

T2S CHANGE REVIEW GROUP

Darío García +49 15 115256814 T2S.CRG@ecb.europa.eu

Outcome

Meeting of the T2S Change Review Group (CRG)

08 April 2025 from 09:30 to 15:00 CET (held remotely)

1. Introductory remarks and approval of the agenda

Background documentation

- · Final CRG meeting Agenda
- Recent resolutions on CRs since last meeting

Outcome

Final CRG meeting Agenda

The CRG chairperson, Adrian Popescu, welcomed the participants and introduced the meeting, held via Microsoft Teams.

The CRG reviewed the meeting agenda and agreed to discuss the detailed assessment of CR-0837 in parallel with the Onboarding of Euronext Securities Copenhagen (ES-CPH) as both topics share common contributors. It was noted, however, that these topics should not be interlinked. While the CR is required in the context of the ES-CPH onboarding, it will also enable further upgrading of the T2S platform for end investor markets and benefit future onboarding cases.

The CRG approved the final meeting agenda.

Outcome

Recent resolutions on CRs since last meeting

The CRG took note of the updated status of the following change requests (CRs):

- CRs under implementation:
 - T2S-0820-SYS CRDM Certificate DN management restrictions: The MIB approved the implementation of CR-0820 with R2025.NOV on 27 March 2025.
- CRs already authorised/ under detailed assessment (DA):
 - T2S-0849-SYS RTS Enhancements Minimising the sending of SETT/LCMM internal messages: The MIB authorised CR-0849 on 28 March 2025. It is ranked #6/25 in the CR ranking.
- CRs not yet authorised at T2S Steering Level:
 - T2S-0845-SYS RTS Enhancements Improving optimisation process and reducing SETT/LCMM coupling for status updates: The CRG approved the updated scope of CR-0845 and agreed to request its Preliminary Assessment (PA) on 5 March 2025.
 - T2S-0829-SYS T2S Eligible Counterparty CSD Links should be at party level and no longer at security,
 Issuer CSD or country level: The CRG agreed to request the PA for CR-0829 on 11 March 2025.



- T2S-0834-SYS Un-prune additional attributes in T2S settlement messages to enhance STP processing:
 The MIB written procedure for the authorisation of CR-0834 is ongoing.
- T2S-0835-SYS T2S should streamline business validations for intended settlement date in the past: The MIB written procedure for the authorisation of CR-0835 is ongoing.

Additionally, the CRG took note of the current PA delivery plan, including the PAs for:

- CR-0828 'T2S should no longer release cash restrictions related to COSD blocking at real-time closure' and CR-0829 'T2S Eligible Counterparty CSD Links should be at party level and no longer at security, Issuer CSD or country level' expected on 16 May 2025,
- CR-0844 'T2S should process settlement instructions with ISD in the future outside the Start of Day period'. and CR-0845 'RTS Enhancements: Optimisation process, reduce coupling and stop sending internal messages.' expected on 30 April 2025, and
- CR-0846 'T2S should not create a realignment chain in mixed scenarios where one realignment chain ends in T2S
 but the other one ends outside of T2S with an External CSD' and CR-0848 'General Ledger file tracking and
 integrity functionality for contingency procedures' expected on 16 June 2025.

Finally, one CRG member remarked that the current duration of CR PAs does not adhere to the maximum of 8 weeks established by the T2S Framework Agreement (FA). The Eurosystem acknowledged current limitations in the 4CB's capacity to conduct preliminary and detailed assessments and is working on ways to improve it.

2. Outcome of previous meetings

Background documentation:

- Outcome of the CRG meeting on 25 February 2025
- List of CRG Action Points

Outcome

Outcome of the CRG meeting on 25 February 2025

The CRG approved the outcome of the CRG meeting on 25 February 2025.

Follow-up actions

ECB team to publish the outcome of the CRG meeting on 25 February 2025 on the ECB Webpage [16 April 2025].

Outcome

List of CRG Action Points

The CRG took note of a status update for the following action points (APs):

AP-4177: The CRG took note that the detailed re-assessment (DrA) for T2 CR-0129 "CRDM admin users access
rights scope limitation", including the relevant editorial updates, had already been reviewed in writing. Although
some points still require further clarification from an operational perspective, particularly regarding the migration of
16 certificate DNs in R2025.NOV, the CRG agreed to recommend the implementation of the related T2S CR-0820
in R2025.NOV. The CRG agreed to close the action point.



