parties and Cash Accounts*.

[23] 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.

[24] The coverage at account level is foreseen for camt.053 in RTGS/CLM Services only.

3. 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.

ATTRIBUTE	DESCRIPTION
Restriction Type	It specifies a code defined by the CRDM Operator 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.
Object Restriction Type	It specifies a classification for the object type on which the restriction applies. The exhaustive list of possible values is as follows: - Party - Cash Account
Restriction Processing Type	It specifies a classification for the type of processing that shall apply for the restriction. The exhaustive list of possible values is as follows: - Blocking: blocking of a party or cash account from settlement
Positive / Negative Parameter Set	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.

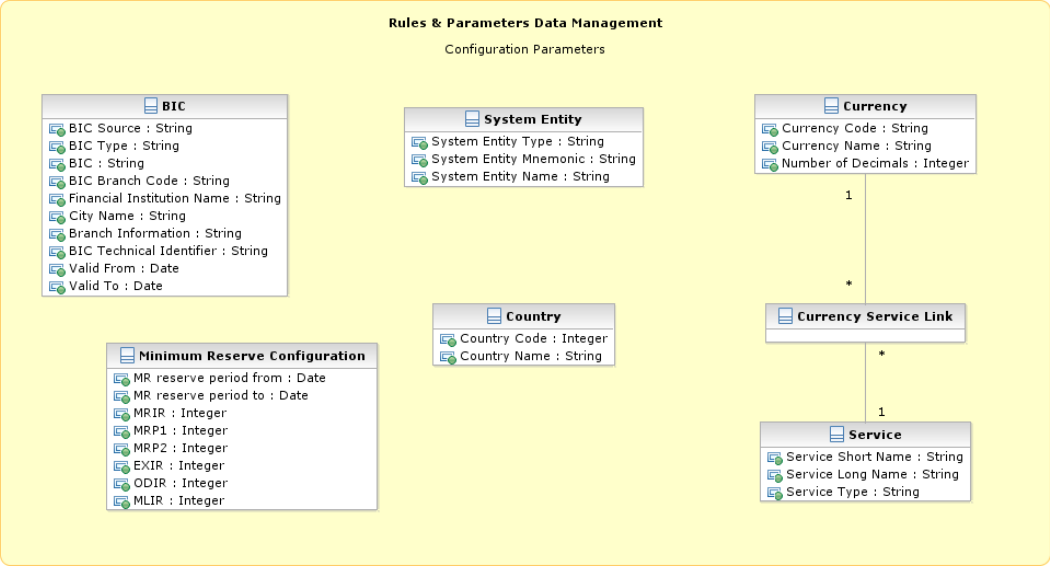
Each *Restriction Type* is linked to the specifying *Party* (i.e. the CRDM Operator).

1.3.9. 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.



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 standard.
Country Name	Name of the country according to the ISO 3166-1 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. 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: - Operator - Central Bank (CB)
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.

Every reference data entity 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*.

4. 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 BIC Data+.

ATTRIBUTE	DESCRIPTION
BIC Source	It specifies a classification for the BIC source. The exhaustive list of possible values is as follows: - Manual input - Automatic loading
BIC Type	It specifies a classification for the BIC type. The exhaustive list of possible values is as follows: - Official BIC - Internal technical BIC
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.

5. 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 Single Shared Platform or not. The exhaustive list of possible values follows: - Internal (i.e. service belonging to the Eurosystem Market Infrastructures) - External

Each Service may be linked to one or multiple *Currencies*.

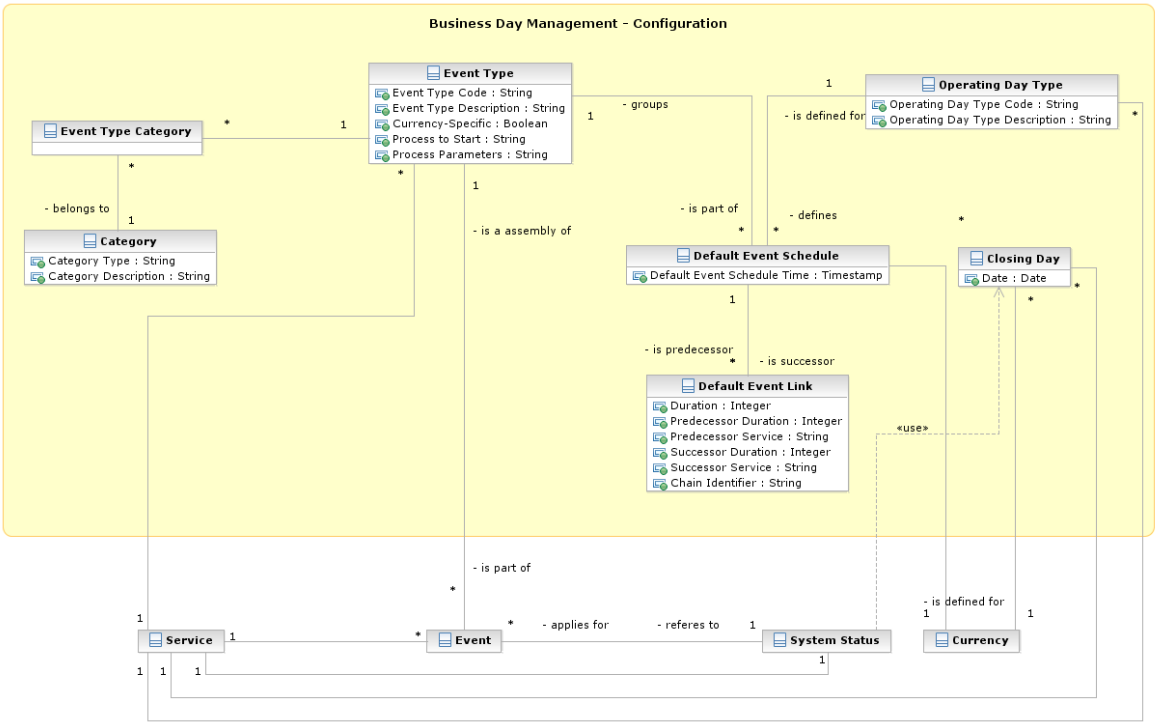
6. Minimum Reserve Configuration

This entity stores information on *Minimum Reserve Configuration* required by CLM Service.

ATTRIBUTE	DESCRIPTION
MR Reserve Period From	It specifies the starting of validity for a minimum reserve period.
MR Reserve 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 1.
EXIR	It specifies the excess reserve interest rate.
ODIR	It specifies the overnight deposit interest rate.
MLIR	It specifies the marginal lending interest rate.

1.3.10. 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.

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.

ATTRIBUTE	DESCRIPTION
Category Type	It specifies the type of the category. The exhaustive list of possible value is: - Business report - CRDM report - Liquidity transfer order report
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. 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, 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 Central Banks, 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 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. 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 sub-set 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 45 - COMMON REFERENCE DATA OBJECTS

AREA	OBJECT	RESPONSIBLE CRDM ACTORS [25, 26]
Party	Party	Operator, Central Bank
	Party Service Link	Operator, Central Bank
	Banking Group	Central Bank
	Ancillary System Bilateral Agreement	Central Bank
	Ancillary System Procedure	Central Bank
Cash account	Cash account	Central Bank, Payment Bank[27]
	Limit	Payment Bank, Ancillary System
	Authorized Account User	Payment Bank, Ancillary System
	Account Monitoring Group	Payment Bank
	Liquidity Transfer Order	Payment Bank, Ancillary System
	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, Central Bank
	Privilege	Operator

25 "All" indicates that all types of CRDM Actors (CRDM Operator, Central Banks, Payment Banks, Ancillary System) have the ability to manage the object type.

26 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 and Ancillary Systems, upon request of the relevant Central Bank) and for the Central Banks to act on-behalf of their Payment Banks and Ancillary Systems, under well-defined contingency scenarios.

27 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.

	Certificate DN	All
	User-Certificate DN Link	All
	Role User[28]	All
	Role Party[29]	Operator, Central Bank
	Grantee Privilege[30]	All
Message subscription configuration	Message subscription rule	Central Bank, Payment Bank, Ancillary System
	Message subscription rule set	Central Bank, Payment Bank, Ancillary System
Network configuration	DN-BIC Routing	All
	Network service	Operator
	Technical address Network service link	Operator, Central Bank
	Routing	All
Report configuration	Report configuration	Payment Bank
Business day management configuration	Event Type	Operator
	Operating Day Type	Operator
	Closing Day	Operator
Restriction type management	Restriction type	Operator
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
	System entity	Operator
	BIC directory	Operator
	Service	Operator
	Minimum Reserve Configuration	Operator

28 This object is related to the granting/revoking of Roles to/from Users.
29 This object is related to the granting/revoking of Roles to/from Parties.
30 This object is related to the granting/revoking of Privileges to/from Roles, Parties and Users.

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.

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.

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[31]. 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 tables show the exhaustive list of all the available reference data maintenance types that are possible in the DMT and in A2A mode:

TABLE 46 – MANAGEMENT OF REFERENCE DATA OBJECTS IN DMT

AREA	OBJECT	DMT FUNCTION
Party data management	Party	Create
	Technical address network service link	Create
Cash account data management	Cash account	Create
	Authorised account user	Create
	Limit	Create
Access rights management	User	Create
	Role	Create, Grant
	Privilege	Grant
	Certificate DN	Create
	User-Certificate DN Link	Create
Message subscription configuration	Message subscription rule set	Create
	Message subscription rule	Create
Report configuration	Report configuration	Create

TABLE 47 – MANAGEMENT OF REFERENCE DATA OBJECTS IN A2A MODE

AREA	OBJECT	A2A FUNCTION
Party data management	Party	Create, Update, Delete

31 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.

Cash Account data management	Cash Account Liquidity Transfer Order Limit	Create, Update, Delete Create, Update, Delete Update, Delete

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 thatservice, 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.

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 48 - COMMON REFERENCE DATA OBJECTS WITH UNLIMITED VALIDITY PERIOD

AREA	OBJECT
Party	Banking Group
Cash Account	Account Monitoring Group Liquidity Transfer Group Settlement Bank Account Group
Access rights management	User Role Privilege Certificate DN User-Certificate DN Link

	Role User Link Role Party Link Privilege Role Link
Network configuration	Network service Technical Address Network Service Link Routing
Business day management configuration	Event Type Operating Day Type Closing Day
Configuration parameters	Country Currency Currency Service Link System entity Service
Billing Configuration	Service Items Invoice Configuration VAT

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 Eurosystem Market Infrastructure Service(s) only by means of the daily reference data propagation process.

Regardless of the way common reference data object with limited validity period are propagated to the relevant Eurosystem Market Infrastructure 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:

TABLE 49 - COMMON REFERENCE DATA OBJECTS WITH LIMITED VALIDITY PERIOD [32]

AREA	OBJECT	CREATION	UPDATE	DELETION
Party	Party	Validity date may take the value of the current date.	May take effect on the current date [33].	May be performed only on objects that are not valid on the current date.
	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.
	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.
	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.
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 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.

32 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.

33 This is not applicable to the Party Code, which cannot be updated if it is currently active.

	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.
	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.
	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.
	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.
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.
	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.
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.
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.
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.
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.

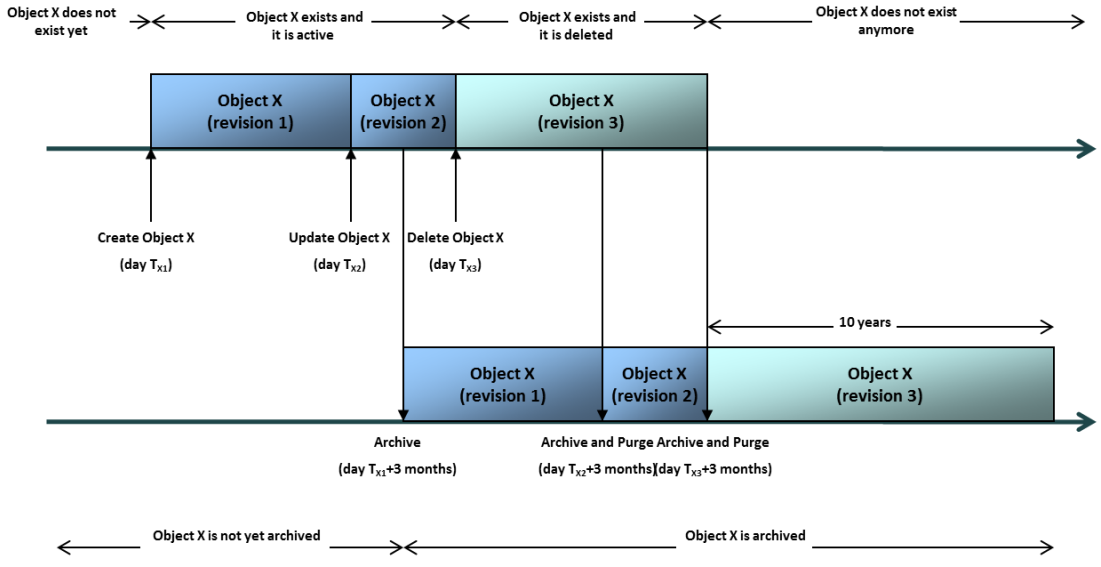
For parties and cash accounts the validity period is defined by an Opening Date and a Closing Date attribute. Between these two dates the common reference data object, i.e. the party or the cash account, is valid, meaning that Eurosystem Market Infrastructure Services can use it for processing (e.g. 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.

1.4.3.4. Common reference data archiving and purging

The CRDM common component archives new reference data and their changes three calendar months after they were created or changed. 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.

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 11 - 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:

- 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;
- 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:

- 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 ;
- 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.

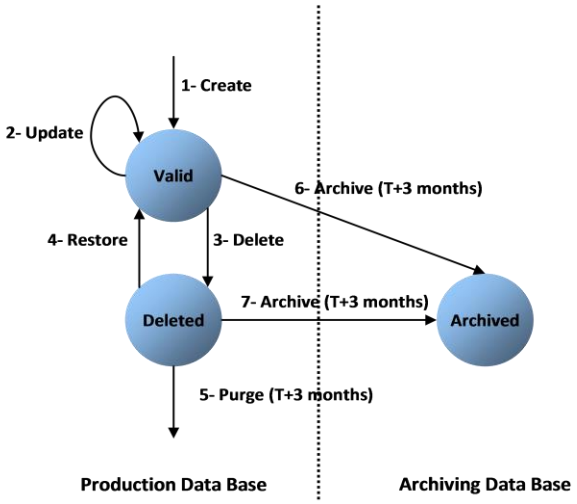
1.4.3.5. Lifecycle of common reference data objects

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 8 - 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).

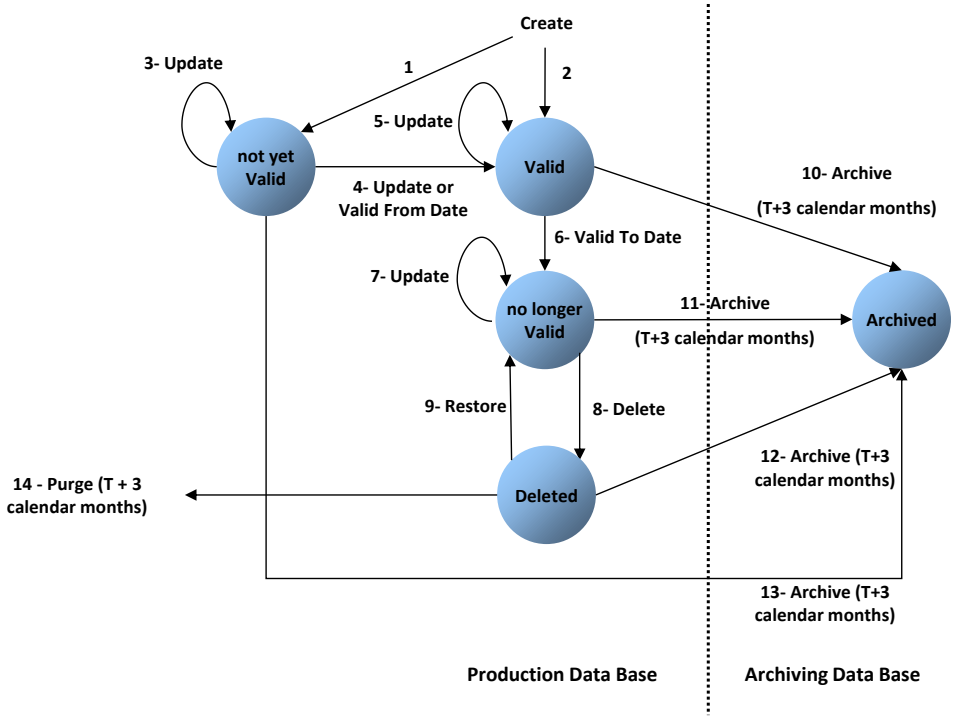
Three calendar months after a common reference data object has been deleted, the CRDM common component physically deletes it from the production data base. This results in the object being purged by the production data base (transition 5), i.e. it exists only in the archiving data base.

