EUROPEAN CENTRAL BANK

EUROSYSTEM

| T2S CHANGE REQUEST FORM | | | |
|---|---|---|---|
| **General Information (Origin of Request)**<br>☒ User Requirements (URD) or GUI Business Functionality Document (BFD)<br>☐ Other User Functional or Technical Documentation (SYS) | | | |
| **Request raised by:** Deutsche Bundesbank on behalf of the German NSGs | **Institute:** Central bank | | **Date raised:** 12/12/2022 |
| **Request title:** Harmonisation of floor/ceiling notifications with T2 | | | **Request No:** T2S 0800 URD |
| **Request type:** Common | **Classification:** Scope enhancement | | **Urgency:** Normal |
| **1. Legal/business importance parameter[1]:** Medium | | **2. Market implementation efforts parameter[2]:** Low | |
| **3. Operational/Technical risk parameter[3]:** Low | | **4. Financial impact parameter[4]:** Medium | |
| **Requestor Category:** Central bank | | **Status:** Implemented | |

**Reason for change and expected benefits/business motivation:**

T2S does not allow to set-up rule-based liquidity transfers between accounts in T2S and T(ARGET)2, based on floor, ceiling or a DvP failure due to lack of cash. So far it is only possible to set up a floor/ceiling notification[5].

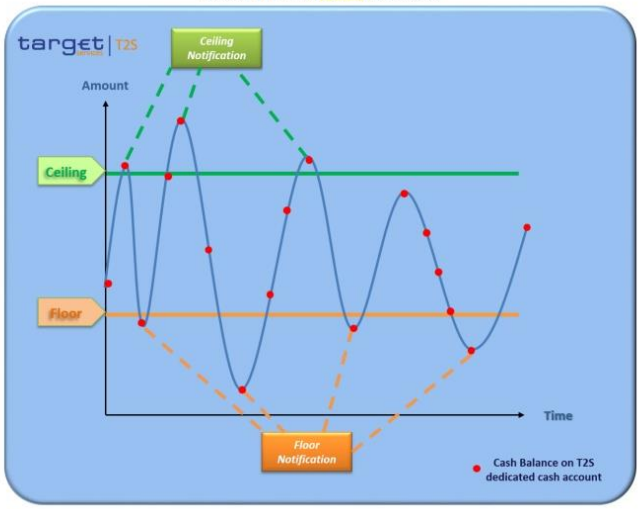
Based on this notification, the cash manager can manually instruct liquidity transfers from/to T2S to/from T(ARGET)2 (some large T2S actors might have developed automated processes on their local system, but the majority of T2S actors do perform their cash management manually). In most cases, the cash manager only instructs a standing order at the beginning of the day from T(ARGET)2 to T2S and waits that the cash "comes back" with the automated end of day cash sweep.

From T2S UDFS V7.2 it can be seen that T2S continuously sends a camt.004 notification when a ceiling amount is exceeded or a floor amount is not reached.

[1] Legal/business importance parameter was set to 'Medium' as the change improves the usability of the system.
[2] Market implementation effort parameter was set to 'Low' as the change does not imply significant changes to T2S Actors. Just the system handling of the notifications changes
[3] Operational/technical risk parameter was set to 'Low' because it is not expected that this change will have an operational impact on the T2S Actors.
[4] Low < 100kEUR < Low-Medium < 200 kEUR < Medium < 400kEUR < High < 700kEUR < Very high
[5] Or to trigger the auto-collateralisation in case of DvP failure, provided that the participant has access to it.

1

DIAGRAM 151 - FLOOR CEILING NOTIFICATION




2

The notifications are sent continuously after each and every securities settlement as well as after liquidity transfers when the threshold value has been reached. In certain constellations, this leads to a veritable “flood” of camt.004 notifications that arrive within seconds.

As a practical consequence, this leads to the current status where the T2S floor/ceiling functionality is only rarely used in production, especially because each camt.004 is subject to a charge (transmission item), additional NSP costs and generates redundant expenses in banks’ backend applications.