- AP-4196: The CRG took note that the editorial changes approved in the context of CR-797 have been incorporated
 in the SDD updates for R2025.JUN, which have been published on the ECB website on 13 March 2025. The CRG
 agreed to close the action point.
- AP-4212: The CRG took note that the OGPF-DG is expected to be reactivated by Q3 2025. The CRG agreed to update the deadline of the action point from Q1 to Q3 2025.
- AP-4217: The CRG took note that the external CSD settlement scenario identified in October 2024 has been
 incorporated in the SDD updates for R2025.JUN, which have been published on the ECB website on 13 March
 2025. The CRG agreed to close the action point.
- AP-4219: The CRG took note of the OMG discussion on 31 March 2025. The PATD and PREL codes will be unpruned in semt.022 only with the new ISO MR 2025 version (CR-0841) in R2026.NOV, and no additional functional CR will be needed for this purpose. The CRG agreed to close the action point.
- AP-4231: The CRG took note of the OMG discussion on 31 March 2025. The OMG confirmed that semt.022 reports are currently not used for operations, and therefore, there is no risk that semt.022 will become non-schema compliant on user side until the implementation of ISO MR 2025 (CR-0841) in R2026.NOV. Despite this, the OMG requested the reporting gap in semt.022 to be documented in the SDDs for R2026.JUN [NEW CRG AP¹]. The CRG agreed to close the action point.

Follow-up actions

> The CRG Secretariat will open a new AP for the 4CB to document the reporting gap in semt.022 between R2026.JUN and R2026.NOV in the SDDs for R2026.JUN [20 May 2025].

3. T2S SDD delivery planning for 2026 releases

Background documentation:

• 2026 SDD delivery planning

Outcome

2026 SDD delivery planning

The CRG took note of the timeline for T2S SDD updates in view of 2026 releases. The expected publication date of the SDD updates is 22 January 2026 for R2026.JUN. The CRG will be invited to review the delivery planning in writing.

Follow-up actions

CRG Secretariat to initiate a written procedure to review the 2026 SDD delivery planning [16 April 2025].

4. Onboarding of Euronext Securities Copenhagen

Background documentation:

- ES-CPH onboarding Impact assessment presentation
- CR-0837
 - T2S-0837-URD: New Mechanism for handling queries and access rights management for Direct Holding Markets
 - CR-0837 Detailed Assessment

¹AP-4233: 4CB to document the reporting gap in semt.022 in the SDDs for R2026.JUN



4CB presentation on CR-0837 detailed assessment

Outcome

ES-CPH onboarding Impact assessment - presentation

The CRG took note of the key milestones and functional impact assessment for the migration of the ES-CPH direct holding market (DHM) to T2S. The ECB clarified that the Steering Level is expected to approve the migration plan and strategy by Q3 2025 (tentatively by September 2025).

One CRG remarked that, since the number of securities accounts are expected to double, performance tests should be planned both by the 4CB and CSDs to prevent disruptions at the end of day reporting, especially due to the higher number of securities account reports that will be processed by T2S at this time. ES-CPH should inform the community regarding the message subscriptions that will be used.

The ECB clarified that DHM CSDs in T2S are currently using flat file reporting, instead of ISO reports. A similar approach is also expected for ES-CPH, to be confirmed within the migration plan and strategy.

With respect to the new T2S CR for STSI and BILL process enhancements, one CRG member asked whether this CR could leverage synergies with other BILL CRs which had been raised earlier by the CRG in order to address past auditing findings in regard to the billing process and also help solve issues in the current billing process which caused or might have caused (serious) billing incidents in the past.

The ECB clarified that CR-0837 will benefit the whole community and should be seen as a strategic evolution as it will enable T2S performance savings in scenarios with increased volumes.

Another CRG member asked what the current implementation priorities are, specifically which CRs are on the critical path for the onboarding of ES-CPH DHM. This is expected to be clarified in the migration plan and strategy.

Regarding testing, one CRG member asked how volume testing will be organised, given known volumetric limitations of the T2S testing environments. The Eurosystem is currently exploring different options to address this issue and will include them in the migration plan and strategy. One possibility could be to scale up the EAC environment, as it had been done in previous onboarding cases.

The CRG Secretariat will schedule a discussion of the initial migration plan and strategy in one of the next meetings, tentatively at the end of Q2 2025.

Outcome

CR-0837: New Mechanism for handling queries and access rights management for Direct Holding Markets

The CRG was presented with the results of the DA for CR-0837 which aims to optimise the Access Rights Management (ARM) checks and A2A/ U2A queries of securities accounts related to DHM. The purpose of the change is to mitigate the risk of adverse impacts on system performance that could occur if the number of securities accounts increases, e.g., following the onboarding of end-investor markets.

