

T2S PROGRAMME OFFICE

27 April 2017

v1.1

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Summary

Meeting of the Change Review Group (CRG)

30 March 2017, from 09:30 to 17:30

held at Deutsche Bundesbank, Frankfurt

1. Introductory session

The Chairperson, Karen Birkel, welcomed the participants. The Chairperson welcomed the new CRG representative of Danmarks Nationalbank, Frederik Jorst who will replace Peter Toubro-Christensen from May 2017.

The CRG was informed about the proposal from the Release Management Subgroup (RMSG) that the RMSG should be in charge of the complete release management process from scoping to implementation. Currently, in line with the Framework Agreement, the CRG is in charge of the scope definition process. In the new release scoping process the CRG would continue to be responsible for the prioritisation/ranking of Change Requests based on the business value for each of the Change Requests; this exercise would have to be conducted on a regular, e.g. yearly basis. The CRG would then share the ranking of Change Requests, functional constraints and any inter-dependencies among the Change Requests with the RMSG. The RMSG would decide on the scope of the T2S Release after considering the ranking/prioritisation shared by the CRG and any other constraints like timing, capacity of the release etc. The RMSG would then recommend the Change Requests for detailed assessment. Upon receipt of the detailed assessment, it would be reviewed by the CRG from a functional perspective and by the RMSG from the timing and feasibility perspective and recommended for inclusion (or not) into that Release by the RMSG.

The proposed change to the release management process is not consistent with the current framework agreement and therefore the RMSG will seek the advice from the Steering level. The CSD Steering group (CSG) is expected to discuss this topic in their meeting on 25 April 2017 and the MIB is expected to discuss this topic in their meeting on 26/27 April 2017. Prior to the CSG, the CRG (and

potentially other governance groups) would be consulted on the process proposal of the RMSG. A change to the RMSG mandate may be necessary, if the changes to the operational framework are accepted and CSD/CB CRG members who would be interested to join the RMSG to participate in the release scoping/definition process may raise their interest.

A CRG member commented that after migration of the Final Wave, the general T2S governance structure should be revised.

The Chairperson informed that the main aim of the meeting was to discuss:

- The detailed assessment on the CR T2S-0515-URD
- The updated version of the CR T2S-0646-SYS and CR T2S-0653-URD
- The CR T2S-0647-SYS and the solutions to various T2S communication failure scenarios
- New editorial CR T2S-0657-SYS
- New CR T2S-0656-URD and other CRs from the market
- A topic from User Testing Sub-group (UTSG)
- Input requested by the Operations Managers Group (OMG) related to a ticket about message sequence numbers around end of day (EOD)/ start of day (SOD)

2. Feedback on action points from previous CRG meetings

The participants were informed that only the 'open' action points would be discussed during the meeting. The feedback of CRG members for action points which were 'pending closure' would be collected through the written procedure¹.

T2SACTION-2795: Change Request T2S-0544-URD (Retroactive Cash Restriction (Cash Blocking and Reservation) - The CR initiator will update the Change Request, if agreeable with the 4CB proposal.

Update: The discussion on the topic was postponed to the CRG meeting on 7 June 2017. The action point remains open.

T2SACTION-2805: Change Request T2S-0647-SYS (T2S Actors should be allowed to extract bulk of outbound messages in XML format) - The CR initiator will check if the current 'Resend' functionality via A2A / U2A mode can be reused and amended to solve the request.

Update: The CRG will provide their feedback if the resending options provided by T2S i.e. via T2S GUI (U2A), via admi.006 - Resend Request (A2A) and massive manual resend by T2S Service Desk are sufficient or if they require additional solutions in T2S to extract messages from T2S which previously failed to be delivered. The action point remains open.

¹ During the written procedure from 03-18 April 2017, the CRG members did not raise any objection for the action points with the status 'pending closure'; hence the action points can be considered closed.

T2SACTION-2806: Change Request T2S-0647-SYS (T2S Actors should be allowed to extract bulk of outbound messages in XML format) - The ECB will check with the OMG if initial communication problem can be covered via a “Retry” Functionality of the NSP.