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 9 - 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:

- 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).
- 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).

1.4.3.6. 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 data propagation flow exists from TIPS, T2S, 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 Banking Group for CLM). 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 and Cash Account.

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.

TABLE 50 – CRDM DATA SEGREGATION PER SERVICE

AREA	OBJECT	CLM	RTGS	T2S	TIPS	SEGREGATION PRINCIPLES
Party	Party	X	X	X	X	All data is available in T2S. Parties with a Party Service Link to CLM, RTGS or TIPS are available in that Service.
	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.
	Ancillary System Bilateral Agreement		X			All data is available in RTGS.
	Ancillary System Procedure		X			All data is available in RTGS.
Cash Account	Cash Account	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	Data is available in different services/components depending on the Cash Account Type attribute of the Cash Accounts it refers to.
	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.
	Liquidity 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 Bank Account Group		X			All data is available in RTGS.
	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 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 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 Rights Management	User	X	X	X		All data is available in CRDM. Data related to Parties with a Party Service Link to CLM or RTGS is available in that Service/component.
	Role	X	X	X	X	All data is available in T2S. Data containing Privileges related to 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 availability of other access rights data in those Services/components. Each Privilege includes a link to a single Service/component which defines the Service/component that contains the user function activated by the Privilege.
	Certificate DN	X	X	X	X	All data is available in T2S. Data linked to Users flagged as main users for TIPS is available in TIPS. Data linked to Users under Parties with a Party Service Link to CLM or RTGS is available in that Service/component.
	User-Certificate DN Link	X	X	X	X	All data is available in T2S. Data linked to Users flagged as main users for TIPS is available in TIPS. Data linked to Users under Parties with a Party Service Link to CLM or RTGS is available in that Service/component.
	Role User	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	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	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	All data is available in T2S. Data containing Message Subscription Rules that reference data from CLM, RTGS or TIPS is available in those Services/components.
	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	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	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	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. Apart from this, only relevant for CRDM and Business Day Management.
	Operating Day Type			X		T2S data is available in T2S Scheduling. Apart from this, only relevant for CRDM and Business Day Management.
	Closing Day			X		T2S data is available in T2S Scheduling. Apart from this, only relevant for CRDM and Business Day Management.
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.
Billing	Service Item					Only relevant for CRDM and Billing.

Configuration	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	All data is available in all Services/components.
	Currency	X	X	X	X	All data is available in all Services/components.
	Currency Service Link	X	X	X	X	Data is available in different Services/components depending on the Service/component the link refers to.
	System Entity	X	X	X	X	All data is available in all Services/components.
	BIC Directory	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.

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 51 – 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 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.
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 owning the TIPS 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: A – Added M – Modified D – Deleted 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. 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: 01 – TIPS Participant 02 – Reachable Party

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 52 – 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
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).

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: TIPSDIRTTTTYYYYMMDD where:

- TTTT is the type, i.e. FULL for the full version and DLTA for the delta version;
- YYYYMMDD specifies the year, month and day as of which the TIPS Directory is valid.

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="(.{157,157}\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 = “TIPSDIRFULL20200101” 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 needed routing information is provided in a structured RTGS Directory.

It includes the list of all BICs for RTGS Participants and parties that are addressable within RTGS.

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 53 – RTGS DIRECTORY STRUCTURE

O/M[34]	FIELD No.	FIELD NAME	FORMAT	DESCRIPTION
M	1	BIC	CHAR(11)	BIC that identifies a RTGS Participant. This BIC is for information purpose only and it allows grouping all User BICs configured by a given RTGS Participant. It cannot be used to address payments.
M	2	Addressee BIC	CHAR(11)	BIC configured as Authorised Account User in CRDM. This BIC shall be used in the message business header to address payments.
M	3	Account Holder BIC	CHAR(11)	BIC identifying the RTGS DCA or CB Account holder.
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.
O	6	National Sorting Code	CHAR(15)	It is the National Sorting Code of the RTGS Participant.
O	7	Main BIC Flag	CHAR(1)	Specifies if the BIC could be used to address the payments if the sender has no other information where to send to.
M	8	Type of Change	CHAR(1)	Exhaustive list of possible values: A – Added M – Modified D – Deleted U – Unchanged
M	9	Valid From	DATE(YYYYMMDD)	Date from which the entry is valid.

[34] Indicates if the field is optional or mandatory.

M	10	Valid To	DATE(YYYYMMDD)	Date up to which the entry is valid. Value "99991231" is used whenever the ending of validity has not been specified.
M	11	Participation Type	CHAR(2)	Exhaustive list of possible values for the entry: 01 – Direct 02 – Indirect 03 – Multi addressee – Credit Institutions 04 – Multi addressee – Branch of Direct Participant 05 – Addressable BIC - Correspondent 06 – Addressable BIC – Branch of Direct Participant 07 – Addressable BIC – Branch of Indirect Participant 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 54 – 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 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).

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: RTGSDIRTTTTYYYYMMDD where:

- TTTT is the type, i.e. FULL for the full version and DLTA for the delta version;
- YYYYMMDD specifies the year, month and day as of which the RTGS Directory is valid.

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.

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 CLM accounts.

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 36 – CLM REPOSITORY STRUCTURE

O/M[35]	FIELD No.	FIELD NAME	FORMAT	DESCRIPTION
M	1	BIC	CHAR(11)	BIC that identifies a CLM account holder.
M	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 Addressee 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: A – Added M – Modified D – Deleted 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. 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).

[35] Indicates if the field is optional or mandatory.

The following table shows the usage of the "Type of Change" field:

TABLE 552 – 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: CLMREPOTTTTYYYYMMDD where:

- TTTT is the type, i.e. FULL for the full version and DLTA for the delta version;
- YYYYMMDD specifies the year, month and day as of which the CLM Repository is valid.

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.

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 T2-T2S Consolidation 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 T2-T2S Consolidation.

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.

1.6. 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:

- 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. The creation of a system entity is a necessary preliminary step for the creation of a Central Bank as a party in CRDM (and, consequently, for the creation of payment banks).

- Party reference data for Central Banks: the CRDM Operator is responsible for creating and maintaining Central Banks as parties in CRDM. Subsequently, users from these parties may create their own payment banks. For more details, see section 1.3.2.
- Access rights configuration for Central Banks: after having created the system entity and the related party, the CRDM Operator may set up the Central Banks' privileges to access CRDM, CLM, RTGS and TIPS. Subsequently, 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 1.3.4.
- General restriction types: the CRDM Operator defines a set of general restriction types which each Central Bank or participant may use in order to block/unblock the participants or accounts/CMBs. See section 1.3.8 for details on restriction types.
- 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.
- Country: the country codes for all countries (for uses such as defining the country of origin of a payment bank) 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 CLM, RTGS and TIPS.
- 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.

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.

1.7. Limitations of the system

1.7.1. A2A channel[36]

The fully-fledged CRDM will be accessible in U2A mode (for all functions) and in A2A mode (for a subset of functions). The A2A channel is intended to allow Central Banks and their participants to perform massive upload of reference data when needed.

The first version of CRDM was designed to interact and support the reference data configuration for TIPS. All the possible solutions for the inclusion of an A2A channel in this version of CRDM were suboptimal both from a technical connectivity standpoint and in terms of coverage of the required functional scope:

- The technical connectivity solution provided by ESMIG at that stage did not cover the full scope of connectivity services foreseen for the go-live of T2-T2S Consolidation. In particular, A2A connectivity towards the fully-fledged CRDM will only be available as of 2021;
- The existing A2A connectivity solution for T2S could not be considered as it would be based on the assumption that all TIPS actors are also T2S actors;

[36] This limitation applies only to CRDM for TIPS.

- A specific solution for the interim period between 2018 and 2021 would be based on a throw-away investment.

In addition, since it is not foreseen to enlarge the scope of available XML messages, all of the above solutions would allow to perform massive reference data upload only for a limited set of reference data objects (specifically, the ones which are currently available through A2A in T2S, i.e. Parties and Cash Accounts, including TIPS CMBs). Several reference data objects expected to have high cardinality would still have to be loaded in U2A mode.

For these reasons the Data Migration Tool (DMT) was chosen as a solution to allow a massive upload of several reference data objects. This allows to avoid a throw-away investment for the implementation of an interim A2A channel and to implement via DMT the full scope of TIPS reference data objects with high cardinality.

1.7.2. Data propagation between CRDM and TIPS

In addition to the propagation of reference data from CRDM on a regular basis, TIPS offers its users a reference data management functionality specifically to maintain the limited set of data that is required to be modifiable on a 24/7 basis in real-time. This data is exhaustively listed below:

- Blocking status for TIPS Participants (represented in CRDM by Party restrictions)
- Blocking status for TIPS Accounts and TIPS Credit Memorandum Balances (represented in CRDM by Cash Account restrictions)
- Limit value for TIPS Credit Memorandum Balances (represented in CRDM by the Limit amount

The concurrent change of this data on either side (CRDM and TIPS), taking into consideration the delayed propagation of data from CRDM to TIPS, could lead to inconsistent and unexpected results. As such, the current version of CRDM does not allow to modify these attributes. While it is possible to set a value for Limits upon creation, this value is propagated to TIPS only as an initial limit value. Following the initial propagation to TIPS, Limits can only be modified in TIPS. On the other hand, the blocking statuses can only be set and modified in TIPS.

1.7.3. Archiving management[37]

CRDM is based on the existing T2S Static Data Management (SDMG) domain. As such it retains all the functionalities that are implemented therein. One notable limitation is that the current version of CRDM does not foresee a reference data archiving function, which is not part of T2S SDMG and is foreseen to be introduced as part of the fully-fledged CRDM.

As a consequence, maintaining the current setup for purging (i.e. physically removing) reference data could lead to unwanted results. In T2S, data is copied to the archiving database with a three-month delay from the production database. Likewise, data which is logically deleted is then purged from the production database after a retention period of three months and can then be consulted in the archiving database only.

The absence of a long-term archive in CRDM would entail that keeping the purging mechanism leads to data being removed for good from the system. For this reason, and until the deployment of the fully-fledged CRDM, it has been chosen to avoid purging logically deleted data from the database. Specifically, this means that the retention period (currently set to three months) is extended indefinitely for reference data objects that are also used in CRDM. These objects include Party, Technical Address Network Service Link, Party Service Link, Cash Account, Authorised Account User, Limit, Role, User, DN-BIC Routing, User-Certificate DN Link, Certificate DN, Message Subscription Rule Set, Message Subscription Rule, Restriction Type, Report Configuration[38].

[37] This limitation applies only to CRDM for TIPS.

[38] For all these objects, audit trail data will continue to be purged after three months and not be archived in any case.

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 Central Bank, Ancillary System or Payment Bank interacting with CRDM through the A2A channel. The two sub-sections present a standard use case for A2A reference data maintenance and A2A data query respectively.

2.2.1. Reference data maintenance process

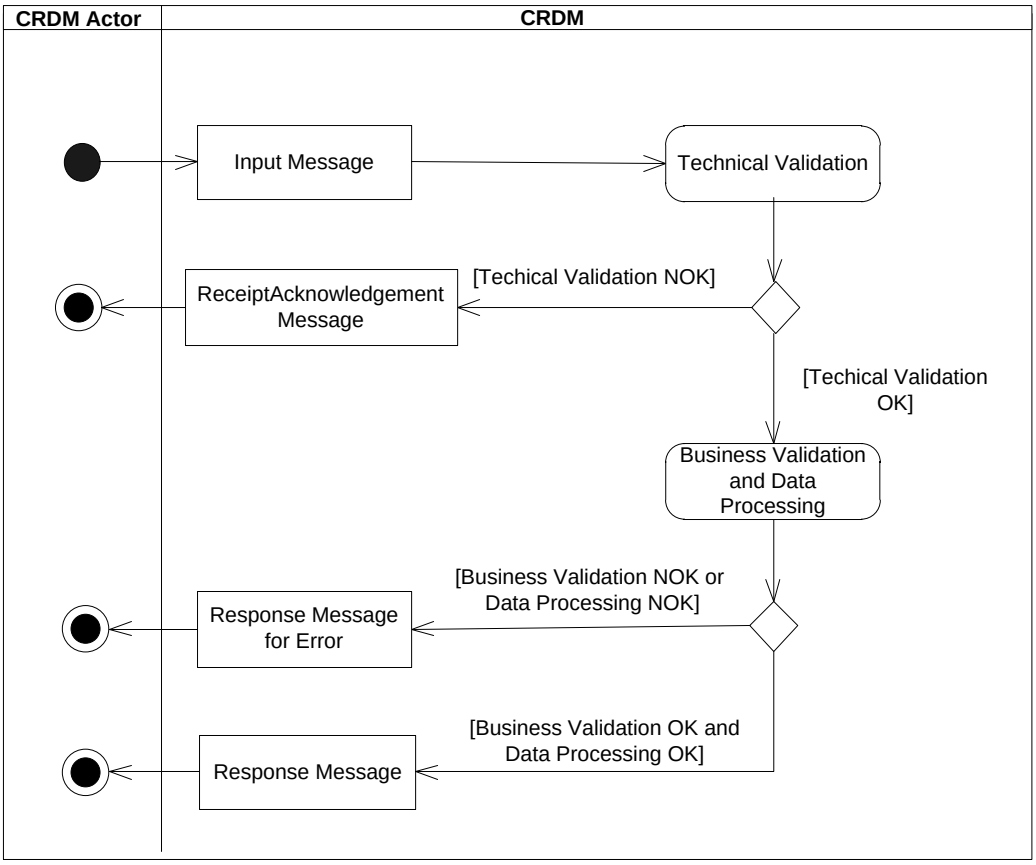
The common reference data maintenance process can be described as a common message flow that applies to every business scenario which allows to create, modify or delete a common reference data object.