The CRG took note that CR-0837 will have significant impacts on the CRDM module as well as on the related processes in LCMM. A follow-up DrA will be required by mid-2026 to clarify additional aspects once the migration plan and strategy have been approved by the Steering Level. This DrA should clarify, among others, the new Business Rule (BR) that will be defined to prevent adding end-investor accounts to secured groups.

One CRG member asked about the process and timeline for finalising the migration aspects. The ECB clarified that aspects related to the migration process should be analysed and clarified together with the onboarding market in the context of the OMG. The initial migration plan and strategy will be presented to the T2S technical groups tentatively by the end of Q2 2025.



Regarding costs, the ECB noted that, according to the definition of CRs in the T2S FA, as well as recent resolutions of Technical Groups and Steering Level, CPU increases should not be included in the CRs' pricing view. Instead, costs related with technical upgrades, as opposed to software or functional upgrades, should be covered by the T2S operational budget. The Eurosystem will further align on the CPU costs currently included in the CR's pricing view and revert back to the CRG [NEW CRG AP²].

Finally, some markets using the layered model in T2S asked whether they would be impacted by the change. It was clarified that only DHMs in T2S would be impacted, as other markets currently have no end-investor accounts in T2S. The 4CB should clarify this aspect in the CR DA [NEW CRG AP³].

The CRG will be invited to review, via a written procedure, the results of the CR DA.

Follow-up actions

- CRG Secretariat to initiate a new written procedure for the review of the DA for CR-0837 [16 May 2025].
- CRG Secretariat to open a new action point for the Eurosystem to review CPU costs currently included in the CR's pricing view [20 May 2025].
- CRG Secretariat to open a new action point for the 4CB to clarify within the CR DA the impact of CR-0837 for markets using the layered model in T2S [20 May 2025].

5. Analysis of change requests

5.1 Change requests under implementation

Background documentation: none.

5.2 Change requests already authorised at T2S Steering Level (not yet under implementation)

Background documentation:

- Overview and way-forward on authorised CRs by the T2S Steering Level
- CR-0784 and CR-0798:
 - T2S-0784-SYS: Update in the Credit Memorandum Balance configuration to allow leveraging on the CCBM model (sent on 25/03//2025)
 - T2S-0798-SYS: T2S COSD logic should support partial release of instructions subject to COSD and partial COSD release (sent on 25/03//2025)
 - 4CB presentation on delivery planning for CR-0784 and CR-0798 (sent on 25/03//2025)
 - ECB summary of CR-0784 and CR-0798 Detailed Assessments (DAs) (table document)

CR-0826

- T2S-0826-SYS: T2S should use Pending Processing status to report hold on unmatched instructions.
- New ISO editorial CR-XXX: Update of Pending Processing Status Definition (sent on 02/04//2025)

Outcome

Overview and way-forward on authorised CRs by the T2S Steering Level

²AP-4234: Eurosystem to review CPU costs currently included in the CR's financial envelope

³AP-4235: 4CB to clarify within the CR DA the impact of CR-0837 for markets using the layered model in T2S



The CRG took note of the status of authorised CRs for which the PMG has not requested a DA due to their low priority. Given the 4CB's limited capacity to perform CR DAs and the high number of CRs with high priority for releases between 2025-2027, the CRG further noted that the PMG will closely monitor the list of authorised CRs and request DAs only for those CRs deemed urgent.

In line with this approach, it was noted that on 10 April, the PMG would assess a proposal to request the DAs for:

- CR-0834 in view of R2026.NOV, considering known synergies for regression testing, and consequently higher cost efficiency, if the CR is implemented together with CR-0841;
- CR-0849 in view of R2026.NOV, via a fast-track procedure, considering its criticality for handling high-volume corporate action events expected following the migration of the ES-CPH direct holding market in T2S.

Finally, it was acknowledged that the DA for CR-0835 should not be pursued yet, as the CR is currently not a priority from a CRG perspective.

Outcome

CR-0784: Update in the Credit Memorandum Balance configuration to allow leveraging on the CCBM model CR-0798 T2S COSD logic should support partial release of instructions subject to COSD and partial COSD release

The CRG was presented with the results of the DAs for CR-0784 and CR-0798.

The CRG agreed to discuss the two CRs in parallel even though there are no functional or technical interdependencies between them because they are currently concurring in terms of 4CB's implementation resources and capacity planning. Exceptionally, the DA results included three different deployment paths combining different implementation alternatives for both CRs.