Update: During the presentation on ‘Traffic flows and error management’ the 4CB mentioned that the ‘Retry’ functionality is currently provided by one of the service providers. Additionally T2S enables resending of messages via A2A, U2A and massive manual resend mode. The action point was closed.

T2SACTION-2887: Change Request T2S-0647-SYS (T2S Actors should be allowed to extract bulk of outbound messages in XML format) - The CRG members will provide their business cases for the issues experienced when resending of messages were necessary, in case they are not covered in the business cases provided by the OMG presentation.

Update: The additional business cases shared by the CRG were discussed during the CRG meeting on 30 March 2017. The action point was closed.

T2SACTION-2891: Change Request T2S-0650-SYS (T2S to prevent duplicate sequence numbers after a Recovery After Disaster) - The CR initiator will be invited to check whether the Change Request needs to be updated or a new Change Request has to be raised to include the issue related to the duplicate MITI reference in case of RAD.

The action point remains open.

T2SACTION-2892: Change Request T2S-0650-SYS (T2S to prevent duplicate sequence numbers after a Recovery After Disaster) - The ECB will check with the OMG the urgency of the CR-650 (and potentially the new requirement for MITI) in case the Change Request is not integrated with the CR-446.

Update: The CRG was informed that the OMG was of the view that the urgency and priority of the Change Request is similar to the Change Request T2S-0446-SYS (Blocking of U2A interface for submitting new instructions to T2S during reconciliation process post RAD (Recovery After Disaster)), i.e. T2S Release 2.0. The action point was closed.

T2SACTION-2911: Change Request T2S-0559-URD (Prevention of matching (moment of irrevocability) SF2 in case of insolvency of a CSD Participant or a DCA holder) - The 4CB will check whether a simpler implementation solution for the Change Request could be envisaged.

Update: The 4CB presented the alternative implementation solution for the Change Request T2S-0559-URD during the CRG meeting on 30 March 2017. The action point was closed.

T2SACTION-2912: Change Request T2S-0544-URD (Retroactive Cash Restriction (Cash Blocking and Reservation)) - Euroclear will check if the new alternative for the definition of the required privileges favoured by the CR initiator and most of the CRG members, i.e. the use of the same privilege to amend cash restriction reference that would be both under the data scope of the cash side and under the data scope of the securities side, could be viable from legal perspective.

Update: The CRG was informed that the feedback from Euroclear will be discussed during the CRG meeting on 7 June 2016. The action point remains open.

T2SACTION-2914: Change Request T2S-0544-URD (Retroactive Cash Restriction (Cash Blocking and Reservation)) - The CRG agreed that the 4CB will draft an ISO CR for addition of the new block in sese.030 to modify restriction references, after the implementation solution for the Change Request is finalised.

Update: The CRG was informed that the Change Request will be updated after the discussion about the implementation approach for the Change Request was finalised. The action point remains open.

T2SACTION-2922: Change Request T2S-0611-SYS (Cash Account Postings GUI Screen to include the T2S Actor References) - The ECB will update the Change Request to align it with the potential SWIFT CR.

Update: The CRG was informed that the Change Request will be updated after approval of the relevant SWIFT CR was given by SWIFT. The action point remains open.

T2SACTION-2924: Change Request T2S-0623-SYS (Standing rebalancing of securities positions) - The CR initiators will check if (i) they would like to classify the Change Request as ‘specific’ Change Request (ii) they prefer to use a new ISO Transaction Code (which would require an ISO CR) for rebalancing or if they would prefer to re-use an existing code.

Update: The CRG was informed about the preference of CR initiators (Euroclear, Iberclear) for classifying the Change Request as ‘common’ and use of new ISO Transaction Code for rebalancing. The action point was closed.

T2SACTION-2926: Scope of T2S Release 3.0 - The 4CB will indicate the time frame for detailed assessment of the second slot of Change Requests and provide considerations about the possible number of Change Requests that could be assigned to each of the slots.

Update: The CRG was informed that the 4CB will provide the indication of the time frame for detailed assessment of the second slot of Change Requests and considerations about the possible number of Change Requests during the CRG meeting on 24 April 2017. The action point remains open.