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



Thecnical 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 imput 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 56 – 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)

2.2.2. Common reference data query

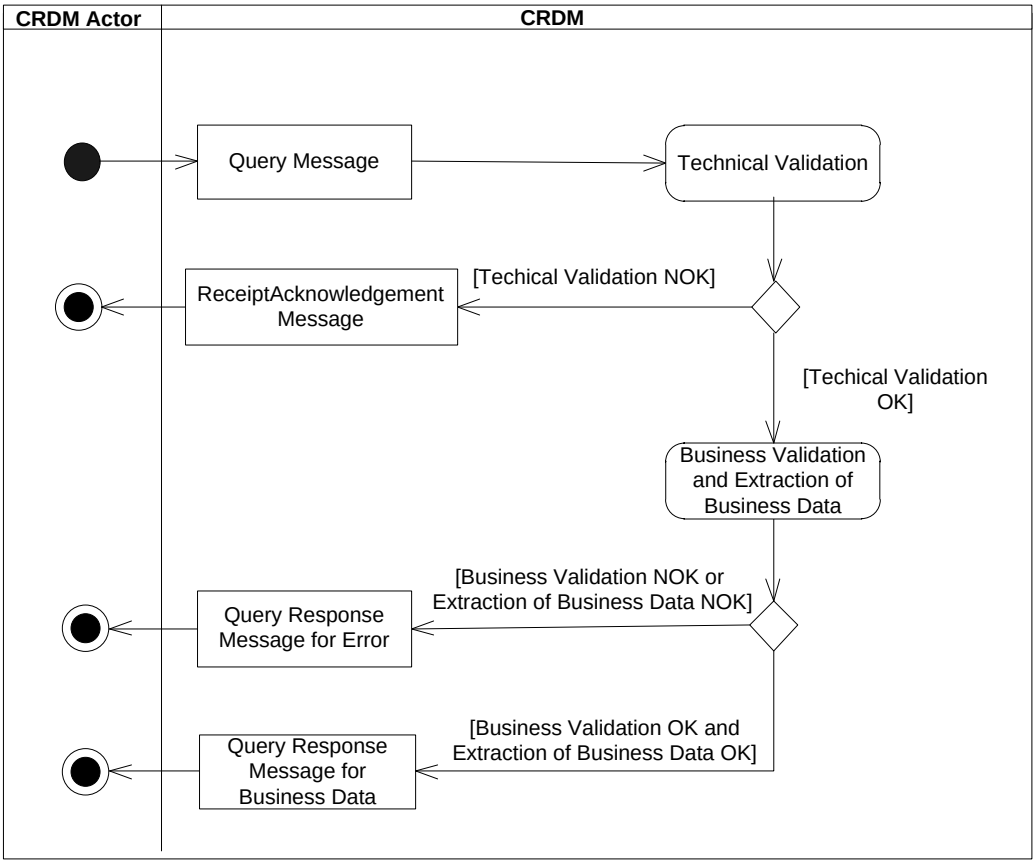
This use case covers the standard situation of CRDM Actor sending a query in A2A and it is applicable to every business scenario.

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



Thecnical 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 change depending 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 57 – 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)
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)
Direct Debit Mandate	DirectDebitMandateQuery(camt.099)	DirectDebitMandateReport(camt.100)	DirectDebitMandateReport(camt.100)

2.3. Data Migration Tool File Upload

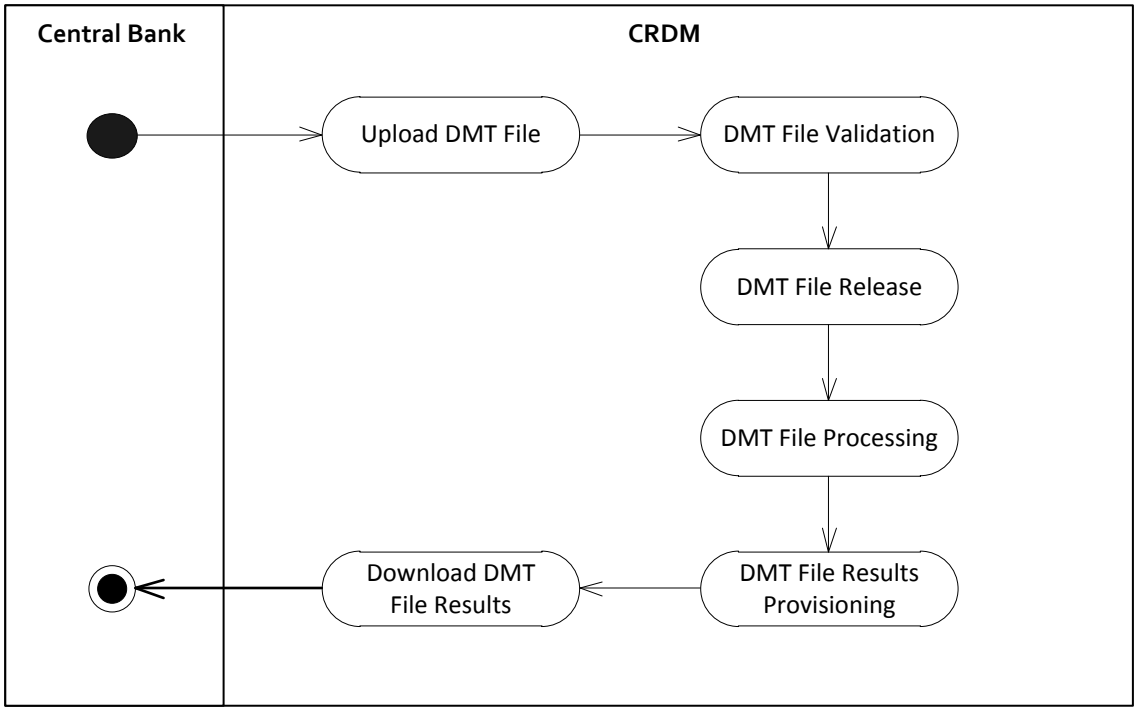
This use case covers the standard situation of a Central Bank loading reference data into CRDM common component. The Upload use case is available via U2A through a dedicated section.

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.~~3~~

~~Catalogue of Messages~~

TABLE 58 – DMT FILES SPECIFICATIONS

REFERENCE DATA OBJECT	OPERATION	FILE SPECIFICATIONS SECTION
Authorised Account User	Create	4.5.3.14
Cash Account	Create	4.5.3.12
Certificate DN	Create	4.5.3.10
DN-BIC Routing	Create	4.5.3.16
Limit	Create	4.5.3.13
Message Subscription Rule	Create	4.5.3.8
Message Subscription Rule Set	Create	4.5.3.7
Party	Create	4.5.3.1
Party-Service Link	Create	4.5.3.15
Privilege	Grant	4.5.3.6
Report Configuration	Create	4.5.3.9
Role	Create	4.5.3.4
Role	Grant	4.5.3.5
Technical Address Network Service Link	Create	4.5.3.2
User	Create	4.5.3.3
User Certificate DN Link	Create	4.5.3.11

3. Catalogue of Messages

3.1. List of messages

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 Orderto be amended or a new Liquidity transfer Orderto 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 Document/ModfyStgOrdr	DCU4001 DCC4001
Liquidity transfer Order Identification Document/ModfyStgOrdr/StgOrdrId/Id	DCU4003 DCU4030 DCC4075
Account Identification Document/ModfyStgOrdr/StgOrdrId/Acct/Id/Othr/Id	DCC4070 DCU4003
Amount Document/ModfyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy	DCC4091 DCC4092 DCU4091 DCU4092 DCC4093 DCU4093
Creditor Account Document/ModfyStgOrdr/NewStgOrdrValSet/CdtrAcct/Id/Othr/Id	DCC4080 DCC4200 DCU4200 DCC4079 DCC4085 DCC4185
Debitor Account Document/ModfyStgOrdr/NewStgOrdrValSet/DbtrAcct/Id/Othr/Id	DCC4085 DCC4185
ActiveCurrencyCode Document/ModfyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy/@Ccy	DCC4800 DCU4800
Execution Type Document/ModfyStgOrdr/NewStgOrdrValSet/ExctnTp/Evt/Prtry	DCC4090 DCU4090 DCC4081 DCC4200 DCU4081 DCU4200
Time Document/ModfyStgOrdr/NewStgOrdrValSet/ExctnTp/Tm	DCC4090
Validity Period Document/ModfyStgOrdr/NewStgOrdrValSet/VldtyPrd	DCC4120 DCU4140 DCU4141 DCU4130 DCC4200 DCU4200 DCC4121 DCU4010 DCU4030
ZeroSweepIndicator Document/ModfyStgOrdr/NewStgOrdrValSet/ZeroSweepInd	DCC4091 DCC4092 DCU4091 DCU4092

3.1.1.1.3The 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 Document/ModfyStgOrdr/StgOrdrId/Id	Identification
Account Identification Document/ModfyStgOrdr/StgOrdrId/Acct/Id/Othr/Id	Account Identification
Type Document/ModfyStgOrdr/StgOrdrId/Acct/Tp/Prtry	Possible values are: CREA - To Create a Standing Order UPDA - To Modifiy a Standing Order
Amount Document/ModfyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy	Amount
Creditor Account Document/ModfyStgOrdr/NewStgOrdrValSet/CdtrAcct/Id/Othr/Id	Creditor Account
Type Document/ModfyStgOrdr/NewStgOrdrValSet/CdtrAcct/Tp/Prtry	Creditor Account Type. Only “CASH” allowed for RTGS
Execution Type Document/ModfyStgOrdr/NewStgOrdrValSet/ExctnTp/Evt/Prtry	Execution Type
Validity Period Document/ModfyStgOrdr/NewStgOrdrValSet/VldtyPrd	Validity Period

Usage case example: *RTGS*ModifyStandingOrder_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 Document/ModfyStgOrdr/StgOrdrId/Id	Identification

MESSAGE ITEM	UTILISATION
Account Identification Document/ModfyStgOrdr/StgOrdrId/Acct/Id/Othr/Id	Account Identification
Type Document/ModfyStgOrdr/StgOrdrId/Acct/Tp/Prtry	Possible values are: CREA - To Create a Liquidity transfer Order UPDA - To Modifiy a Liquidity transfer Order
Account owner Document/ModfyStgOrdr/StgOrdrId/AcctOwnr/FinInstnId/BICFI	Technical Account BIC
Amount Document/ModfyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy	Amount
Creditor Document/ModfyStgOrdr/NewStgOrdrValSet/Cdtr/FinInstnId/BICFI	Creditor BIC
Creditor Account Document/ModfyStgOrdr/NewStgOrdrValSet/CdtrAcct/Id/Othr/Id	Creditor Account
Type Document/ModfyStgOrdr/NewStgOrdrValSet/CdtrAcct/Tp/Prtry	Creditor Account Type. Only “CASH” allowed for RTGS
Debtor Document/ModfyStgOrdr/NewStgOrdrValSet/Dbtr/FinInstnId/BICFI	Debtor BIC
Debtor Account Document/ModfyStgOrdr/NewStgOrdrValSet/DbtrAcct/Id/Othr/Id	Debtor Account
Execution Type Document/ModfyStgOrdr/NewStgOrdrValSet/ExctnTp/Evt/Prtry	Execution Type
Validity Period Document/ModfyStgOrdr/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 Document/ModfyStgOrdr/StgOrdrId/Id	Identification
Account Identification Document/ModfyStgOrdr/StgOrdrId/Acct/Id/Othr/Id	Account Identification

MESSAGE ITEM	UTILISATION
Type Document/ModfyStgOrdr/StgOrdrId/Acct/Tp/Prtry	Possible values are: CREA - To Create a Liquidity transfer Order UPDA - To Modifiy a Liquidity transfer Order
Amount Document/ModfyStgOrdr/NewStgOrdrValSet/Amt/AmtWthCcy	Amount
Creditor Account Document/ModfyStgOrdr/NewStgOrdrValSet/CdtrAcct/Id/Othr/Id	Creditor Account
Type Document/ModfyStgOrdr/NewStgOrdrValSet/CdtrAcct/Tp/Prtry	Creditor Account Type. Only “CASH” allowed for CLM
Execution Type Document/ModfyStgOrdr/NewStgOrdrValSet/ExctnTp/Evt/Prtry	Execution Type
Validity Period Document/ModfyStgOrdr/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”.

3.1.1.2. GetStandingOrder (camt.069)

3.1.1.2.1Overview 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.

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 Document/GetStgOrdr/MsgHdr/ReqTp/Prtry/Id	IIMP200 IIMP011 IIMP012 IIMP013 IIMP014 IIMP015 IIMP027 IIMP028 IIMP029
KeyAttributesIndicator Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/KeyAttrbtsInd	IIMP011 IIMP012 IIMP014 IIMP027 IIMP028 IIMP029
StandingOrderIdentification Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/StgOrdrId	IIMP012 IIMP028
Identification Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/Acct/Id/Othr/Id	IIMP011 IIMP013
Currency Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/Ccy	IIMP011 IIMP013
Validity Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/VldtyPrd/	IIMP011 IIMP013
BICFI Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/SysMmb/FinInstnId/BICFI	IIMP011 IIMP013 IIMP015
BICFI Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/RspnsblPty/FinInstnId/BICFI	IIMP011 IIMP013 IIMP015
LinkSetIdentification Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/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 Document/GetStgOrdr/MsgHdr/ReqTp/Prtry/Id	Request Type SDTL
Account Identification Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/Acct/Id/Othr/Id	Account Identification
Party BIC Document/GetStgOrdr/StgOrdrQryDef/StgOrdrCrit/NewCrit/SchCrit/RspnsblPty/FinInstnId/BICFI	Party BIC

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.

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*.

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 Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id	Request Type SDTL
Liquidity transfer Order Identification Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Id	Identification
Account Identification Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id	Account Identification
Account owner Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/AcctOwnr/FinInstnId/BICFI	Account owner
Amount Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcy	Amount
CreditDebit Indicator Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd	CreditDebit Indicator
Validity Period Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd	Validity Period
Responsible Party Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/RspnsblPty/FinInstnId/BICFI	Responsible NCB
Execution Type Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp/Evt/Prtry	Execution Type
Creditor Account Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Id/Othr/Id	Creditor Account
Type Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Tp/Prtry	Creditor Account Type. Only “CASH” allowed for 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 Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id	Request Type SDTL
Liquidity transfer Order Identification Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Id	Identification
Account Identification Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id	Account

MESSAGE ITEM	UTILISATION
	Identification
Account Owner Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/AcctOwnr/FinInstnId/BICFI	Technical Account BIC
Amount Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcy	Amount
CreditDebit Indicator Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd	CreditDebit Indicator
Validity Period Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd	Validity Period
Responsible Party Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/RspnsblPty/FinInstnId/BICFI	Responsible NCB
Execution Type Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp/Evt/Prtry	Execution Type
Creditor Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Cdtr/FinInstnId/BICFI	Creditor BIC
Creditor Account Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Id/Othr/Id	Creditor Account
Type Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Tp/Prtry	Creditor Account Type. Only “CASH” allowed for RTGS
Debtor Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Dbtr/FinInstnId/BICFI	Debtor BIC
Debtor Account Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/DbtrAcct/Id/Othr/Id	Debtor 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 Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id	Request Type SDTL
Liquidity transfer Order Identification Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Id	Identification
Account Identification Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/Acct/Id/Othr/Id	Account Identification
Account owner Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrId/AcctOwnr/FinInstnId/BICFI	Account owner

MESSAGE ITEM	UTILISATION
Amount Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/Amt/AmtWthtCcy	Amount
CreditDebit Indicator Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtDbtInd	CreditDebit Indicator
Validity Period Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/VldtyPrd	Validity Period
Responsible Party Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/RspnsblPty/FinInstnId/BICFI	Responsible Party NCB
Execution Type Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/ExctnTp/Evt/Prtry	Execution Type
Creditor Account Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Id/Othr/Id	Creditor Account
Type Document/RtrStgOrdr/RptOrErr/Rpt/StgOrdrOrErr/StgOrdr/CdtrAcct/Tp/Prtry	Creditor Account Type. Only “CASH” allowed for 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 Document/RtrStgOrdr/MsgHdr/ReqTp/Prtry/Id	Request type
Code Document/RtrStgOrdr/RptOrErr/OprlErr/Err/Prtry	Specific error
Description Document/RtrStgOrdr/RptOrErr/OprlErr/Desc	Textual description in addition to the reported error

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 Document/DelStgOrdr	DCD4001 DCD4003 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 Document/DelStgOrdr/StgOrdrDtls/StgOrdr/Id	Liquidity transfer Order identification
Account Identification Document/DelStgOrdr/StgOrdrDtls/StgOrdr/Acct/Id/Othr/Id	Account 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.*

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
BICFI Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/BilLmtCtrPtyId/FinInstnId/BICFI	IIMP114
Code Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/CurLmtTp/Cd	IIMP114

MESSAGE ITEM	BUSINESS RULES
Identification Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/AcctId/Othr/Id	IIMP114
LimitCurrency Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtCcy	IIMP114
Amount Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtAmt/ImpldCcyAndAmtRg/Amt	IIMP114
FromDate 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 Document/GetLmt/MsgHdr/ReqTp/Prtry/Id	Fixed value "LIMI"
Identification Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/BilLmtCtrPtyId/FinInstnId/Othr/Id	Cash Account
Code Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/CurLmtTp/Cd	Limit type Possible values: - BILI - MULT
Identification Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/AcctId/Othr/Id	Cash account identification
LimitCurrency Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtCcy	Limit currency
LimitAmount Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtAmt	Limit amount
FromDate 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 Document/GetLmt/MsgHdr/ReqTp/Prtry/Id	Fixed value "LIMI"
BICFI Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/BilLmtCtrPtyId/FinInstnId/BICFI	Credit consumer
Code Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/CurLmtTp/Cd	Limit type Possible values: - UCDT - ACOL - EXGT
Identification Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/AcctId/Othr/Id	Cash account identification
LimitCurrency Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtCcy	Limit currency
LimitAmount Document/GetLmt/LmtQryDef/LmtCrit/NewCrit/SchCrit/LmtAmt	Limit amount
FromDate 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.