CR-0784 is aimed to enable Eurosystem counterparties to get all the intraday credit in a single Dedicated Cash Account (DCA) irrespectively of the mobilisation channel used. The DA results clarified that the CR does not have any impacts on ECMS. It also showed that no risk or security impact had been identified.

CR-0798 is aimed to enhance the CoSD functionality to support partial "Party hold" release of instructions subject to CoSD and partial CoSD release. This will increase settlement efficiency for settlement flows under an external CSD scenario (CoSD). It also showed that no risk or security impact had been identified.

As part of the DA results, the CRG took note that the current partial release of party hold settlement instructions will need to be updated to cover the partial release of instructions subject to CoSD, and a new functionality to be created for implementing the partial CoSD release.

Additionally, the logical data model will need to be revised. Several BRs will need to be updated, and new ones created to identify that instructions are under partial CoSD release process.

The CRG also took note of a comment received during the DA review that aimed to change from 'YES' to 'NO' the current eligibility for a penalty of the reason code "CDLR". This reason code is used to report to the Administering party when the resources have been blocked in a CoSD sub-position via a sese.024. Currently, "CDLR" reason code eligibility is set to 'YES', which indicates that if an instruction fails to settle by the cut-off time because the CoSD funds were blocked and the administering party did not release the funds in time, a penalty will be imposed. Clearstream agreed



to follow-up internally and clarify the rationale for changing the eligibility of reason code "CDLR" with the implementation of CR-0798 [NEW CRG AP⁴].

With respect to the delivery options presented by the 4CB, one CRG member expressed a preference for option 1, i.e., to have CR-0798 in R2026.NOV and CR-0784 in R2027.NOV, highlighting that CR-0798 will enable higher volumes to be settled in T2S (currently settling outside T2S), and support cost recovery objectives. Additionally, since streamlining interactions with external CSDs, it will also make T2S more accessible and integrated in the European settlement landscape.

The CRG was supportive of option 1 as a compromise solution, noting concerns from some of its members regarding the time-to-market of CR-0784, as the scoping discussions had been initiated two years ago, and no delivery planning had been agreed yet. The CRG agreed to convey the message to the PMG that if option 1 is followed, there should be a commitment not to change the agreed delivery plan at a later stage, e.g., due to capacity dependencies with other CRs.

The CRG recommended to the PMG the implementation of CR-0798 in R2026.NOV and CR-0784 in R2027.NOV. As a next step, the PMG will be invited to allocate these CRs accordingly.

Follow-up actions

The CRG Secretariat will open a new AP for CBF to follow-up internally and clarify the rationale for changing the eligibility of reason code "CDLR" with the implementation of CR-0798 [20 May 2025].

Outcome

CR-0826: T2S should use Pending Processing status to report hold on unmatched instructions

The CRG took note that the SMPG will raise a new ISO editorial CR in view of the next maintenance cycle 2025/2026 by the end of May 2025. The CR will cover editorial updates for both ISO 15022 and ISO 20022.

Additionally, the SMPG Securities Settlement Status Advices – Usage and Market Practice Rules will be updated, as suggested by TFOS, to align with the new ISO editorial CR.

As next step, the scope of CR-0826 should be updated by the initiator (CBF) and circulated for CRG review and approval [NEW CRG AP⁵]. This will allow the 4CB to resume the fast-track DA subsequently.

Follow-up actions

CRG Secretariat to open a new AP for CBF to update the scope of CR-0826 to align the definition of the "Pending Processing" status with the new ISO editorial CR [20 May 2025].

5.3 Change requests not yet authorised at T2S Steering level

5.3.1 Change requests under preliminary assessment

Background documentation:

• T2S-0834-SYS: Un-prune additional attributes in T2S settlement messages to enhance STP processing

⁴ AP-4236: CBF to follow-up internally and clarify why the eligibility of reason code "CDLR" should be changed with the implementation of CR-0798

⁵AP-4237: CBF to update the scope of CR-0826 to align the definition of the "Pending Processing" status with the new ISO editorial CR



Way forward (sent on 31/03//2025)

Outcome

T2S-0834-SYS: Un-prune additional attributes in T2S settlement messages to enhance STP processing

The CRG took note of the feedback received during the review of the PA for CR-0834.

The CRG took note that the PMG would assess the DA request in view of R2026.NOV.

5.3.2 Candidates for preliminary assessment / Newly raised CRs

Background documentation: none.

5.3.3 Change requests raised in other TARGET Services

Background documentation: none.

5.4 Editorial CRs

Background documentation: none.