T2SACTION-2928: Observations about T2S behaviour experienced after migration wave 4. Clearstream will provide a background document on the topic for the discussion during the next CRG meeting.

Update: During the CRG meeting on 30 March 2017, Clearstream presented their observations on 5 different cases where T2S processing resulted in unexpected results. The action point was closed.

3. Approval of the summary of previous meetings

The CRG did not raise any objections to the final approval of the following summaries:

- Summary of the CRG meeting of 24 January 2017
- Summary of the CRG teleconference of 8 February 2017
- Summary of CRG written procedure from 15 - 17 February 2017
- Summary of CRG written procedure from 10 – 16 March 2017

Some of the CRG member mentioned that they would like to provide feedback on the Summary of the CRG meeting of 28 February 2017. They agreed to share the feedback by 31 March 2017.

4. Analysis of the Change Requests

A) Detailed assessment on Change Requests

Change Request T2S-0515-URD (Allow instructions from CSD participants for n days after maturity date of security)

The aim of the Change Request is to allow instructions in T2S from CSD participants for n days after the maturity date of an ISIN. During this period the instructions sent by CSD participants should be validated and allowed to match but not settle (with the exception of CCP PFOD instructions which should be allowed to settle).

The Change Request has a development cost of Euro 536,165.16 and operational cost of Euro 58,635.33.

The CRG was informed that in case of matched instruction in a matured ISIN which has already reached the intended settlement date (ISD) the sese.024 (Securities Settlement Transaction Status Advice) would report pending reason code 'OTHR.

A CRG member suggested that the OMG should be requested to consider the need to set up a procedure in the T2S Manual of Operational Procedures (MOP) as to how to add a CCP BIC into the new 'CCP Transformation Exceptions' table.

The CRG was informed that currently the Change Request is part of the proposal for potential Release 2.0 scope. On 6 April 2017, the 4CB will indicate whether a standalone delivery of the Change Request before Release 2.0 is feasible and beneficial for end-of-day processing. The CRG will discuss the incorporation of the Change Request in the relevant release during the CRG meeting on 24 April 2017.

The CRG agreed to provide the feedback on the detailed assessment and recommendation on the approval of the Change Request during a written procedure till 7 April 2017.

CRG decision: The CRG recommended the Change Request for approval and its inclusion in T2S Release 2.0 in principle, subject to no objection from the CRG on the detailed assessment during the CRG written procedure.

Action points:

- The CRG will provide feedback on the detailed assessment on the Change Request and objections on the approval of the Change Request, if any via a written procedure until 7 April 2017.
- The CRG will request the OMG to consider the need to set up a procedure in the MOP as to how to add a CCP BIC into the new 'CCP Transformation Exceptions' table.

B) Other Change Requests from the market for future T2S Releases

Change Request T2S-0544-URD (Retroactive Cash Restriction (Cash Blocking and Reservation))

The aim of the Change Request is to enable users to amend an existing settlement instruction to add or remove cash restriction references.

Based on the request of CRG members who preferred to finalise a bilateral discussion related to the Change Request, the CRG agreed to postpone the discussion on the Change Request to the CRG meeting on 7 June 2017 and keep the Change Request on hold.

CRG decision: The CRG agreed to keep the Change Request on hold.

Change Request T2S-0559-URD (Prevention of matching (moment of irrevocability) SF2 in case of insolvency of a CSD Participant or a DCA holder)

The aim of the Change Request is to prevent the risk of matching of instructions debiting an insolvent party, between the moment where the operator is made aware of the insolvency and the moment where the instructions are cancelled.

As follow-up on an action point from the previous meeting to find a simpler solution, the 4CB presented three alternative implementation solutions. The first proposal as already presented to the CRG during the CRG meeting on 28 February 2017 was to check the insolvency status at the validation level for the instruction and at the matching level for counterparty instruction when insolvency status is activated, the impact on T2S performance was expected to be high.

The second solution would require creation of a new 'revalidation' process. The revalidation process would be triggered every time a SAC/DCA was marked for restriction type RT4. The process would identify all settlement instructions from the insolvent party and flag them as "not subject to matching". However the solution would still have high impact on T2S performance and on the Lifecycle Management and Matching (LCMM) module.