For the T2 CLM/RTGS and TIPS services, the following applies concerning the floor/ceiling notification functionality: The notification is sent only once for every threshold breach, i.e., RTGS/CLM/TIPS does not send the notification again if, after having passed the threshold, the balance of the RTGS DCA/CLM MCA or TIPS DCA remains consistently below the floor or above the ceiling threshold defined.

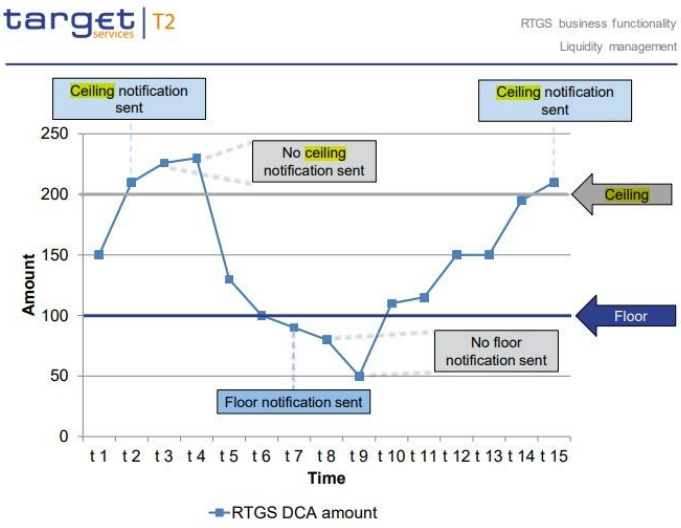



Figure 43 - Breach of floor/ceiling threshold - notification

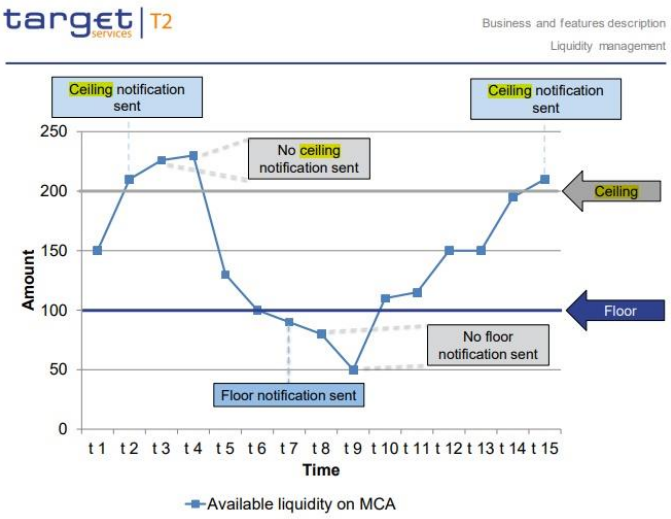
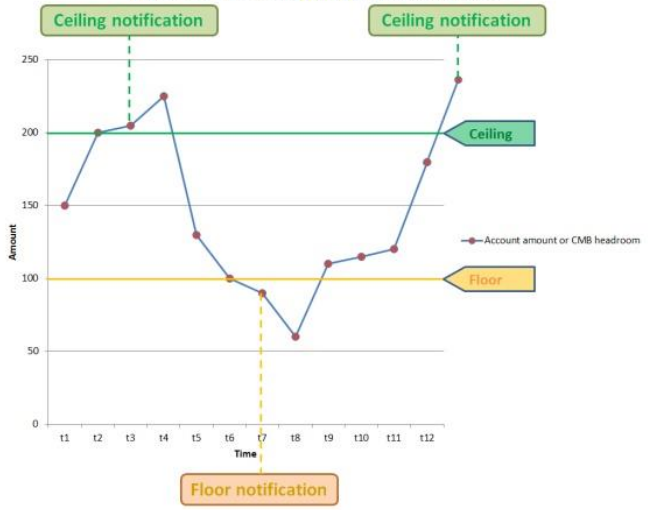



**Figure 28 - Breach of floor/ceiling threshold – notification**

The notifications are generated every time the threshold is undercut (floor) or exceeded (ceiling). TIPS does not generate new notifications if, after trespassing the threshold, the account balance or the CMB headroom remains consistently above the ceiling threshold or below the floor threshold.