6. Clarification notes

Background documentation

SDD-PBR-CN for PBI-235389 related to INC000000429626 (Cross-CSD transaction sent to the SoD
revalidation process in status partially settled for which a new realignment chain is needed) (sent on
31/03/2025)

Outcome

SDD-PBR-CN for PBI-235389 related to INC000000429626

The CRG took note of SDD-PBR-CN-0113 related to INC000000429626 discussed in the previous meeting on 25 February 2025.

The ECB proposed some editorial changes to align the SDD-CN with the original CRG request to create a new BR only for the case where a partially settled transaction could still have a new realignment chain. It was agreed that the case where the partially settled transaction could not have a new possible realignment chain should not be included.

The CRG will be invited to review the updated SDD-CN in writing.

Follow-up actions

> CRG Secretariat to initiate a written procedure to review SDD-PBR-CN-0113 [16 April 2025].

7. Update on Quality Assurance and Testing (QAT)

Background documentation

- Way forward QAT incidents raised on 25/02/2025
- New QAT points for CRG attention

Outcome



Way forward - QAT incidents raised on 25/02/2025

The CRG discussed the way forward for incidents raised by the QAT team in the previous meeting on 25 February 2025.

Regarding INC-431000 and INC-431946, it was agreed that:

- (i) the identified inconsistencies between reda.006 and reda.007 should be fixed, i.e., so that the update of "Short Name" shall leave "Long Name" unchanged, and vice-versa [NEW CRG AP⁶].
- (ii) "Short Name" and "Long Name" should be made optional in reda.006 with the next ISO Upgrade, i.e., MR 2026, in line with the logic used in the original ISO version (prior to T2S customisation) and applied in reda.007 [NEW CRG AP⁷].
- (iii) all outbound reda messages with "Short Name" and "Long Name" (reda.009, reda.012,...) should be tested to verify that they are still XSD compliant, irrespective of the changes applied.

With respect to INC-424177, the CRG agreed that it could be addressed via SDD updates in the next Multiplex Editorial CR [NEW CRG AP⁸].

Follow-up actions

- The CRG Secretariat will open new APs for the 4CB to address INC-431000 and INC-431946, notably (i) to raise a new PBI and fix the identified inconsistencies between reda.006 and reda.007 and (ii) to update reda.006 with the next ISO Upgrade (MR2026) [20 May 2025].
- The CRG Secretariat will open a new AP for the 4CB to address INC-424177 via SDD updates in the next Multiplex Editorial CR [20 May 2025].

Outcome

New QAT points for CRG attention

The CRG was presented with four incidents found by the ECB QAT team during release testing in EAC.

Regarding INC000000435956 related to the segregation of data when viewing granted privileges, the CRG considered it as a confidentiality data breach. The incident should be acknowledged as a production problem to be fixed, as an editorial change would not be enough to address it. The CRG agreed to seek the views of OMG members and invite them to follow-up on the problem resolution.

The CRG will be invited to review INC000000437546, INC000000440948 and INC000000439806 in writing and decide whether there is the need for any follow-up actions

Follow-up actions

- CRG Secretariat to initiate a written procedure for the CRG to review the new QAT points for attention [16 April 2025].
- CRG Secretariat to seek the views of the OMG regarding INC000000435956 [NEW CRG AP⁹].

⁶ AP-4238: 4CB to raise new PBI and fix identified inconsistencies between reda.006 and reda.007

⁷ AP-4239: 4CB to make "Short Name" and "Long Name" optional in reda.006 with the next ISO Upgrade, i.e., MR 2026

⁸AP-4240: 4CB to address INC-424177 via SDD updates in the next Multiplex Editorial CR

⁹AP-4241: CRG Secretariat to seek the views of the OMG regarding INC000000435956



8. New Detailed Assessment template

Background documentation

New Change Request Detailed Assessment template updated

Outcome

New Change Request Detailed Assessment template updated

The CRG did not discuss this topic during the meeting. The new CR DA template will be reviewed in writing.

Follow-up actions

> CRG Secretariat to initiate a written procedure for the CRG to review the new CR DA template [16 April 2025].

9. Any other business

Background documentation

- Delivery plan of change requests
- Upcoming releases and change requests
- Dashboard on cross-service impact of CRs
- The following CRG meetings are planned in 2025 (to be confirmed at least 4 weeks in advance)

Outcome

Any other business

The CRG took note that the next CRG meeting will take place on 20 May 2025 and will be held remotely.

20 May 2025	09:30-15:00	Teams
1 July 2025	09:30-15:00	Teams
9 September 2025	09:30-15:00	Teams
14 October 2025	09:30-16:00	SIX SIS (Zurich)
2 December 2025	09:30-16:00	ECB Main Building