A CRG member suggested that instead of the addition of new parameters, the possibility of reusing exiting parameters could be considered which would avoid the update of data model that leads to further revalidation of data. The 4CB informed that the use of additional matching flags could be considered, however that would not be the cleanest solution.

The third solution was to run an ad hoc revalidation process that would lead to the cancellation of the instructions of the insolvent party by T2S; however it was acknowledged by the CRG that this solution would be against the requirements of the Insolvency Task Force; which requires that the instructions are cancelled by the CSDs.

The CRG acknowledged that for instructions entered by the insolvent party after restriction type RT4 is in place, T2S would automatically reject the instructions. The Change Request would only avoid matching of the settlement instructions until the time they are cancelled by the CSD, thereby reducing the burden on CSDs of having to perform potential bilateral cancellations if matching was not prevented. In the absence of the Change Request, if such settlement instructions were matched and it were required to release restriction type case 2 to ensure the settlement of instructions entered in T2S before the party was declared insolvent, the CSD could still put the instructions (entered after the declaration of insolvency) on CSD hold and could cancel them later. Thereby it was acknowledged that the Change Request has rather low business value.

The CRG was informed about the OMG feedback that the OMG insolvency procedure as defined in MOP v1.5 did not consider this Change Request since it is not part of the current potential Release 2.0 scope. The OMG indicated that the Change Request would be helpful but not mandatory for them (i.e. it would facilitate the handling of instruction cancellations in case of insolvency of a CSD participant with many instructions).

The CRG was of the view that the CR initiator (CSG) could consider withdrawal of the Change Request considering its low business value, high implementation efforts and the feedback from the OMG that (i) the Change Request would be helpful but not mandatory and (ii) the OMG insolvency procedure has been drafted without considering this Change Request.

CRG decision: The CRG was of the view that the CR initiator (CSG) could consider withdrawal of the Change Request considering its low business value, high implementation efforts and the feedback from the OMG that (i) the Change Request would be helpful but not mandatory and (ii) the OMG insolvency procedure has been drafted without counting on this Change Request.

Action points: The ECB will inform the CR initiator (CSG) about the CRG view that the Change Request could be considered for withdrawal considering

- the Change Request has a low business value, involves high implementation efforts and may have an effect on the performance in T2S. Therefore it may not be scoped for upcoming T2S Releases.
- the OMG has drafted the OMG insolvency procedure without including this Change Request and they consider that the Change Request would be helpful however not mandatory.

Change Request T2S-0623-SYS (Standing rebalancing of securities positions)

The aim of the CR is to introduce A2A or U2A option for CSDs to allow them to generate 'standing', 'already matched FOP transfers' to move the whole position of one SAC or earmarking position to another SAC or earmarking position.

The CR initiators (Euroclear, Iberclear) informed the CRG that they would prefer to classify the Change Request as 'common' and they would prefer to have a new ISO code introduced to identify the rebalancing of securities at the end of the day.

The CRG agreed to inform sub-group on Message Standardisation (SGMS) about the CRG preference for new ISO Transaction Code for 'Rebalancing' of securities positions at the end of the day. Based on the SGMS proposal for the code the 4CB would draft the relevant ISO CR.

CRG Action: The CRG had a preference for a new ISO transaction code for rebalancing of securities positions.

Action points: The ECB will inform SGMS about the CRG preference to request a new ISO Transaction Code for 'Rebalancing' of securities positions at the end of the day. SGMS will be requested to make a proposal on the code to be used and to initiate drafting of the related ISO CR (to be done by 4CB).

Change Request T2S-0638-SYS (T2S should allow and process already matched instructions which include the counterparty's securities sub-position to be used for settlement purposes)

The aim of the Change Request is to allow the provision of the sub-balance type of the counterparty in an already matched instruction. Currently the sub-balance type can be provided only for one leg of the transaction.