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.*

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 Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/SysId/MktInfrstrctrId/Prtry	NCB responsible for account owner
Identification Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/BilLmtCtrPtyId/FinInstnId/Othr/Id	Cash Account
Code Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/Tp/Cd	Limit type Possible values: - BILI - MULT
BICFI Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/AcctOwnr/FinInstnId/BICFI	Account owner

MESSAGE ITEM	UTILISATION
Identification Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/AcctId/Othr/Id	Cash account identification
AmountWithCurrency Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtOrErr/Lmt/Amt/AmtWthCcy	Limit amount
Date 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 Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/SysId/MktInfrstrctrId/Prtry	NCB responsible for account owner
Identification Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/BilLmtCtrPtyId/FinInstnId/BICFI	Credit consumer
Code Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/Tp/Cd	Limit type Possible values: - UCDT - ACOL - EXGT
BICFI Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/AcctOwnr/FinInstnId/BICFI	Account owner
Identification Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtId/AcctId/Othr/Id	Cash account identification
AmountWithCurrency Document/RtrLmt/RptOrErr/BizRpt/CurLmt/LmtOrErr/Lmt/Amt/AmtWthCcy	Limit amount
Date 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

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 Document/ModfyLmt/LmtDtls/LmtId/Dflt	IIMP199
Identification Document/ModfyLmt/LmtDtls/LmtId/Dflt/SysId/MktInfrstrctrId/Prtry	DRU9001 DRU9003
Identification Document/ModfyLmt/LmtDtls/LmtId/Dflt/BilLmtCtrPtyId/FinInstnId/BICFI	DRU9001 DRU9003
Account owner Document/ModfyLmt/LmtDtls/LmtId/Dflt/AcctOwnr/FinInstnId/BICFI	DRU9001 DRU9003
Account identification Document/ModfyLmt/LmtDtls/LmtId/Dflt/AcctId/Othr/Id	DRU9001 DRU9003
Amount Document/ModfyLmt/LmtDtls/NewLmtValSet/Amt/AmtWthCcy	DRU9055 DRU9056 DRU9150 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 Document/ModfyLmt/LmtDtls/LmtId/Dflt/SysId/MktInfrstrctrId/Prtry	NCB BIC
Identification Document/ModfyLmt/LmtDtls/LmtId/Dflt/BilLmtCtrPtyId/FinInstnId/Othr/Id	Cash Account as Bilateral Limit Counterparty Identification
Type /Document/ModfyLmt/LmtDtls/LmtId/Dflt/Tp/Cd	Limit Type. Possible values: - BILI - MULT

MESSAGE ITEM	UTILISATION
Account owner Document/ModfyLmt/LmtDtls/LmtId/Dflt/AcctOwnr/FinInstnId/BICFI	Account owner
Account identification Document/ModfyLmt/LmtDtls/LmtId/Dflt/AcctId/Othr/Id	Account identifier
Valid From Document/ModfyLmt/LmtDtls/NewLmtValSet/StartDtTm/Dt	Valid From
Amount Document/ModfyLmt/LmtDtls/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 Document/ModfyLmt/LmtDtls/LmtId/Dflt/SysId/MktInfrstrctrId/Prtry	NCB BIC
Identification Document/ModfyLmt/LmtDtls/LmtId/Dflt/BilLmtCtrPtyId/FinInstnId/BICFI	BIC as Bilateral Limit Counterparty Identification
Type Document/ModfyLmt/LmtDtls/LmtId/Dflt/Tp/Cd	Limit Type Possible values: - UCDT - ACOL - EXGT
Account owner Document/ModfyLmt/LmtDtls/LmtId/Dflt/AcctOwnr/FinInstnId/BICFI	Account owner
Account identification Document/ModfyLmt/LmtDtls/LmtId/Dflt/AcctId/Othr/Id	Account identifier
Valid From Document/ModfyLmt/LmtDtls/NewLmtValSet/StartDtTm/Dt	Valid From
Amount Document/ModfyLmt/LmtDtls/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
Identification Document/ModfyLmt/LmtDtls/LmtId/Dflt/BilLmtCtrPtyId/FinInstnId/BICFI	BIC of the TIPS CMB user
Type Document/ModfyLmt/LmtDtls/LmtId/Dflt/Tp/Cd	Limit Type Possible values: - INBI
Account owner Document/ModfyLmt/LmtDtls/LmtId/Dflt/AcctOwnr/FinInstnId/BICFI	BIC of the Account owner referenced by the TIPS CMB
Account identification Document/ModfyLmt/LmtDtls/LmtId/Dflt/AcctId/Othr/Id	Identification of the account linked to the referenced CMB
Valid From Document/ModfyLmt/LmtDtls/NewLmtValSet/StartDtTm/Dt	Valid From
Amount Document/ModfyLmt/LmtDtls/NewLmtValSet/Amt/AmtWthCcy	Amount

Usage case example: *TIPSUpdateLimit_*example.xml

In this example a CB with BIC “BITAITRRXXX” requests the update of Indirect Bilateral limit set for the account “ACC001” (owned to the PB “UNCRITMMXXX”) for CMB user.

3.1.1.8. DeleteLimit (camt.012)

3.1.1.8.1Overview 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;*

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 Document/DelLmt/LmtDtls/CurLmtId/SysId/MktInfrstrctrId/Prtry	DRD9001 DRD9003
Identification Document/DelLmt/LmtDtls/CurLmtId/BilLmtCtrPtyId/FinInstnId/BICFI	DRD9001 DRD9003
Type Document/DelLmt/LmtDtls/CurLmtId/Tp/Cd	DRD9003
Account owner Document/DelLmt/LmtDtls/CurLmtId/AcctOwnr/FinInstnId/BICFI	DRD9001 DRD9003
Account Identification Document/DelLmt/LmtDtls/CurLmtId/AcctId/Othr/Id	DRD9003

3.1.1.8.3The 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 Document/DelLmt/LmtDtls/CurLmtId/SysId/MktInfrstrctrId/Prtry	NCB BIC
Identification Document/DelLmt/LmtDtls/CurLmtId/BilLmtCtrPtyId/FinInstnId/Othr/Id	Cash Account as Bilateral Limit Counterparty Identification
Type Document/DelLmt/LmtDtls/CurLmtId/Tp/Cd	Limit Type Possible values: - BILI - MULT
Account owner Document/DelLmt/LmtDtls/CurLmtId/AcctOwnr/FinInstnId/BICFI	Account owner
Account Identification Document/DelLmt/LmtDtls/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 Document/DelLmt/LmtDtls/CurLmtId/SysId/MktInfrstrctrId/Prtry	NCB BIC
Identification Document/DelLmt/LmtDtls/CurLmtId/BilLmtCtrPtyId/FinInstnId/BICFI	BICas Bilateral Limit Counterparty Identification
Type Document/DelLmt/LmtDtls/CurLmtId/Tp/Cd	Limit Type Possible values: - UCDT - ACOL - EXGT
Account owner Document/DelLmt/LmtDtls/CurLmtId/AcctOwnr/FinInstnId/BICFI	Account owner
Account Identification Document/DelLmt/LmtDtls/CurLmtId/AcctId/Othr/Id	Account identifier

Usage case example: *CRDMDeleteLimit*_example.xml

In this example a CB with BIC “BITAITRRXXX” requests the deletion of the Auto-collateralization limit set for payment bank identified with BIC “UNCRITMMXXX” owning the cash account identified with “ACC001”.

3.1.1.9. ModifyReservation (camt.048)

3.1.1.9.1Overview 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;
- 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 Document/ModfyRsvatn	DCU7001 DCU7006
Default Document/ModfyRsvatn/RsvatnId/Dflt	IIMP199
Account Document/ModfyRsvatn/RsvatnId/Dflt/AcctId/Othr/Id	DCU7002

3.1.1.9.3The 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 Document/ModfyRsvatn/RsvatnId/Dflt/Tp/Cd	Possible values: - HPAR - UPAR - CARE
Account Identification Document/ModfyRsvatn/RsvatnId/Dflt/AcctId/Othr/Id	Cash Account to which the reservation applies
New reservation amount Document/ModfyRsvatn/NewRsvatnValSet/Amt/AmtWthCcy	New reservation amount required “Value “0” deletes the reservation”
Start Date Document/ModfyRsvatn/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)

3.1.1.10.1Overview 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 DirectDebitMandateReport is sent in response to the DirectDebitMandateQuery(camt.099) message.

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 Document/Rct/RctDtls/OrgnlMsgId/MsgId	Copy of BAH MsgId of incoming message.
Status Document/Rct/RctDtls/ReqHdlg/StsCd	Possible values: - LTOC - for Completed: - LTOQ - for Queued; - LTOR - for Rejected.

Usage case example: *Liquidity transferOrdernotification*_example.xml

In this example, the recipient is notified about the succesfull 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 Document/Rct/RctDtls/OrgnlMsgId/MsgId	Copy of BAH MsgId of incoming message.
Status Document/Rct/RctDtls/ReqHdlg/StsCd	Possible values: - LIMC - for Completed: - LIMQ - for Queued; - 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 Document/Rct/RctDtls/OrgnlMsgId/MsgId	Copy of BAH MsgId of incoming message.
Status Document/Rct/RctDtls/ReqHdlg/StsCd	Possible values: - RSVC - for Completed: - RSVQ - for Queued; - 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)

3.1.1.11.1Overview 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 serach 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 Document/DrctDbtMndtQry/SchCrit/Cdtr/Id/Id/AnyBIC	DCR8002
Cash Account 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 Document/DrctDbtMndtQry/SchCrit/Cdtr/Id/Id/AnyBIC	Creditor
Responsible Party Document/DrctDbtMndtQry/SchCrit/Cdtr/RspnsblPtyId/Id/AnyBIC	NCB
Cash Account Document/DrctDbtMndtQry/SchCrit/CshAcct/Othr/Id	Account
Direct Debit Mandate Reference Document/DrctDbtMndtQry/SchCrit/DrctDbtMndtRef	Direct Debit Mandate Reference
Service Document/DrctDbtMndtQry/SchCrit/Svc/SysId/MktInfrstrctrId/Prtry	Service

Usage case example: *Direct Debit MandateQuery*_example.xml

3.1.1.12. DirectDebitMandateReport (camt.100)

3.1.1.12.1Overview 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 Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/Svc/SysId/MktInfrstrctrId/Prtry	Service
Creditor Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/Cdtr/Id/Id/AnyBIC	Creditor
Responsible Party Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/Cdtr/RspnsblPtyId/Id/AnyBIC	NCB
Cash Account Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/CshAcct/Othr/Id	Account
Amount Type Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/MaxAmt/Tp/Prtry	Amount Type
Amount Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/MaxAmt/Amt	Amount
Direct Debit Mandate Reference Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/DrctDbtMndtRef	Direct Debit Mandate Reference
Valid From Document/DrctDbtMndtRpt/RptOrErr/DrctDbtMndtRpt/MndtOrErr/DrctDbtMndt/VldFr/DtTm	Valid From
Valid To 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 Document/DrctDbtMndtRpt/RptOrErr/OprlErr/Err/Prtry	Specific error
Description Document/DrctDbtMndtRpt/RptOrErr/OprlErr/Desc	Textual description in addition to the reported error

Usage case example: *DirectDebitMandateReportReport*_example.xml

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. 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).

AccountServicerIdentification

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;
- 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.025.001.02

Business rules applicable to the schema

MESSAGE ITEM	BUSINESS RULES
Identification Document/AcctQryList/AcctSchCrit/Id/Othr/Id	IIMP054 IIMP056
Type Document/AcctQryList/AcctSchCrit/Tp/Prtry	IIMP054 IIMP056
Currency Document/AcctQryList/AcctSchCrit/Ccy	IIMP054 IIMP055 IIMP056 IIMP057
ClosingDate Document/AcctQryList/AcctSchCrit/ClsgDt	IIMP054 IIMP056

MESSAGE ITEM	BUSINESS RULES
OpeningDate Document/AcctQryList/AcctSchCrit/OpngDt	IIMP054 IIMP056
Identification Document/AcctQryList/AcctSchCrit/RefAcctId/Othr/Id	IIMP054 IIMP056
BIC Document/AcctQryList/AcctSchCrit/AcctOwnr/AnyBIC	IIMP054 IIMP056
Identification Document/AcctQryList/AcctSchCrit/Prtry/Id	IIMP054 IIMP056 IIMP057 IIMP064 IIMP065 IIMP087
SchemeName Document/AcctQryList/AcctSchCrit/Prtry/SchmeNm	IIMP087

3.1.2.1.3The 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 Document/AcctQryList/AcctSchCrit/Id/Othr/Id	Account identifier
Type Document/AcctQryList/AcctSchCrit/Tp/Prtry	Account type
Currency Document/AcctQryList/AcctSchCrit/Ccy	Currency code
ClosingDate Document/AcctQryList/AcctSchCrit/ClsgDt	Closing date
OpeningDate Document/AcctQryList/AcctSchCrit/OpngDt	Opening date
Proprietary Document/AcctQryList/AcctSchCrit/Prtry	BIC of the NCB Party Type Request Type - Fixed value "CASH"
BIC 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 mist be provided.

MESSAGE ITEM	UTILISATION
Currency Document/AcctQryList/AcctSchCrit/Ccy	Currency code
Proprietary Document/AcctQryList/AcctSchCrit/Prtry	BIC of the NCB Party Type Request Type - Fixed value "LIST"
BIC 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.

3.1.2.2. AccountListReport (acmt.026)

3.1.2.2.1Overview 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 information, in the following message usages:

- Cash Account Reference Data Query Response;
- Cash Account List Query Response.

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 Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Id/Othr/Id	Account identifier
Type Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Tp/Prtry	Account type
Currency Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Ccy	Currency code
FloorNotificationAmount Document/AcctListRpt/RptOrErr/AcctRpt/Acct/FlrNtfctnAmt	Floor notification amount
CeilingNotificationAmount Document/AcctListRpt/RptOrErr/AcctRpt/Acct/ClngNtfctnAmt	Ceiling notification amount
ClosingDate Document/AcctListRpt/RptOrErr/AcctRpt/Acct/ClsgDt	Closing Date
Restriction Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Rstrctn	Account restriction
OpeningDate Document/AcctListRpt/RptOrErr/AcctRpt/Acct/OpngDt	Opening date

MESSAGE ITEM	UTILISATION
ReferenceAccount Document/AcctListRpt/RptOrErr/AcctRpt/RefAcct/Id/Othr/Id	Linked account reference
Type Document/AcctListRpt/RptOrErr/AcctRpt/RefAcct/Tp/Prtry	Linked account type, only “CASH” for RTGS/CLM
AccountOwner Document/AcctListRpt/RptOrErr/AcctRpt/AcctOwnr/AnyBIC	Account owner
Proprietary 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 Document/AcctListRpt/RptOrErr/Err/Err/Prtry	Specific error code
Description 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 Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Id/Othr/Id	Account identifier
Currency Document/AcctListRpt/RptOrErr/AcctRpt/Acct/Ccy	Currency code
AccountOwner Document/AcctListRpt/RptOrErr/AcctRpt/AcctOwnr/AnyBIC	Account owner
Proprietary 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 Document/AcctListRpt/RptOrErr/Err/Err/Prtry	Specific error code
Description 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.

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) and AccountRequestAcknowledgement (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.