**Figure 178 – Floor and ceiling notification triggers**




Main benefits of this Change request:

- **Harmonisation of floor/ceiling notification functionality across TARGET Services**: Processes should be harmonised across services.

**- System efficiency**: T2S as well as bank's backend applications have to process less messages in relation to this functionality

- Functionality serves better the users expectations/needs and **preserves costs** (T2S and NSP costs)

- **Cash management efficiency**: This CR leads to less manual intervention from cash treasurers. The cash manager will no longer need to watch the balances of the T2S manually.

**Description of requested change:**

T2S should be aligned with T2 in order to just send one notification after breaching the threshold. T2S should not send the notification again if, after having passed the threshold, the balance of the T2S DCA remains consistently below the floor or above the ceiling threshold defined.

**Submitted annexes / related documents:**

**Outcome/Decisions:**

*ECB on 12 December 2022: the ECB team checked the completeness of the CR template, assigned change request number CR-0800 and informed the CR initiator.

*CRG on 18 January 2023: the CRG agreed to launch the preliminary assessment of CR-0800.

*CRG on 27 April 2023: the CRG agreed to recommend CR-0800 for authorisation by the T2S Steering Level.

*AMI-SeCo on 9 May 2023: The AMI-SeCo agreed with the CRG recommendation of CR-800 for T2S Steering Level Authorisation

*CSG on 10 May 2023: the CSG agreed to authorise CR-800.

*NECSG on 10 May 2023: the NECSG agreed to authorise CR-800.

*MIB on 18 May 2023: the MIB agreed to authorise CR-800.

*PMG on 6 June 2023: the PMG agreed to launch the detailed assessment of CR-800 with a view of scoping in R2024.JUN.

*PMG on 7 September 2023: the PMG agreed to launch the detailed assessment of CR-800 with a view of scoping in R2025.JUN.

*OMG on 15 November 2023: the OMG identified no operational impact from the inclusion of CR-800 in the scope of R2024.NOV.

*CRG on 5 December 2023: the CRG agreed to recommend to the PMG the inclusion of CR-800 in the scope of R2025.NOV.

*PMG on 12 December 2023: the PMG agreed to recommend the inclusion of CR-800 in the scope of R2025.NOV.

*CSG on 21 December 2023: the CSG approved the inclusion of CR-800 in the scope of R2025.NOV.

*NECSG on 21 December 2023: the NECSG approved the inclusion of CR-800 in the scope of R2025.NOV.

*MIB on 21 December 2023: the MIB approved the inclusion of CR-800 in the scope of R2025.NOV.

*PMG on 15 March 2024: the PMG agreed to recommend to the T2S Steering Level the descoping of CR-0800 from R2025.NOV.

*PMG on 15 March 2024: the PMG agreed to launch the detailed assessment of CR-800 with a view of scoping in R2025.JUN.

*CSG on 25 March 2024: the CSG approved the removal of CR-0800 from R2025.NOV.

*NECSG on 25 March 2024: the NECSG approved the removal of CR-0800 from R2025.NOV.

*MIB on 26 March 2024: the MIB approved the removal of CR-0800 from R2025.NOV.

*OMG on 8 April 2024: the OMG identified no operational impact from the inclusion of CR-800 in the scope of R2024.NOV.

*CRG on 9 April 2024: the CRG agreed to recommend to the PMG the inclusion of CR-800 in the scope of R2025.JUN.

*PMG on 9 April 2024: the PMG agreed to recommend the T2S Steering Level the inclusion of CR-800 in the scope of R2025.JUN.

*CSG on 17 April 2024: the CSG approved the inclusion of CR-800 in the scope of R2025.JUN.

*NECSG on 17 April 2024: the NECSG approved the inclusion of CR-800 in the scope of R2025.JUN.

*MIB on 18 April 2024: the MIB approved the inclusion of CR-800 in the scope of R2025.JUN.