The CRG was informed about the updates made to the Change Request to restrict the scope to the sese.023 (Securities Settlement Transaction Instruction) message only, according to the discussions in the last CRG meeting. The Change Request was considered finalised from content perspective and CRG recommended to launch its preliminary assessment.

The CRG was also informed that, in the context of the duplication of the section to be able to transport the information related to the delivering and the receiving leg some of the CRG members proposed that it would be useful to duplicate the whole Settlement Parameters block to facilitate the provision of other processing information per settlement leg, e.g. Hold Indicator, ISO Transaction Code, etc. Upon explaining the business cases for duplicating these fields for already matched instructions, a CRG member agreed to draft a similar T2S Change Request so T2S allows and processes already matched instructions including additional settlement parameters of the counterparty, e.g. Hold Indicator, ISO Transaction Code, etc.

The CRG discussed the approach and related business cases and agreed to share with the Securities Market Practice Group (SMPG) the proposal from the CRG for inclusion of the additional settlement parameters of the counterparty in already matched instructions.

During the discussion CRG representatives from the Italian market highlighted that they see a strong need to discuss a procedure for the definition of common and specific change requests, as their market has not indicated a need for this Change Request.

CRG decision: The CRG recommended to launch the preliminary assessment on the Change Request.

Action points:

- A CRG member (Clearstream) will draft a similar Change Request so T2S allows and processes already matched instructions including additional settlement parameters of the counterparty, e.g. Hold Indicator, ISO Transaction Code, etc.

- The ECB will share with the SMPG the proposal from the CRG for inclusion of the additional settlement parameters of the counterparty in already matched instructions, e.g. Hold Indicator, ISO Transaction Code, etc. and the business case for inclusion of the settlement parameters block.

Change Request T2S-0646-SYS (Pre-formatted operational reports at specific times)

The Change Request aims at providing pre-formatted operational reports based on the data retrieved from T2S at specific times and providing these reports to the individual CSDs /CBs that opt for them. The Data Access Task Force (DATF) representative informed about the updated version of the Change Request which now incorporates the feedback from the CRG, OMG and the Working Group on TARGET2 (WGT2) as well as the CSG. The updated Change Request ensures compliance with the principles of confidentiality and data hierarchy. As per the updated Change Request, the NCBs would receive the T2S data which would be the aggregated data from all NCBs however they will not receive the data of the CSDs. The Chairperson informed that it would be up to the individual CSDs and NCBs to decide whether they want to share their reports between each other outside of T2S. A separate document of working assumptions behind the Operational Reports envisaged by the Change Request has been added to the Change Request.

The CRG was also informed about a change in the definition of the fields 'lack of cash reports' and 'lack of securities reports' in all the reports related to the CSDs. The CRG took note that the associated billing solution for report subscription would be taken up later in a separate Change Request.

The CRG agreed to resume the detailed assessment on the updated Change Request. The 4CB informed that the detailed assessment would take another 4 weeks for completion. Additional 4 weeks were foreseen to get approvals from the steering level. The 4CB communicated that they were evaluating the feasibility of implementing the Change Request as part of a standalone T2S Release between Release 1.3 and Release 2.0, in accordance with the preferences of DATF members.

CRG decision: The CRG agreed to resume the detailed assessment of the updated Change Request.

Action points: The ECB will share the updated version of the attachments to the Change Request with the CRG, i.e. a correction in the definition of 'Lack of cash report' and 'Lack of securities report' in the CSD reports.

Change Request T2S-0647-SYS (T2S Actors should be allowed to extract bulk of outbound messages in XML format)

The aim of the Change Request is to allow T2S Actors to extract outbound messages in XML format from the T2S graphical user interface (GUI).

The 4CB presented various scenarios of communication failure and the solutions in case of store-and-forward traffic mode. The 4CB informed that the presentation is not applicable for the real-time message service which is used for queries in T2S. The 4CB communicated that the OMG considered

the solutions for the business cases as sufficient in the context of contingency scenarios and did not identify any need for further changes.

Regarding the business case 'T2S internal error' (back-end, interface or middleware level), the 4CB informed that it was not likely for this situation to occur again. It was analysed that messages which result in an internal error are queued and are not lost. Such messages could later be sent out manually as massive resend or as single messages.