AccountServicerIdentification

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 mandatory. 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 Document/AcctOpngReq/Acct/Id/Othr/Id	DCC1103 DCC1216 DCC1532 DCC1534 DCC1533 DCC1535
Proprietary Document/AcctOpngReq/Acct/Tp/Prtry	DCC1530 DCC1531 DCC1536
Currency Document/AcctOpngReq/Acct/Ccy	DCC1100 DCC1207
FloorNotificationAmount Document/AcctOpngReq/Acct/FlrNtfctnAmt	DCC1101 DCC1800
CeilingNotificationAmount Document/AcctOpngReq/Acct/ClngNtfctnAmt	DCC1101 DCC1800
ClosingDate Document/AcctOpngReq/Acct/ClsgDt	DCC1210
Code Document/AcctOpngReq/Acct/Rstrctn/RstrctnTp/Cd	DCC1024 DCC1300
ValidFrom Document/AcctOpngReq/Acct/Rstrctn/VldFr	DCC1025 DCC1212 DCC1208 DCC1300 DCC1601
ValidUntil Document/AcctOpngReq/Acct/Rstrctn/VldUntil	DCC1212 DCC1209

MESSAGE ITEM	BUSINESS RULES
	DCC1300
TargetGoLiveDate Document/AcctOpngReq/CtrctDts/TrgtGoLiveDt	DCC1205
BIC Document/AcctOpngReq/AcctSvcrId/FinInstnId/BICFI	DCC1001
BIC Document/AcctOpngReq/Org/OrgId/AnyBIC	DCC1400 DCC1524 DCC1555
Identification Document/AcctOpngReq/RefAcct/Id/Othr/Id	DCC1204 DCC1206 DCC1208 DCC1217 DCC1218 DCC1219

3.1.2.3.3The 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 Document/AcctOpngReq/Acct/Id/Othr/Id	Identification of the account.
Proprietary Document/AcctOpngReq/Acct/Tp/Prtry	Account Type
Currency Document/AcctOpngReq/Acct/Ccy	Currency
FloorNotificationAmount Document/AcctOpngReq/Acct/FlrNtfctnAmt	FloorNotificationAmount
CeilingNotificationAmount Document/AcctOpngReq/Acct/ClngNtfctnAmt	CeilingNotificationAmount
ClosingDate Document/AcctOpngReq/Acct/ClsgDt	ClosingDate
Code Document/AcctOpngReq/Acct/Rstrctn/RstrctnTp/Cd	Restriction Type
ValidFrom Document/AcctOpngReq/Acct/Rstrctn/VldFr	Restriction ValidFrom
ValidUntil Document/AcctOpngReq/Acct/Rstrctn/VldUntil	Restriction ValidTo
TargetGoLiveDate Document/AcctOpngReq/CtrctDts/TrgtGoLiveDt	Start date of the operational validity of the account
BIC Document/AcctOpngReq/AcctSvcrId/FinInstnId/BICFI	Responsible NCB
BIC Document/AcctOpngReq/Org/OrgId/AnyBIC	Party opening the account
Identification Document/AcctOpngReq/RefAcct/Id/Othr/Id	Reference Account

MESSAGE ITEM	UTILISATION
Type Document/AcctOpngReq/RefAcct/Tp/Prtry	Reference Account Type: Only “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).

3.1.2.4.3The 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 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 Document/AcctReqAck/Refs/Sts	Fixed value "COMP"
Identification Document/AcctReqAck/AcctId/Id/Othr/Id	Cash account identifier
Currency 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).

3.1.2.5.3The 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 queued.

Specific message content

MESSAGE ITEM	UTILISATION
Status 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.

In response, CRDM sends an AccountRequestAcknowledgement (acmt.010) and AccountRequestAcknowledgement (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 for notifying the cash manager, the upper threshold 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.

AccountServicerIdentification

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 Document/AcctExcldMndtMntncReq/Acct/Id/Othr/Id	DCU1003 DCU1555 DCU1556 DCU1557 DCU1214
Currency Document/AcctExcldMndtMntncReq/Acct/Ccy	DCU1218
FloorNotificationAmount Document/AcctExcldMndtMntncReq/Acct/FlrNtfctnAmt	DCU1101 DCU1800
CeilingNotificationAmount Document/AcctExcldMndtMntncReq/Acct/ClngNtfctnAmt	DCU1101 DCU1800
ClosingDate Document/AcctExcldMndtMntncReq/Acct/ClsgDt	DCU1030 DCU1040 DCU1041 DCU1400 DCU1532 DCU1534 DCU1210
Code Document/AcctExcldMndtMntncReq/Acct/Rstrctn/ Rstrctn/RstrctnTp/Cd	DCU1024 DCU1216 DCU1217 DCU1300
ValidFrom Document/AcctExcldMndtMntncReq/Acct/Rstrctn/ Rstrctn/VldFr	DCU1211 DCU1219 DCU1300 DCU1600
ValidUntil Document/AcctExcldMndtMntncReq/Acct/Rstrctn/ Rstrctn/VldUntil	DCU1212 DCU1216

MESSAGE ITEM	BUSINESS RULES
	DCU1220 DCU1300 DCU1313 DCU1600
BIC Document/AcctExcldMndtMntncReq/AcctSvcrId/FinInstnId/BIC	DCU1001
BIC Document/AcctExcldMndtMntncReq/Org/OrgId/AnyBIC	DCU1001

3.1.2.6.3The 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 Document/AcctExcldMndtMntncReq/Acct/Id/Othr/Id	Identification of the account.
Currency Document/AcctExcldMndtMntncReq/Acct/Ccy	Currency
FloorNotificationAmount Document/AcctExcldMndtMntncReq/Acct/FlrNtfctnAmt	FloorNotificationAmount
CeilingNotificationAmount Document/AcctExcldMndtMntncReq/Acct/ClngNtfctnAmt	CeilingNotificationAmount
ClosingDate Document/AcctExcldMndtMntncReq/Acct/ClsgDt	ClosingDate
Code Document/AcctExcldMndtMntncReq/Acct/Rstrctn/RstrctnTp/Cd	Restriction Type
ValidFrom Document/AcctExcldMndtMntncReq/Acct/Rstrctn/VldFr	Restriction ValidFrom
ValidUntil Document/AcctExcldMndtMntncReq/Acct/Rstrctn/VldUntil	Restriction ValidTo
BIC Document/AcctExcldMndtMntncReq/AcctSvcrId/FinInstnId/BIC	Responsible NCB
BIC Document/AcctExcldMndtMntncReq/Org/OrgId/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 AccountRequestAcknowledgement (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 Document/AcctClsgReq/AcctId/Id/Othr/Id	DCD1001 DCD1003 DCD1030

MESSAGE ITEM	BUSINESS RULES
	DCD1014 DCD1300 DCD1400
RemovalIndicator Document/AcctClsgReq/CtrctDts/RmvlInd	IIMP063

3.1.2.7.3The 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 Document/AcctClsgReq/AcctId/Id/Othr/Id	Identification of the account.
RemovalIndicator Document/AcctClsgReq/CtrctDts/RmvlInd	

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)

3.1.3.1.1Overview 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 Document/PtyQry	DPR1001
Identification Document/PtyQry/MsgHdr/ReqTp/Prtry/Id	IIMP036 IIMP039 IIMP037 IIMP038 IIMP040 IIMP041
OpeningDate Document/PtyQry/SchCrit/OpngDt	IIMP036 IIMP039
ClosingDate Document/PtyQry/SchCrit/ClsgDt	IIMP036 IIMP039
Type Document/PtyQry/SchCrit/Tp	IIMP036 IIMP039 IIMP038 IIMP041
Responsible Party Document/PtyQry/SchCrit/RspnsblPtyId/Id/AnyBIC	IIMP036 IIMP039 IIMP037 IIMP038 IIMP040 IIMP041

MESSAGE ITEM	BUSINESS RULES
Identification Document/PtyQry/SchCrit/PtyId/Id/AnyBIC	IIMP036 IIMP039
RestrictionIdentification Document/PtyQry/SchCrit/RstrctnId	IIMP038 IIMP041
RestrictionIssueDate Document/PtyQry/SchCrit/RstrctnIsseDt	IIMP038 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 Document/PtyQry/MsgHdr/ReqTp/Prtry/Id	Fixed value "PYRD"
OpeningDate Document/PtyQry/SchCrit/OpngDt	Opening Date
ClosingDate Document/PtyQry/SchCrit/ClsgDt	Closing Date
Type Document/PtyQry/SchCrit/Tp	Party type
Responsible Party Document/PtyQry/SchCrit/RspnsblPtyId/Id/AnyBIC	Responsible Party BIC
Identification 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 Document/PtyQry/MsgHdr/ReqTp/Prtry/Id	Fixed value "PYLI”
Responsible Party Document/PtyQry/SchCrit/RspnsblPtyId/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 Document/PtyQry/MsgHdr/ReqTp/Prtry/Id	Fixed value "PYRS”
Type Document/PtyQry/SchCrit/Tp	Party type
Responsible Party Document/PtyQry/SchCrit/RspnsblPtyId/Id/AnyBIC	Responsible Party BIC
RestrictionIdentification Document/PtyQry/SchCrit/RstrctnId	Restriction type
RestrictionIssueDate Document/PtyQry/SchCrit/RstrctnIsseDt	Restriction issue date

Usage case example: *RestrictedPartyQuery_*example.xml

In this example a Central Bank with BIC “NCBAXXYYAAA” requests a list of the restricted parties starting from 2021-08-01.

3.1.3.2. PartyReport(reda.017)

3.1.3.2.1Overview 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 T2S in the following message usages: 22

- Party Reference Data Response;
- Party List Response;
- Restricted Party Response.

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 Document/PtyRpt/RptOrErr/PtyRpt/PtyId	Identification of the party to be reported
OpeningDate Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/OpngDt	Opening date for the party
ClosingDate Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/ClsgDt	Closing date for the party
Type Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Tp/Cd	Party type
TechnicalAddress Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/TechAdr/TechAdr	Technical addresses for the party
Identification Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/ PtyId /Id/Id	Party code for the party
Name Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Nm	Long and short names for the party
Address Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Adr	Address for the party
Restriction 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 Document/PtyRpt/RptOrErr/OprlErr/Err/Prtry	Specific error code
Description Document/PtyRpt/RptOrErr/OprlErr/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 Document/PtyRpt/RptOrErr/PtyRpt/PtyId	Identification of the party to be reported
Name 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 Document/PtyRpt/RptOrErr/PtyRpt/PtyId	Identification of the party to be reported
Type Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Tp/Cd	Party type
Restriction Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Rstrctn	Restrictions issued on the party
Valid From Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Rstrctn/VldFr	Restricted on date
Type Document/PtyRpt/RptOrErr/PtyRpt/PtyOrErr/SysPty/Rstrctn/Tp	Restriction type

Usage case example: Restricted*PartyResponse*_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)

3.1.3.3.1Overview 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 Document/CshAcctAudtTrlQry	DRRI001 DRRI002
Cash Account Identification Document/CshAcctAudtTrlQry/SchCrit/CshAcctId/Id/Othr/Id	IIMP073
Date period 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 Document/CshAcctAudtTrlQry/SchCrit/CshAcctId/Id/Othr/Id	Cash Account Identification
Date period 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)

3.1.3.4.1Overview 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 Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/FldNm	Field Name
Old Field Value Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/OdFldVal	Old Field Value
New Field Value Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/NewFldVal	New Field Value
Timestamp Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/OprTmStmp	Timestamp
Instructing User Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/InstgUsr	Instructing User
Approving User Document/CshAcctAudtTrlRpt/RptOrErr/CshAcctAudtTrlRpt/CshAcctAudtTrlOrErr/AudtTrl/ApprvgUsr	Approving User
Account Identification 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 Document/CshAcctAudtTrlRpt/RptOrErr/OprlErr/Err/Prtry	Specific error code
Description 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)

3.1.3.5.1Overview 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 Document/PtyAudtTrlQry	DRRI001 DRRI002
Party Identification Document/PtyAudtTrlQry/SchCrit/PtyId/Id/Id/AnyBIC	IIMP070
Date period 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 Document/PtyAudtTrlQry/SchCrit/PtyId/Id/Id/AnyBIC	Party Identification
Responsible Party identification Document/PtyAudtTrlQry/SchCrit/PtyId/RspnsblPtyId/Id/Id/AnyBIC	Responsible Party Identification
Date period 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)

3.1.3.6.1Overview 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.

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.

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.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 Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/Rcrd/Othr/FldNm	Field Name
Old Field Value Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/Rcrd/Othr/OdFldVal	Old Field Value
New Field Value Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/Rcrd/Othr/NewFldVal	New Field Value
Timestamp Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/OprTmStmp	Timestamp
Instructing User Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/InstgUsr	Instructing User
Approving User Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyAudtTrlOrErr/AudtTrl/ApprvgUsr	Approving User
Party Identification Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyId/Id/Id/AnyBIC	Party Identification
Responsible Party Identification Document/PtyAudtTrlRpt/RptOrErr/PtyAudtTrlRpt/PtyId/RspnsblPtyId/IdIAnyBIC	Responsible Party BIC

The returned data in case of an error response is listed below:

MESSAGE ITEM	UTILISATION
Proprietary Document/PtyAudtTrlRpt/RptOrErr/OprlErr/Err/Prtry	Specific error code
Description Document/PtyAudtTrlRpt/RptOrErr/OprlErr/Desc	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)

3.1.3.7.1Overview 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 serach 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
CaendarQuery Document/CalQry	QMPC100 QMPC104
Search Criteria Document/CalQry/SchCrit	QMPC101
Year Document/CalQry/SchCrit/Yr	QMPC103

MESSAGE ITEM	BUSINESS RULES
Month Document/CalQry/SchCrit/Mnth	QMPC103
Service Document/CalQry/SchCrit/Svc/SysId/MktInfrstrctrId/Prtry	QMPC102
Currency Document/CalQry/SchCrit/Svc/SysCcy	QMPC102

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 Document/CalQry/SchCrit/Yr	Year
Month Document/CalQry/SchCrit/Mnth	Month
Service Document/CalQry/SchCrit/Svc/SysId/MktInfrstrctrId/Prtry	Service
Currency Document/CalQry/SchCrit/Svc/SysCcy	Currency of the Service for which the Calendar is requested.

Usage case example: *Calendar Query*_example.xml

3.1.3.8. CalendarReport(reda.065)

3.1.3.8.1Overview 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 Document/CalRpt/RptOrErr/CalRpt/CalOrErr/CalData/SysDt	Date
Status Document/CalRpt/RptOrErr/CalRpt/CalOrErr/CalData/SysSts/Cd	Status
Service Document/CalRpt/RptOrErr/CalRpt/Svc/SysId/MktInfrstrctrId/Prtry	Service
Currency	Currency of the

MESSAGE ITEM	UTILISATION
Document/CalRpt/RptOrErr/CalRpt/Svc/SysCcy	Service for which the Calendar is returned.