**Documentation to be updated:**

**UDFS**:

1.6.2.7.3 Liquidity Monitoring Process„ | *Floor/Ceiling Notification: In order to monitor a T2S Dedicated Cash Account balance the T2S Actor can set limits which are to be stored in the reference data, i.e., a specific floor (minimum amount) and/or a ceiling (maximum amount) referring to a specific account. In case a posting results in a balance exceeding the defined ceiling limit or the balance falls under the defined floor limit, T2S sends an appropriate*

*notification to the T2S Actor concerned stating the balance.*
The notification will only be sent for the first instance of a floor or ceiling breach, not for additional bookings where the floor or ceiling remains breached.

1.6.1.8.5 Booking process – p400 sentence added to footnote in the table under "irrevocable settlement"
…

| | |
|---|---|
| *Check of the floor and ceiling amounts [244]* | *T2S checks the floor and ceiling defined for each T2S dedicated cash account involved. When the amount of their cash balances falls below the defined minimum amount of liquidity or exceeds the defined maximum amount of liquidity, T2S generates information to the T2S Actor* |

*244 The floor and ceiling notification functionality is ignored by settlement when the corresponding value is equal to 0. In case a customer would like to receive a floor/ceiling notification for amounts that are slightly below/above zero the T2S Actor has to define a value of 0.01 € instead.* Information to the T2S Actor is only generated the first time the cash balance falls below the minimum amount or exceeds the maximum amount, not for additional bookings where the floor or ceiling remains breached.

**GFS:**

3.5.6.3 Booking - p450 - checking the floor and ceiling
*Checking the floor and ceiling*
*Reference Id SETT.VPB.BKG.4.1*
*For each updated cash balance:*
*l If a floor is defined on the corresponding T2S Dedicated Cash Account (static data) and if the cash balance is less than the floor amount, the function sends floor information to the Failure Management and Settlement Outcome function {T2S.06.233}[xx1];*

*l If a ceiling is defined on the corresponding T2S Dedicated Cash Account (static data) and if the cash balance is greater than the ceiling amount, the function sends ceiling information to the Failure Management and Settlement Outcome function {T2S.06.234}[xx2]*

**Footnote to add xx1**;
Floor information is only sent the first time a breach happens, not for additional bookings where the balance is less than the floor.

**Footnote to add xx2**
Ceiling information is only sent the first time a breach happens, not for additional bookings where the balance is greater than the ceiling

URD:

Section 6.2.2.1 General Requirements

**Definition of a "floor" for a T2S dedicated cash account**

| **Reference ID** | T2S.06.233 |
|---|---|

The account holder of the T2S dedicated cash account shall have the possibility to define a minimum amount of liquidity (i.e. a liquidity floor) that should be available on the T2S dedicated cash account. T2S shall check the minimum amount, defined by the account holder of the T2S dedicated cash account after each posting on the T2S dedicated cash account. When the liquidity available falls below the defined minimum amount, T2S shall alert the treasurers at the account holder of the T2S dedicated cash account through a message.T2S shall not send a notification again if, after having passed the defined minimum amount, the T2S DCA remains below the floor of the threshold defined.

**Definition of a "ceiling" for a T2S dedicated cash account**

| **Reference ID** | T2S.06.234 |
|---|---|

The account holder of the T2S dedicated cash account shall have the possibility to define a maximum amount of liquidity (i.e. a liquidity ceiling) that should be available on T2S dedicated cash account. T2S shall check the maximum amount defined by the account holder of the T2S dedicated cash account after each posting on the T2S dedicated cash account. When liquidity available exceeds the defined maximum amount, T2S shall alert the treasurers at the account holder of the T2S dedicated cash account through a message. T2S shall not send a notification again if, after having passed the defined maximum amount, the T2S DCA remains above the ceiling of the threshold defined.