The returned data in case of an error response is listed below:

MESSAGE ITEM	UTILISATION
Proprietary Document/CalRpt/RptOrErr/OprlErr/Err/Prtry	Specific error
Description Document/CalRpt/RptOrErr/OprlErr/Desc	Textual description in addition to the reported error

Usage case example: *CalendarReport_*example.xml

3.1.3.9. PartyCreationRequest(reda.014)

3.1.3.9.1Overview 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 Document/PtyCreReq	DPC1001
ValidFrom Document/PtyCreReq/Pty/PtyId/Id/VldFr	DPC1300
Identification Document/PtyCreReq/Pty/PtyId/Id/Id/AnyBIC	DPC1013 DPC1180
Address Document/PtyCreReq/Pty/Adr	DPC1305 IIMP132
Country Document/PtyCreReq/Pty/Adr/Ctry	DPC1021
Valid From Document/PtyCreReq/Pty/Adr/VldFr	DPC1301
OpeningDate Document/PtyCreReq/Pty/OpngDt	DPC1205
ClosingDate Document/PtyCreReq/Pty/ClsgDt	DPC1206
Type Document/PtyCreReq/Pty/Tp/Cd	DPC1002 DPC1305 IIMP132 DPC1005
Value Document/PtyCreReq/Pty/MktSpcfcAttr/Val	DPC1252 DPC1254 DPC1256 DPC1257
ValidFrom Document/PtyCreReq/Pty/Nm/VldFr	DPC1302
ValidFrom Document/PtyCreReq/Pty/Rstrctn/VldFr	DPC1208 DPC1600
ValidTo Document/PtyCreReq/Pty/Rstrctn/VldTo	DPC1207
Type Document/PtyCreReq/Pty/Rstrctn/Tp	DPC1024 DPC1025

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 Document/PtyCreReq/Pty/PtyId/Id/VldFr	Identification Valid From
Identification Document/PtyCreReq/Pty/PtyId/Id/Id/AnyBIC	Party BIC

MESSAGE ITEM	UTILISATION
LEI Document/PtyCreReq/Pty/PtyId/Id/LEI	LEI
Address Document/PtyCreReq/Pty/Adr	Party Address
Country Document/PtyCreReq/Pty/Adr/Ctry	Country
Valid From Document/PtyCreReq/Pty/Adr/VldFr	Address Valid From
OpeningDate Document/PtyCreReq/Pty/OpngDt	Party Opening Date
ClosingDate Document/PtyCreReq/Pty/ClsgDt	Party Closing Date
Type Document/PtyCreReq/Pty/Tp/Cd	Party Type
ValidFrom Document/PtyCreReq/Pty/Nm/VldFr	Party Name Valid From
Name Document/PtyCreReq/Pty/Nm/Nm	Party name
Short Name Document/PtyCreReq/Pty/Nm/ShrtNm	Party name
ValidFrom Document/PtyCreReq/Pty/Rstrctn/VldFr	Restriction Valid From
ValidTo Document/PtyCreReq/Pty/Rstrctn/VldTo	Restriction Valid To
Type 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)

3.1.3.10.1Overview 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 Document/PtyStsAdvc/PtySts/Sts	Fixed value "REJT"
StatusReason	Details for reason

MESSAGE ITEM	UTILISATION
Document/PtyStsAdvc/PtySts/StsRsn	

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 Document/PtyStsAdvc/PtySts/Sts	Fixed value "QUED"
StatusReason 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 Document/PtyStsAdvc/PtySts/Sts	Fixed value "COMP"
SystemPartyIdentification Document/PtyStsAdvc/PtySts/SysPtyId	Identification of the party involved in the 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)

3.1.3.11.1Overview 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 Document/PtyModReq	DPU1001 DXAA007
SystemPartyIdentification Document/PtyModReq/SysPtyId	DPU1003
ScopeIndication Document/PtyModReq/Mod/ScpIndctn	IIMP101
OpeningDate Document/PtyModReq/Mod/ReqdMod/SysPtyDt/OpngDt	DPU1206 IIMP106
ClosingDate Document/PtyModReq/Mod/ReqdMod/SysPtyDt/ClsgDt	DPU1205 DPU1030 IIMP106
PartyIdentification Document/PtyModReq/Mod/ReqdMod/PtyId	DPU1005 DPU1010 DPU1501
ValidFrom Document/PtyModReq/Mod/ReqdMod/PtyId/VldFr	DPU1009 IIMP107
PartyBIC Document/PtyModReq/Mod/ReqdMod/PtyId/Id/Id/AnyBIC	DPU1013 DPU1180 DPU1350 DPU1351
PartyName Document/PtyModReq/Mod/ReqdMod/PtyNm	DPU1005 DPU1010 DPU1500
ValidFrom Document/PtyModReq/Mod/ReqdMod/PtyNm/VldFr	DPU1009 IIMP108
TechnicalAddress Document/PtyModReq/Mod/ReqdMod/TechAdr	DPU1005 IIMP101 IIMP110 DPU1007
PartyAddress Document/PtyModReq/Mod/ReqdMod/PtyAdr	DPU1005 DPU1010 DPU1305 DPU1500
Country Document/PtyModReq/Mod/ReqdMod/PtyAdr/Ctry	DPU1021
ValidFrom Document/PtyModReq/Mod/ReqdMod/PtyAdr/VldFr	DPU1009 IIMP109
SystemRestriction DocumentDocumentDocument/PtyModReq/Mod/ReqdMod/SysRstrctn	DPU1025
ValidFrom Document/PtyModReq/Mod/ReqdMod/SysRstrctn/VldFr	IIMP104 DPU1208 DPU1300 DPU1600
ValidTo Document/PtyModReq/Mod/ReqdMod/SysRstrctn/VldTo	DPU1207 DPU1300 DPU1600

MESSAGE ITEM	BUSINESS RULES
Type Document/PtyModReq/Mod/ReqdMod/SysRstrctn/Tp	DPU1024 DPU1300 IIMP104
Name Document/PtyModReq/Mod/ReqdMod/MktSpcfcAttr/Nm	DPU1252 DPU1255 DPU1258 IIMP105
Value Document/PtyModReq/Mod/ReqdMod/MktSpcfcAttr/Val	DPU1254 DPU1256 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 Document/PtyModReq/SysPtyId	Party Identification
ScopeIndication Document/PtyModReq/Mod/ScpIndctn	Modification request type
OpeningDate Document/PtyModReq/Mod/ReqdMod/SysPtyDt/OpngDt	Party Opening Date
ClosingDate Document/PtyModReq/Mod/ReqdMod/SysPtyDt/ClsgDt	Party Closing Date
ValidFrom Document/PtyModReq/Mod/ReqdMod/PtyId/VldFr	Party Identification Valid From
Identification Document/PtyModReq/Mod/ReqdMod/PtyId/Id/Id/AnyBIC	Party Identification
LEI Document/PtyModReq/Mod/ReqdMod/PtyId/Id/LEI	LEI
ValidFrom Document/PtyModReq/Mod/ReqdMod/PtyNm/VldFr	Party Name Valid From
TechnicalAddress Document/PtyModReq/Mod/ReqdMod/TechAdr	Technical Address
PartyAddress Document/PtyModReq/Mod/ReqdMod/PtyAdr	Postal Address
Country Document/PtyModReq/Mod/ReqdMod/PtyAdr/Ctry	Country
ValidFrom Document/PtyModReq/Mod/ReqdMod/PtyAdr/VldFr	Party Address Valid From
ValidFrom Document/PtyModReq/Mod/ReqdMod/SysRstrctn/VldFr	Restriction Valid From
ValidTo Document/PtyModReq/Mod/ReqdMod/SysRstrctn/VldTo	Restriction Valid To
Type	Restriction Type

MESSAGE ITEM	UTILISATION
Document/PtyModReq/Mod/ReqdMod/SysRstrctn/Tp	
Name Document/PtyModReq/Mod/ReqdMod/MktSpcfcAttr/Nm	Market Specific Attribute Name
Value 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)

3.1.3.12.1Overview 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 Document/PtyDeltnReq	DPD1001
RelatedPartyIdentification Document/PtyDeltnReq/SysPtyId//Id/Id/AnyBIC	DPD1003 DPD1030 DPD1300
ResponsiblePartyIdentification Document/PtyDeltnReq/SysPtyId/RspnsblPtyId/Id/AnyBIC	DPD1003 DPD1030 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 Document/PtyDeltnReq/SysPtyId//Id/Id/AnyBIC	Party BIC
ResponsiblePartyIdentification 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".

3.1.4. 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 Document/AppHdr	ICSA004 IICP001 IICP002 ICSA005 IIMP097 IIMP098 IIMP099 IIMP066 IIMS001
BICFI Document/AppHdr/Fr/FIId/FinInstnId/BICFI	IIMP120
MemberIdentification Document/AppHdr/Fr/FIId/FinInstnId/ClrSysMmbId/MmbId	ICSA002 ICSA003 ICSA012 ICSA013 ICSA009
Identification Document/AppHdr/Fr/FIId/FinInstnId/Othr/Id	IIMP120
BusinessMessageIdentifier Document/AppHdr/BizMsgIdr	ICSA009
MessageDefinitionIdentifier Document/AppHdr/MsgDefIdr	IIMP089
Signature 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 Document/Xchg	IIFV001 IIFV008 ICSA004 ICSA005 ICSA012
PayloadIdentifier Document/Xchg/PyldDesc/PyldDtls/PyldIdr	IIFV007
SystemUser Document/Xchg/PyldDesc/ApplSpcfcInf/SysUsr	ICSA013 ICSA002 ICSA003
XMLSignatures Document/Xchg/PyldDesc/ApplSpcfcInf/Sgntr	ICSA013 ICSA011 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 (NCBAXXYYAAA) 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.

3.1.5.1.1Schema

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).

3.1.5.1.2The 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 Document/RctAck/Rpt/RltdRef/Ref	Copy of BAH BizMSgIdr of incoming message If the BAH BizMsgIdr of the incoming message cannot be identified, this field will contain "NONREF".
Status Code Document/RctAck/Rpt/ReqHdlg/StsCd	Status Code specifiing the error.
Description 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 imput 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 Document/RctAck/Rpt/RltdRef/Ref	Copy of BAH BizMSgIdr of incoming message If the BAH BizMsgIdr of the incoming message cannot be identified, this field will contain "NONREF".
Status Code Document/RctAck/Rpt/ReqHdlg/StsCd	Status code "I001"
Description 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 window is running and the query has to be queued.

4. Data Migration Tool Files

4.1. Introduction

The Data Migration Tool (DMT) offers National 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[39]
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.

[39] 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: • true • false	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[40]. 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:

40 Currently, character « quote » is not allowed. See chapter ~~3.2.1.10~~ 4.2.1.10 for details. Please note that the CSV format definition is independent from the character set.

Carriage Return (CR)	0x0d
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 column	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 - 4.5.3.16 DN-BIC Routing.	Occurs in the 2nd 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: • PMBK • ANSY	Classification of the party: • PMBK = Payment bank • ANSY = Ancillary System			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	
11	K	Street	VARCHAR (70)	Name of the street for the address.			1..1
12	L	House Number	VARCHAR (16)	House number for the address.			1..1
13	M	Postal Code	VARCHAR (16)	Postal code for the address.			1..1
14	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”					This group is defined for keeping backward compatibility with T2S. It is not used in TIPS.	0..1	
18	R	Collateralisation Procedure	Possible value: • REPO	Type of collateralisation procedure application. Possible value: • 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.		0..1
Group “Party Contact”						0..10	
26	Z	Contact Name	VARCHAR(140)	Name of the contact.			1..1
27	AA	Contact Position	VARCHAR(35)	Position of the contact.			1..1

28	A B	Valid From	DATE	Starting validity date of a contact.	Must be equal or greater than the current date		1..1
29	A C	Valid To	DATE	Ending validity date of a contact	Must be equal or greater than the Valid From.		0..1
30	A D	Office Telephone Number	VARCHAR(35)	Office telephone number of a contact.			0..1
31	A E	Mobile Number	VARCHAR(35)	Mobile number of a contact.			0..1
32	A F	E-mail address	VARCHAR(2048)	E-mail address of a contact.			0..1

4.5.3.2. 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 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.	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 interoperability character set restriction does not apply	1..1	
6	F	Network Service	VARCHAR (35)			1..1	

4.5.3.3. User - New

- Record Type: “User”

The record is used to create a user.

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.	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. Date and time cannot be specified when “Lockout” = false. Date and time are mandatory when “Lockout” = true		0..1
7	G	Lockout From Time	TIME				0..1
8	H	Lockout	BOOLEAN	• true = The user cannot enter the system after the Lockout From Date and Time			1..1
Group “Party”						1..1	
9	I	Parent BIC	CHAR (11)	Party parent BIC.			
10	J	BIC	CHAR (11)	Party BIC.			1..1

4.5.3.4. Roles - New

- Record Type: “Role”

The record is used to create a role.

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.	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

4.5.3.5. Grant Roles - New

- Record Type: “Grant Role”

The record is used to grant a role to a party and/or a user.

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.	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”					Mandatory if group “Party” is not specified, Not allowed otherwise.	0..1	
4	D	User	VARCHAR (35)	Login name of the user.			1..1
Group “Party”					Mandatory if group “User” is not specified. Not allowed otherwise.	0..1	
5	E	Parent BIC	CHAR (11)	Parent BIC of the party.			1..1
6	F	BIC	CHAR (11)	BIC of the party.			1..1

4.5.3.6. Grant System Privilege - New

- Record Type: “Grant System Privilege”

The record is used to grant a system privilege to a role.

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.	Must occur in each line of the record.	1..n	
Group “Role”						1	
3	C	Role Name	VARCHAR (35)	Name of the role.			1..1
Group “Party”					This group is defined for keeping backward compatibility with T2S. It is not allowed in TIPS.	0	
4	D	Parent BIC	CHAR (11)	Parent BIC of the party.			0
5	E	BIC	CHAR (11)	BIC of the party.			0
Group “User”					This group is defined for keeping backward compatibility with T2S. It is not allowed in TIPS.	0	
6	F	User	VARCHAR (35)	Login name of the user.			0
Group “Privilege”						1..1	
7	G	Privilege Name	VARCHAR (35)	Name of the system privilege.	EPC SCT Inst interoperability character set restriction does not apply		1..1
8	H	Deny Option	BOOLEAN	• true = The system privilege is explicitly denied • false = The system privilege is explicitly assigned			1..1
9	I	4-Eyes Option	BOOLEAN	• true = The 4-eyes principle is required to perform the activity linked to the system privilege			1..1

				• false = The 2-eyes principle is required to perform the activity linked to the system privilege			
10	J	Administration Option	BOOLEAN	• 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. • 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.			1..1

4.5.3.7. 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 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.	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	• true = The message subscription rule set must be used in positive way • false = The message subscription rule set must be used in negative way			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

4.5.3.8. 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 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.	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. Allowed values for T2S are: • INTP (Instruction Type) • MXST (Message Status) • PART (PARTY) • SACC (Securities Account) • ISIN • CASH (T2S DCA) • INST (Instruction Status) • TRCD (Transaction				1..1

			Code) • CURR (Currency) • AMFL (Already Matched Flag) • MXID (Message Identification) • SECO (Settlement Transaction Condition Code) • BUPA (Business Sending Party) • BUSE (System User Reference) • INPA (Instructing Party) Allowed values for CLM/RTGS are: • INTP (Message Type) • CASH (Cash Account) • CRDB (Debit/Credit Indicator) • MABI (Multi-addressee BIC) • BUCA (Business Case) • PRTY (Priority) • UMTP (Underlying Message Type) Allowed values for TIPS are: • INTP (Message Type) • CASH (TIPS Account) • CRDB				

			(Debit/Credit Indicator)				
9	I	Parameter Type Value	VARCHAR (35)	Value for the parameter type	Mandatory when Parameter Type Name is: INTP, MXST, INST, TRCD, CURR, AMFL, MXID, SECO, BUSE,CRDB,MABI,BUCA,PRTY,UMTP; not allowed otherwise When Parameter Type Name is "CRDB", possible values are: CRDT – Credit DBIT – Debit		0
10	J	Parameter Parent BIC Identifier	CHAR(11)		Mandatory when Parameter Type Name is: PART Not allowed otherwise.		0
11	K	Parameter Party BIC Identifier	CHAR(11)		Mandatory when Parameter Type Name is: PART Not allowed otherwise.		0
12	L	Parameter Securities Account Identifier	VARCHAR(35)		Mandatory when Parameter Type Name is: SACC Not allowed otherwise.		0
13	M	Parameter Securities Identifier	CHAR(12)		Mandatory when Parameter Type Name is: ISIN Not allowed otherwise.		0
14	N	Parameter Cash Account Identifier	VARCHAR(34)		Mandatory when Parameter Type Name is: CASH Not allowed otherwise.		
15	O	Parameter Business Sending Parent BIC Identifier	CHAR(11)		Mandatory when Parameter Type Name is: BUPA Not allowed otherwise.		0

16	P	Parameter Business Sending Party BIC Identifier	CHAR(11)		Mandatory when Parameter Type Name is: BUPA Not allowed otherwise.		0
17	Q	Parameter Instructing Party Parent BIC Identifier	CHAR(11)		Mandatory when Parameter Type Name is: INPA Not allowed otherwise.		0
18	R	Parameter Instructing Party Party BIC Identifier	CHAR(11)		Mandatory when Parameter Type Name is: INPA Not allowed otherwise.		0

4.5.3.9. Report Configuration - New

- Record Type: “Report Configuration”

The record is used to create a report configuration.

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.	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	• true = The recipient gets the report in delta mode • false = The recipient gets the report in full mode			1..1
6	F	Report Name	Possible values: T2S Report Types • Statement of Holdings • Statement of Transactions • Statement of Pending Instructions • Statement of Settlement Allegements • Statement of Accounts • SD Party Statement • SD Securities Statement • SD Securities Accounts Statement • SD T2S DCA Statement • Current Business Day Cash Forecast • Next Business Day Cash Forecast • Executed AI on Cash • Executed AI on Securities	Name of the report type.			1..1

			• Executed CI on Cash • Executed CI on Securities • Pending AI on Cash • Pending AI on Securities • Pending CI on Cash • Pending CI on Securities • Pending Restrictions on Cash • Pending Restrictions on Securities • Settled Restrictions on Cash • Settled Restrictions on Securities TIPS Report Types: • TIPS Statement of Accounts • TIPS Statement of Account Turnover • TIPS Directory • TIPS Directory Update • MPL Repository Maintenance Report CLM Report Types: • CLM Statement of Accounts • CLM Repository • CLM Repository Update RTGS Report Types: • RTGS Statement of Accounts • RTGS Directory • RTGS Directory Update				
7	G	System Entity Wide Reporting Flag	BOOLEAN	• true = System entity wide reporting			1..1
8	H	Frequency	DECIMAL (2,0)	Frequency in hours for the generation of the delta reports	Mandatory when Delta Mode = true. Not allowed otherwise.		0..1
9	I	Cash	VARCHAR(34)	Number of the Cash	Only		0..1

		Account Number		Account linked to the Report Configuration.	allowed for T2 RTGS and T2 CLM Reports. Not allowed otherwise. Field is used by DMT to retrieve the account identifier for backend processing.		
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	• true = The recipient gets the report in push mode • false = The recipient gets the report in pull mode	Only allowed value in TIPS is “true”.		1..1
13	M	Execution Time	TIME	Time of the execution of the report.	~~This field is defined for keeping backward compatibility with T2S. It is not allowed in TIPS.~~Mandatory for non-TIPS reports if Event Type is not filled in. Not allowed if Event Type is used.		0..1
14	N	Event Type	CHAR (4)	Code of the event type that triggers the report.	Mandatory for non-TIPS reports if Execution Time is not filled in. Not		0..1

					allowed if Execution Time is used.~~This field is defined for keeping backward compatibility with T2S. It is not allowed in TIPS.~~		
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	~~This field is defined for keeping backward compatibility with T2S. It is not allowed in TIPS.~~Not allowed if Event Type is not filled in.		0..1

4.5.3.10. 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 interoperability character set restriction does not apply	1..1	

4.5.3.11. 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)		Interoperability character set restriction does 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		1..1	

4.5.3.12. 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		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”. It is mandatory otherwise.	0..1	
5	E	Account Type	Possible values: • CSHA • NCBA	Possible values: T2S Account Types:		1..1	

			• RTGS • TACC • TCMB • TTAC • RDCA • RSAA • RCBA • RTAC • AGAC • ATEC • CMCA • ONDP • MGLD • CCAC • CECB • CEMA • CTTS • CTTI • CTRT	CSHA : T2S Dedicated Cash Account NCBA : T2S Central Bank Account RTGS ; T2S Dedicatd Transit Account TIPS Account Types: TACC : TIPS Account TCMB : TIPS Credit Memorandum Balance TTAC : TIPS Transit Account RTGS Account Types: RDCA : RTGS Dedicated Cash Account RSAA : RTGS Sub-Account RCBA: RTGS Central Bank Account RTAC : RTGS Dedicated Transit Account AGAC : Ancillary System Guarantee Funds Account ATEC : Ancillary System Technical Account CLM Account Types: CMCA : Main Cash Account ONDP : Overnight Deposit Account MGLD : Marginal Lending Account CCAC : CLM Central Bank Account CECB : Central Bank ECB Account CEMA : ECB Mirror Account CTTS : CLM Dedicated Transit Account for T2S CTTI : CLM Dedicated Transit Account for TIPS • CTRT : CLM Dedicated Transit Account for RTGS			
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 - all T2S	0..1	

					account types - all TIPS account types - RTGS DCAs - Main Cash Accounts		
9	I	Ceiling Notification Amount	DEC (13,5)	Threshold for ceiling notifications	This field is only allowed for - all T2S account types - all TIPS account types - RTGS DCAs - Main Cash 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)	Cash Account linked to the CMB	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 Dedicated Cash Account, RTGS Sub-Account. It is also mandatory if the Account Type is Main Cash Account and Default MCA is set to TRUE. It is not allowed otherwise.	0..1	
13	M	Linked Account Type	Possible values: • CSHA • EXTA	Possible values: - CASH (Cash Account) - EXTA (External RTGS 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, RTGS Dedicated Cash Account, RTGS Sub-Account. It is also mandatory if the Account Type is Main Cash Account and Default MCA is set to TRUE. 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. 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.	This field is mandatory if "Target Amount After Breaching Floor" and/or "Target Amount After Breaching Ceiling" are		0..1

					used.		
22	V	Floor Notification	BOOLEAN	Flag to enable floor notifications.			0..1
23	W	Ceiling Notification	BOOLEAN	Flag to enable ceiling notifications.			0..1
Group “Account Billing Configuration”						0..1	
24	X	Billed Party	CHAR (11)	Party within same system entity to be billed.			0..1
25	Y	Charged Party	CHAR (11)	Party within same system entity to be charged,			0..1
26	Z	Debited MCA	CHAR (34)	Account to debit.			0..1
Group “Reserve Management Account Configuration”						0..1	
27	AA	Minimum Reserve Calculation	BOOLEAN	Flag to enable account for minimum reserve calculation.			0..1
28	AB	Default MCA	BOOLEAN	Flag to enable account as default MCA.			0..1
29	AC	Interest Calculation	Possible values: • NONE • MINI • MONT	Possible values: - NONE - MINI : Minimum reserve calculation period - MONT : Monthly	This attribute is mandatory if Minimum Reserve Calculation is set to FALSE. It is not allowed otherwise.		0..1
30	AD	Interest Rate Type	Possible values: • MRIR • MRP1 • MRP2 • EXIR • ODIR • MLIR	Possible values: - MRIR - Minimum reserve interest rate -MRP1 - Minimum reserve penalty rate type 1 - MRP2 - Minimum reserve penalty rate type 2 - EXIR - Excess reserve interest rate - ODIR - Overnight deposit interest rate - MLIR - Marginal lending interest rate	This field is mandatory if Interest Calculation is set to a value different from "No". It is not allowed otherwise.		0..1
Group “Additional Account Configuration”						0..1	
31	AE	Contingency Account Identifier	CHAR (34)	Contingency account			0..1
32	AF	Co-managed	BOOLEAN	Flag to enable account for co-management.	This field is only allowed if Account Type is Main Cash Account.		0..1
33	AG	Co-manager	CHAR (11)	Party within same system entity to co-manage the account.	This field is not allowed if "Co-managed" is set to FALSE. It		0..1

					is mandatory if "Co-managed" is set to TRUE.		
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

4.5.3.13. 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: • BILI • MULT • UCDT • ACOL • EXGT • INBI	Classification of the Limit: • BILI: ISO Code identifying a bilateral Limit set between an Account Owner and a counterparty • MULT: Multilateral limit for RTGS Cash Account • UCDT: Unsecured credit • ACOL: Auto-Collateralisation • EXGT: External Guarantee • INBI: TIPS CMB Limit		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 Limit Type is Multilateral Limit.	0..1	
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 Cash Account Number	VARCHAR(34)	Cash account towards to the Limit is established.	This field is mandatory if Limit Type is Bilateral Limit. ~~and the Cash Account Number identifies a RTGS Account or if Limit Type is Multilateral Limit~~It is not allowed otherwise.~~.~~	0..1	

4.5.3.14. 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	ules	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	Participation Type	Possible values are: • DIRE • INDI • MADI	Type of participation for RTGS service •DIRE = Direct •INDI = Indirect •MADI = Multi			

			• MACI • ADCO • ADDI • ADIN • ADBC	Addressee – Branch of Direct Participant • MACI = Multi Addressee – Credit Institution • ADCO = Addressable BIC - Correspondent • ADDI = Addressable BIC – Branch of Direct Participant • ADIN = Addressable BIC – Branch of Indirect Participant • ADBC = Addressable BIC – Branch of Correspondent			

4.5.3.15. 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	Possible values: • TIPS	Classification of the Service Name: • TIPS: TIPS Settlement 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: • TPPT • TPRP • MPPT	Classification of the Service Name: • TPPT: TIPS Participant • TPRP: Reachable Party • MPPT: MPL-Only Participant		1..1	

4.5.3.16. 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: • TRUE: Inbound • FALSE: Outbound		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	

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: • Migrated • Not migrated	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 2nd 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
DCC1001	When performing a Cash Account create request, the Party Type of the Requestor must be NCB or Payment Bank. 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. Users belonging to Payment Banks can only create TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility. 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.	acmt.007	acmt.011	REJT	Requestor not allowed	Yes	Yes	Yes	Yes
DCC1024	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 of the Cash Account or of the Service Operator.	acmt.007	acmt.011	REJT	Invalid restriction type	Yes	Yes	Yes	Yes
DCC1025	When performing a Cash Account create request, the Valid From specified in the Cash Account Restriction section must be	acmt.007	acmt.011	REJT	'Valid From' invalid	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	equal to or greater than the current timestamp.								
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
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/ Ceiling Notification Amount	Yes	Yes	Yes	Yes
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
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
DCC1205	When performing a Cash Account create request the Opening Date must be equal to or greater than the current date and be 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.	acmt.007	acmt.011	REJT	'Opening Date' invalid	Yes	Yes	Yes	Yes
DCC1206	When performing a Cash Account create	acmt.007	acmt.011	REJT	Invalid External RTGS	Yes	Yes	No	No

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	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.				account				
DCC1207	When performing a Cash Account create request, the Linked Account, regardless of type, must have the same currency code of the Cash Account.	acmt.007	acmt.011	REJT	Invalid Currency code	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
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
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
DCC1212	When performing a Cash Account create request, the Valid To specified in the Cash Account Restriction section must be equal to or greater than the Valid From.	acmt.007	acmt.011	REJT	'Valid to ' invalid	Yes	Yes	Yes	Yes
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" which is open throughout the	acmt.007	acmt.011	REJT	Invalid linked account	No	Yes	No	No

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	specified opening period of the TIPS CMB being created.								
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" which is open throughout the specified opening period of the Cash Account being created and belongs to the same Account Owner Party.	acmt.007	acmt.011	REJT	Invalid linked account	No	No	Yes	No
DCC1218	When performing a Cash Account create request to create a CLM Main Cash Account, the Linked Account must refer to an existing Cash Account instance in CRDM with type "RTGS Dedicated Cash Account" which is open throughout the specified opening period of the Cash Account being created and belongs to the same System Entity.	acmt.007	acmt.011	REJT	Invalid linked account	No	No	No	Yes
DCC1219	When performing a Cash Account create request to create an RTGS Dedicated Cash Account, the Linked Account must refer to an existing Cash Account instance in CRDM 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.	acmt.007	acmt.011	REJT	Invalid linked account	No	No	Yes	No
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
DCC1400	When performing a Cash Account Create request, if a CLM Account Holder is specified as Owner Party, they must have at least one active and open MCA at all	acmt.007	acmt.011	REJT	MCA must be set up over correct validity period	No	No	No	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	times.								
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
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
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
DCC1532	When performing a Cash Account create request, when creating a TIPS 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
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
DCC1534	When performing a Cash Account create request, when creating an RTGS Dedicated 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	Yes	Yes	Yes	Yes
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

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
DCC1536	When performing a Cash Account create request, when creating any kind of 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.007	acmt.011	REJT	Transit account already existing for this currency	No	No	No	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
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
DCC1800	When performing a Cash Account Create request, the number of decimals in the values provided for Floor Notification Amount, Target Amount After Breaching Floor, Ceiling Notification Amount and Target Amount After Breaching Ceiling must be compliant with the number of decimals foreseen for the relevant currency.	acmt.007	acmt.011	REJT	Invalid number of decimals.	Yes	Yes	Yes	Yes
DCC4001	A Standing and Predefined Liquidity Transfer Order can only be created 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.024	camt.025	REJT	Requestor not allowed	Yes	No	Yes	Yes
DCC4070	When performing a Standing and	camt.024	camt.025	REJT	Invalid Debited Cash	Yes	No	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	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 RTGS DCA, RTGS Sub-Account, Ancillary System Technical Account, MCA, T2S Dedicated Cash Account, T2S Dedicated Transit Account orT2S Central Bank Account.				Account				
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 to an existing and active instance for the same Cash Account.	camt.024	camt.025	REJT	Standing and Predefined Liquidity Transfer Order Reference already assigned	Yes	No	Yes	Yes
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, Ancillary System Technical Account, MCA, T2S Dedicated Cash Account, T2S Dedicated Transit Account or T2S Central Bank 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
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
DCC4081	When performing a Standing and Predefined Liquidity Transfer Order Create	camt.024	camt.025	REJT	Unknown Event Type Identifier	Yes	No	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	request, the Event Type Code, when specified in the create request, must refer to an active and existing instance in Event Type.								
DCC4085	When performing a Standing and Predefined Liquidity Transfer Order Create request, if the specified Creditor or Debited Cash account is an RTGS Sub-Account or an Ancillary System Technical Account, then the counterpart must be an RTGS DCA.	camt.024	camt.025	REJT	Invalid Creditor and Debited Cash Accounts	No	No	Yes	No
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
DCC4091	When performing a Standing and Predefined Liquidity Transfer Order Create 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
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
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
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

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
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
DCC4185	When performing a Standing and Predefined Liquidity Transfer Order Create request from an RTGS DCA to an other RTGS DCA or from an MCA to an other MCA, the accounts must belong to the same Liquidity Transfer Group defined in CRDM.	camt.024	camt.025	REJT	The Creditor and Debited Accounts must belong to the same Liquidity Transfer Group	No	No	Yes	Yes
DCC4200	When performing a Standing and Predefined Liquidity Transfer Order Create 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
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
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
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
DCD1400	When performing a Cash Account delete	acmt.019	acmt.011	REJT	At least one MCA must be	No	No	No	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	request, if a CLM Account Holder is specified as Owner Party, they must have at least one active and open MCA at all times.				configured				
DCD1001	When performing a Cash Account delete or restore request, the Party Type of the Requestor must be NCB or Payment Bank. Users belonging to NCBs can only delete or restore 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 delete or restore Cash Accounts for which they are defined as Co-Managers. Users belonging to Payment Banks can only delete or restore TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility. 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.	acmt.019	acmt.011	REJT	Requestor not allowed	Yes	Yes	Yes	Yes
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
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	acmt.019	acmt.011	REJT	Deletion not allowed due to open Cash Accounts related to this Transit Account.	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	respectively must exist in CRDM.								
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, Standing Order for Reservation, Direct Debit Mandate, or if it is referenced in another Cash Account as a Linked Account, Associated LT Account, Debited MCA or Contingency Account.	acmt.019	acmt.011	REJT	The deletion/close is not allowed due to a deletion priority constraint	Yes	Yes	Yes	Yes
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
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
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
DCU1001	When performing a Cash Account update request the Party Type of the Requestor must be NCB or Payment Bank. Users belonging to NCBs can only update	acmt.015	acmt.011	REJT	Requestor not allowed	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	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 update Cash Accounts for which they are defined as Co-Managers. Users belonging to Payment Banks can only update TIPS Credit Memorandum Balances linked to Cash Accounts that fall under their responsibility. 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.								
DCU1003	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.	acmt.015	acmt.011	REJT	Data to be updated not found	Yes	Yes	Yes	Yes
DCU1024	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.	acmt.015	acmt.011	REJT	Invalid restriction type	Yes	Yes	Yes	Yes
DCU1030	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 Reservation, Direct Debit Mandate.	acmt.015	acmt.011	REJT	The account cannot be closed due to a closure priority constraint	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
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
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, Associated LT Account, Debited MCA or Contingency Account.	acmt.015	acmt.011	REJT	Opening/Closing Date not consistent with linked Cash Account	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
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
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.	acmt.015	acmt.011	REJT	"Valid From" invalid	Yes	Yes	Yes	Yes
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 and must be equal to or greater than the Valid From.	acmt.015	acmt.011	REJT	"Valid To" invalid	Yes	Yes	Yes	Yes
DCU1214	When performing a Cash Account update	acmt.015	acmt.011	REJT	Invalid linked account	No	Yes	No	No