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URD Section 16.8.4 T2S Dedicated Cash Accounts

**Table 16-19 – List of Attributes for the Entity T2S Dedicated Cash Account**

| Attribute | Description |
|---|---|
| System Entity Identifier | This attribute shall specify the entity identifier of the NCB that operates the T2S dedicated cash account. |
| Party Identifier | This attribute shall be the unique technical party identifier of the payment bank that owns the T2S dedicated cash account. |
| T2S Dedicated Cash Account Identifier | This attribute shall specify the unique technical identifier of the T2S dedicated cash account in T2S. |
| T2S Dedicated Cash Account number | This attribute shall define the unique T2S dedicated cash account number. It is provided by the NCB (or party authorised) at the time of the dedicated cash account creation and should be in line with ISO20022 specifications for cash accounts. T2S shall check uniqueness of the provided account number. |
| Currency | This attribute shall specify the currency of the T2S dedicated cash account. |
| Floor Notification Amount | This attribute shall specify the lower threshold for notifying the cash manager. If the balance of the T2S dedicated cash account falls below this amount, then T2S immediately informs the liquidity manager of the account owner. Information to the T2S Actor is only generated the first time the cash balance falls below this amount, not for additional bookings where the floor remains breached. |
| Ceiling Notification Amount | This attribute shall specify the upper threshold for notifying the cash manager. If the balance of the T2S dedicated cash account exceeds this amount, then T2S immediately inform the liquidity manager of the account owner. Information to the T2S Actor is only generated the first time the cash balance exceeds this amount, not for additional bookings where the ceiling remains breached. |
| Account Status | This attribute specifies the current business status of the T2S dedicated cash account (e.g., open or closed). |
| Opening Date | This attribute shall specify the date that the payment bank opens the T2S dedicated cash account. |
| Closing Date | This attribute shall specify the date that the payment bank closes the T2S dedicated cash account. |
| RTGS Account Number | This attribute shall specify the RTGS account or the MCA linked to the T2S dedicated cash account. |
| Linked Account Type | This attribute shall specify if the DCA is linked to a RTGS account or to a MCA. |

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**Preliminary assessment:**

- **Financial Impact:** Low
- **Impacted modules:** SETT
- **Impact on other Eurosystem Services or Projects:** No impact on T2**,** TIPS or ECMS;
- **Risk analysis:** No risks have been identified during PA

**Findings**

- RTS and NTS breach notifications need to be updated in order to reflect new requested behaviour.

**Questions**

- We assume that it will not be necessary to send breach notifications in the case of an intra-day change of floor/ceiling in T2S. In that case a notification would not be sent out in the example below:
  *A DCA has a balance of 900.000€*
  *The ceiling is modified from 1.000.000€ to 800.000€*
  *Since the balance is now above the ceiling (even if no booking was done), we assume that it is not necessary to send a breach notification in this case.*
  If notifications have to be sent in this case, it will have higher impact on the solution design.

**Detailed assessment:**

| EUROSYSTEM ANALYSIS – GENERAL INFORMATION | | |
|---|---|---|
| **T2S Specific Components** | | **Common Components** |
| **LCMM** | | |
| | Instructions validation | |
| | Status management | |

| | | | |
|---|---|---|---|
| | Instruction matching | | |
| | Instructions maintenance | | |
| | Penalty Mechanism | | |
| | | | |
| **Settlement** | | | |
| | Standardisation and preparation to settlement | | |
| X | Night-time Settlement | | |
| | Daytime Recycling and optimisation | | |
| X | Daytime Validation, provisioning & booking | | |
| | Auto-collateralisation | | |
| | | | |
| **Liquidity Management** | | | |
| X | Outbound Information Management | | |
| | NCB Business Procedures | | |
| | Liquidity Operations | | |
| | | | |
| **T2S Interface** | | **Eurosystem Single Market Infrastructure Gateway** (from R6.0 June 2022) | |
| | Communication | | Communication |
| | Outbound Processing | | Outbound Processing |
| | Inbound Processing | | Inbound Processing |
| | | | |
| **Static Data Management** *(until June 2022)* | | **Common Reference Data Management** *(from R6.0 June 2022)* | |
| | Party data management | | Party data management |
| | Securities data management | | Securities data management |
| | Cash account data management | | Cash account data management |
| | Securities account data management | | Securities account data management |
| | Rules and parameters data management | | Rules and parameters data management |
| | | | |
| **Statistics and archive** | | **Statistics and archive** | |
| | Statistical information (until June 2022) | | Short term statistical information |
| | Legal archiving (until June 2022) | | Legal archiving (from R6.0) |
| | | | Data Warehouse (from R6.0) |
| | | | |
| **Information** *(until June 2022 containing reference data)* | | **CRDM business interface** *(from R6.0 June 2022)* | |
| | Report management | | Report management |
| | Query management | | Query management |
| | | | Communication |
| | | | Outbound Processing |
| | | | Inbound Processing |
| | | | |
| **Operational Services** | | | |
| | Data Migration (T2S DMT) | | Data Migration (CRDM DMT, from R6.0) |
| | Scheduling (until June 2022) | | Business Day Management (from R6.0) |
| | | | Business Day Management business interface (from R6.0) |
| | Billing (until June 2022) | | Billing (from R6.0) |
| | | | Billing business interface (from R6.0) |
| | Operational Monitoring | | Operational and Business Monitoring |
| | MOP Contingency Templates | | |
| | | | |