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	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" which is open throughout the specified validity period of the TIPS CMB being updated.								
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.	acmt.015	acmt.011	REJT	Restriction cannot be deleted	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
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
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
DCU1220	When performing a Cash Account update 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.	acmt.015	acmt.011	REJT	"Valid To" invalid	Yes	Yes	Yes	Yes
DCU1300	When performing a Cash Account Update request, in case of request for creation/update of Cash Account	acmt.015	acmt.011	REJT	Cash Account Restriction overlaps with existing instance	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	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.								
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
DCU1400	When performing a Cash Account Update request, changes to the Opening and Closing Date of a Main Cash Account must ensure that the owner has at least one active and open MCA at all times.	acmt.015	acmt.011	REJT	At least one MCA must be set up over the Account Owner's validity period	No	No	No	Yes
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
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 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
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

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
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
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
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
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 and Target Amount After Breaching Ceiling 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
DCU4001	A Standing and Predefined Liquidity Transfer Order can only be updated 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.024	camt.025	REJT	Requestor not allowed	Yes	No	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
DCU4003	When performing a Standing and Predefined Liquidity Transfer Order update request, it must refer to an existing and active instance in CRDM.	camt.024	camt.025	REJT	Data to be updated not found	Yes	No	Yes	Yes
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
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	Yes	Yes
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.	camt.024	camt.025	REJT	Unknown Event Type Identifier	Yes	No	Yes	Yes
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
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
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
DCU4093	When performing a Standing and Predefined Liquidity Transfer Order update	camt.024	camt.025	REJT	Amount cannot be set to zero if All Cash and	Yes	No	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	request, the Amount cannot be set to zero if the Dedicated Amount field and the All Cash field are set to False.				Dedicated Amount are 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
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
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
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
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
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	reda.014	reda.016	REJT	Requestor not allowed	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	user that is granted the appropriate privilege(s) on the Party responsible for the Party to be created.								
DPC1002	When performing a Party Create request, the 'System Entity' specified in input must refer to an existing instance in CRDM, and its type must be consistent with the 'Party Type' specified in input.	reda.014	reda.016	REJT	Invalid System Entity Identifier	Yes	Yes	Yes	Yes
DPC1005	When performing a Party Create request, the Party Type cannot be 'CSD' or 'NCB' if there is already a CSD or NCB defined within the System Entity.	reda.014	reda.016	REJT	Only one CSD/NCB per System Entity allowed	Yes	Yes	Yes	Yes
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
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
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
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
DPC1180	When performing a Party Create request,	reda.014	reda.016	REJT	Party Mnemonic not found	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	the 'Party Mnemonic' specified in the Party Code section (when its type is BIC) must exist in the BIC Directory.				in BIC directory				
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
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
DPC1207	When performing a Party Create request, the Party Restriction 'Valid To', when specified, must be equal to or greater than the current timestamp, 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.	reda.014	reda.016	REJT	"Valid To" invalid	Yes	Yes	Yes	Yes
DPC1208	When performing a Party Create request, the Party Restriction 'Valid From", when specified, must be equal to or greater than the current timestamp 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
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
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

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
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
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
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
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
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
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
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	reda.014	n/a	n/a	n/a	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	processing of retrieved queued requests.								
IIMP132	When performing a Party Create request, the Party Address section must be filled in if the Party Type is different than CSD Participant.	reda.014	reda.016	REJT	Party Address must be defined if the Party Type is different than CSD Participant.	Yes	No	No	No
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
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
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
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
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	reda.022	reda.016	REJT	Requestor not allowed	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	maintained.								
DPU1003	When performing a Party Update request, it must refer to an existing and active Party whose Closing Date is equal to or greater than the current business date.	reda.022	reda.016	REJT	Unknown party	Yes	Yes	Yes	Yes
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
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
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
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
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	reda.022	reda.016	REJT	Party Mnemonic already used	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	active Party belonging to the same System Entity and having the same Parent BIC.								
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
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
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.	reda.022	reda.016	REJT	Invalid restriction type	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) 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
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
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
DPU1206	When performing a Party Update request, it is only possible to update the 'Opening Date' if it is greater than the current business date. The new specified value must be equal to or greater than the	reda.022	reda.016	REJT	"Opening Date" or "Close Date" invalid	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	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, 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
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, 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
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	Yes	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	Yes	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	Yes	No	No

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
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	Yes	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
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
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
DPU1305	When performing a Party update request, the Party Address section must not be filled in if the Party Type is CSD Participant.	reda.022	reda.016	REJT	Party Address must not be defined for CSD Participant	Yes	No	No	No
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, T2_CLM or T2_RTGS).	reda.022	reda.016	REJT	Party BIC already linked to this service	No	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 Party BIC	No	Yes	No	No

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
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 currently in use or the future one	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 have a future validity	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
DXAA007	Each historical entity may have no more than one future instance.	reda.022	reda.016	REJT	Only one instance may become effective in the future.	Yes	Yes	Yes	Yes
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
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
IIMP105	Value for MktSpcfcAttr/Nm must be unique per message.	reda.022	reda.016	REJT	Value for MktSpcfcAttr/Nm must be unique per message.	Yes	Yes	Yes	Yes
IIMP106	An attribute for 'SysPty' can be used only once per message.	reda.022	reda.016	REJT	An attribute for 'SysPty' must be used only once.	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
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
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
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
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
DRD9001	When performing a request to delete a Limit, the requestor must be authorised to delete the requested data according to the following: A System Operator user can delete all data 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 A Payment Bank user can delete only Limits for its own non-primary T2S CMBs, its own RTGS DCAs and TIPS CMBs linked to its own Cash Account	camt.012	camt.025	REJT	Requestor not allowed	Yes	Yes	Yes	No
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
DRU9001	When performing a request to update a Limit, the requestor must be authorised to update the requested data according to the following: A Service Operator user can update all data	camt.011	camt.025	REJT	Requestor not allowed	Yes	Yes	Yes	No

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	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 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								
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
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
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
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
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

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
DCU7001	Standing Order for Reservation can be updated by Service Operator, CB, Payment Bank or Ancillary System. CBs can update Standing Orders for Reservation for Cash Accounts in their System Entity. 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
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
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
IIMP200	For the user query "Liquidity Transfer Order Detail Query (SDTL)" the following search criteria are allowed: - Account Identification - Party 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
IIMP054	- For the Cash Account Reference Data Query the following search criteria are allowed:Cash Account Identifier - BIC of the account owner - BIC of the NCB - Party Type - Opening Date - Closing Date - Referenced account - 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
IIMP055	For the user query 'Cash Account List Query (LIST)' the following search criteria are allowed:	acmt.025	acmt.026	REJT	While referring to the query 'Cash Account List Query (LIST)', the selected search	Yes	Yes	No	No

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	- BIC of the account owner - BIC of the NCB - Currency code				criteria are invalid.				
IIMP056	For the Cash Account Reference Data Query, at least one of the following search criteria fields should be present: - Cash Account Identifier - Account Type - Currency - Opening Date - Closing Date - 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
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)': - BIC of the account owner - BIC of the NCB - 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
IIMP064	If element Prtry/SchmeNm is equal 'REQT', Prtry/Id must be 'CASH' or 'LIST'	acmt.025	acmt.026	REJT	Request type invalid	Yes	Yes	Yes	Yes
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
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
DRRI001	When performing a request to read an Audit Trail, the requestor must be authorised to access the requested data.	reda.039 reda.042	reda.040 reda.043	REJT REJT	Requestor not allowed	Yes	Yes	Yes	Yes
DRRI002	A request to read an Audit Trail must refer to existing data in CRDM.	reda.039 reda.042	reda.040 reda.043	REJT REJT	No data available	Yes	Yes	Yes	Yes
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: - CashAccountId - DatePeriod	reda.039	reda.040	REJT	Please select at least one valid search criteria parameter.	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
IIMP114	For the user query 'Limit Query (LIMI)' the following search criteria are allowed: - Limit Type - Credit Consumer - Cash Account Number - Limit Currency - Limit Amount - 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
DPR1001	When performing a request to read a Party, the requestor must be authorised to access the requested data according to the following: The Service Operator user can access all data A CSD or NCB user can access only data belonging to its own System Entity A CSD Participant or Payment Bank user can access only its own data 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.	reda.015	reda.017	REJT	Requestor not allowed	Yes	Yes	Yes	Yes
IIMP036	For the user query 'Party Reference Data Query (PYRD)' the following search criteria are allowed: - BIC of the Party - Parent BIC of the Party (NCB BIC or CSD BIC) - Party Type - Opening Date - Closing Date	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
IIMP037	For the user query 'Party List Query (PY-LI)' the following search criteria are al-	reda.015	reda.017	REJT	While referring to the query 'Party Reference Data Query	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	lowed: - BIC of the CSD - BIC of the NCB				(PYLI)', the selected search criteria are invalid.				
IIMP038	For the user query 'Restricted Party Query (PYRS)' the following search criteria are allowed: - BIC of the CSD - BIC of the NCB - Party Type - Restriction Type - Restriction Issue Date	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
IIMP039	At least one of the following search criteria fields should be present, if the tag search criteria is specified for query 'Party Reference Data Query (PYRD) ': - BIC of the Party - BIC of the CSD - BIC of the NCB - Party Type - Opening Date - Closing Date	reda.015	reda.017	REJT	Please select at least one valid search criteria parameter.	Yes	Yes	Yes	Yes
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)': - BIC of the CSD - BIC of the NCB	reda.015	reda.017	REJT	Please select at least one valid search criteria parameter.	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)': - BIC of the CSD - BIC of the NCB - Party Type - Restriction Type - Restriction Issue Date	reda.015	reda.017	REJT	Please select at least one valid search criteria parameter.	Yes	Yes	Yes	Yes
IIMP070	At least one of the following search criteria	reda.042	reda.043	REJT	Please select at least one	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
	fields should be present, if the tag search criteria is specified for query Party Audit Trail: - PartyId - DatePeriod				valid search criteria parameter.				
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
DCR8002	The Creditor Party has to be known in CRDM.	camt.099	camt.100	REJT	Unknown or invalid Creditor Party	No	No	Yes	Yes
QMPC100	The Request Type has to be known in CRDM.	reda.064	reda.065	REJT	Unknown Request Type	Yes	Yes	Yes	Yes
QMPC101	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
QMPC102	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
QMPC103	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
QMPC104	For the Calendar Query, requested data should exists in CRDM.	reda.064	reda.065	REJT	No data available	Yes	Yes	Yes	Yes
IIMP199	Default block should be present for CRDM requests.	camt.011 camt.048	camt.025 camt.025	REJT	Default block not present	Yes	Yes	Yes	Yes
ICSA002	The System User sending the inbound A2A communication has to be known in CRDM.	head.001 head.002	admi.007 admi.007	I008	The System User is not known in CRDM.	Yes	Yes	Yes	Yes
ICSA003	The System User sending the inbound A2A communication must not be locked.	head.001 head.002	admi.007 admi.007	I009	The System User is blocked due to lockout.	Yes	Yes	Yes	Yes

Rule Id	Description	Inbound message	Outbound message	Reason Code	Error Text	T2S	TIPS	RTGS	CLM
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 head.002	admi.007 admi.007	I018	The Technical Sending User is not known for CRDM.	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 head.002	admi.007 admi.007	I019	The Technical Sending User is not known for the used Network Service.	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 authentica-tion is not valid. //Dynamic error including element name.//	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
ICSA011	The Business Sending User has to be known in CRDM.	head.001 head.002	admi.007 admi.007	I072	The Business Sending User is not known in CRDM.	Yes	Yes	Yes	Yes
ICSA012	Technical Sending User is allowed to send for the Business Sending Party.	head.001 head.002	admi.007 admi.007	I073	Technical Sending User is not allowed to send for the Business Sending Party.	Yes	Yes	Yes	Yes
ICSA013	Business Sending User is allowed to send for the system user reference.	head.001 head.002	admi.007 admi.007	I075	Business Sending User is not allowed to send for the system user reference.	Yes	Yes	Yes	Yes
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
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	head.001	respective outbound business message for received inbound message except for the messages which	I010	It is not allowed to initiate A2A requests in four eyes mode.	Yes	Yes	Yes	Yes

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	the four eyes option usage.		are explicitly listed						
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 messages which are explicitly listed	I064	Content of element //tag name// is only filled with blanks, CR/LFs and/or tabs.	Yes	Yes	Yes	Yes
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
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
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
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
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	I068	In order to ensure correct processing, it is only possible to send instructing	Yes	Yes	Yes	Yes

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			message except for the messages which are explicitly listed		requests within a functional file (multi-message).				
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
IIMS001	A message type has to be supported by CRDM.	head.001	admi.007	I005	The received single message type is not known in CRDM.	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. //Dynamic error including element name.//	Yes	Yes	Yes	Yes
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
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
IIMP011	For the user query 'Liquidity Transfer Order List Query (LLIQ) ' the following search criteria are allowed: - Parent BIC of the party - BIC of the party - Cash Account Number - Currency - Only key fields returned - Valid From - Valid To	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
IIMP012	For the user query 'Liquidity Transfer Order Detail Query (LDEQ)' the following	camt.069	camt.070	I031	While referring to the query 'Liquidity Transfer detail	Yes	No	No	No

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	search criteria are allowed: l Liquidity Transfer Order Identifier l Only key fields returned				query (LDEQ)', the selected search criteria are invalid.				
IIMP013	For the user query 'Liquidity Transfer Order Link Set Query (LLSQ)' the following search criteria are allowed: - BIC of the party - Parent BIC - Cash Account Number - Valid from - Valid to - Currency	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
IIMP014	For the user query 'Sequenced liquidity transfer order for a link set (SLSQ)' the following search criteria are allowed: - Unique technical identifier of the liquidity transfer order link set - Key field indicator.	camt.069	camt.070	I033	While referring to the query 'Se-quenced liquidity transfer order for a link set (SLSQ)', the selected search criteria are invalid.	Yes	No	No	No
IIMP015	For the user query 'Total amount of standing and predefined orders Query (TALT)' the following search criteria are allowed: - BIC of the Party - Parent BIC of the Party.	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
IIMP027	For the user query 'Liquidity transfer order list query (LLIQ)' the following search criteria are mandatory: - Key field indicator	camt.069	camt.070	I045	For 'Liquidity transfer order list query (LLIQ)', selection of - Key field indicator is mandatory.	Yes	No	No	No
IIMP028	For the user query 'Liquidity Transfer detail query (LDEQ)' the following search criteria are mandatory: Liquidity Transfer Order Identifier	camt.069	camt.070	I046	For 'Liquidity Transfer detail query (LDEQ)' query, selection of - LTO Identifier	Yes	No	No	No

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	- Key field indicator.								
IIMP029	For the user query 'Sequenced liquidity transfer order for a link set (SLSQ)' the following search criteria are mandatory: - Key field indicator.	camt.069	camt.070	I047	For 'Sequenced liquidity transfer order for a link set (SLSQ)' query, selection of - Key field indicator is mandatory.	Yes	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