| | | |
|---|---|---|
| **Impact on major documentation** | | |
| **Document** | **Chapter** | **Change** |
| Impacted URD chapter | Section 6.2.2.1 General Requirements | Modify description of floor and ceiling. |
| | Section 16.8.4 T2S Dedicated Cash Accounts | Clarification on the attributes of a T2S DCA. |

| | | |
|---|---|---|
| Impacted GFS chapter | 3.5.6.3 Booking | Add footnotes that only first breach generates a notification |
| Impacted UDFS chapter | 1.6.1.8.5 Booking process | Modify description regarding check of floor and ceiling amounts. Add information to footnote 244 |
| | 1.6.2.7.3 Liquidity Monitoring Process | Add information that only first breach will generate a notification |
| Additional deliveries for Message Specification (UDFS, MyStandards, MOP contingency templates) | | |
| UHB | | |
| Other impacted documentation (FA Sch. 05, FA Sch. 07) | | |
| Impacted GDPR message/ screen fields | | No impact |

| Links with other requests | | | | |
|---|---|---|---|---|
| Links | Reference | | Title | |

| **OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT** |
|---|
| **Summary of functional, development, infrastructure and migration impacts** |
| This CR will impact the floor/ceiling breach notifications, in order to align with T2/TIPS, and to have a functionality more in line with client needs.<br><br>In order to only send notifications the first time there is a breach of floor/ceiling threshold it is necessary to track whether it is the first time the threshold is breached, or if the breach already occurred, This will be checked in relation to each booking during RTS, and after each settlement sequence during NTS, according to current behaviour in T2S.<br>If applicable according to the new rules, the breach information will be forwarded to the client according to existing functionality and set-up.<br><br>**Main Cost Drivers**<br><br>- Adapt the RTS and NTS processes in order to take into consideration that only the first floor/ceiling breach will entail the generation of a notification to the T2S clients<br>- Testing of the new functionality and notification generation in case of floor breaching or ceiling breaching for different use cases occurring in RTS or NTS |
| **Impact on other TARGET Services and projects** |
| No impact on other Eurosystem services (T2, TIPS) or projects (ECMS). |
| **Summary of project risk** |
| No risk has been identified during DA. |
| **Security analysis** |
| No adverse effect has been identified during security assessment. |

27 March 2024

# Cost assessment on Change Requests

| T2S-800-SYS – Harmonisation of floor/ceiling notifications with T2 | | | |
|---|---|---|---|
| One-off | Assessment costs*<br>- Preliminary<br>- Detailed | <br>2,000.00<br>20,000.00 | <br>Euro<br>Euro |
| One-off | Development costs | 239,588.77 | Euro |
| Annual | Operational costs<br>- Maintenance costs<br>- Running costs | <br>26,106.32<br>0.00 | <br>Euro<br>Euro |

*The relevant assessment costs will be charged regardless of whether the CR is implemented (Cf. T2S Framework Agreement, Schedule 7, par. 5.2.3).