A CRG member mentioned that the manual resend of failed messages via the U2A was not feasible in case of a situation where a large number of messages need to be resent, since the manual resend via U2A could trigger the messages only one by one. Therefore it was important to have an option to extract a file from the GUI, which was the underlying reason for raising CR T2S-0647-SYS.

The 4CB explained that, as part of a manual operational procedure, a T2S Actor may request the T2S Operator to conduct a massive resending of messages. A CRG member raised an issue with the massive manual resend functionality that the original signature in the message is kept unchanged. This "old signature" has caused issues at their side, i.e. the massively resent messages could not be processed by their internal system. The CRG member therefore considered it important that a new signature is generated when messages are resent.

The 4CB explained that in case of massive manual resend, T2S changes the signature in the Data Exchange Protocol (DEP) Header and but keeps the signature in the Business Application Header (BAH) as this is not possible via the manual procedure, to regenerate a new signature. Changing this behaviour, i.e. change of signature in case of massive manual resend, would require a Change Request and involve the development of a more sophisticated tool.

As an alternative, it was proposed that the CSDs could use the standard existing T2S A2A functionality to massively resend messages. They would need development on their side to send Resend Request messages (admi.006) so that they receive the outbound messages with a new BAH signature. In case of opting for using the massive manual resent by the T2S Operator, the T2S Actors may also consider to skip the signature check on their side in specific cases, which would not cause a major risk due to the fact that:

- 1) The bypass of the security checks would be done in the framework of a severe incident only (i.e. exceptionally)
- 2) It is easy to identify the messages coming from the Distinguished Name (DN) of T2S; therefore there should be no risk of accepting messages from other counterparties
- 3) All the messages potentially bypassed would just be notifications, not transactions to be executed (low risk)²

Another CRG member suggested that keeping the signature unchanged has the advantage that DiCoAs can identify messages which are duplicates much more easily.

² After the CRG meeting a CRG member informed that this point is wrong. Messages can be sese.023 copies, or sese.025 settlement confirmations. If a CSD processes faked sese.023 copies and corresponding sese.025, then this can create issues.

Another comment that was made was that the current measures for resending of messages which are in place should be sufficient, because the likelihood of occurrence of lost messages was considered low. But in the view of another CRG member this view was because the risk implied by lost messages, even if this was a rare case, would potentially be very high.

Upon a question about the cases in which the messages can be seen in T2S, the 4CB informed that if the internal error occurs at the T2S business interface level or at the back end then the messages are not generated and also not visible on the T2S GUI. However if the internal error occurs at the middleware level then the messages can be seen on the T2S GUI and can be extracted using the standard message extraction tools available.

A CRG member expressed that it very important to receive all messages by the end of the day at the latest. The 4CB informed that in case of an incident/exception if the messages could not be sent successfully till the end of the day, then a procedure has already been defined, i.e. there would be a settlement manager's call and the EOD could be delayed until all the messages are sent out.

The CRG was informed that in case the message is sent from T2S to NSP, the NSP sends the positive or negative acknowledgement for receipt/non-receipt of messages. If the acknowledgement is not received then T2S does not know if the message has been delivered and automatically attempts to resend the messages. After a certain number of retry attempts, if still no acknowledgement is received then the T2S Operator is alerted and needs to send the messages manually, this will only be conducted in accordance with the relevant party.

In case the message is not received at DiCoA, the 4CB informed that currently a new alerting tool is built, which will inform the operator about such incidents. This will give the operator the possibility to contact the user and inform them about the incident as early as possible. The new alerting functionality is expected to be in place within the next few weeks.

The CRG agreed to provide the feedback if resending options provided by T2S i.e. via T2S GUI, via admi.006 Resend Request and via massive manual resend are sufficient or if they require additional solutions to extract messages from T2S which previously failed to be delivered. Also feedback is requested about whether it was acceptable to have the signature changed only in the Data Exchange Protocol (DEP) Header, but keep the signature unchanged in the Business Application Header (BAH), in case of massive manual resend.

Based on the outcome of the written procedure the CRG will decide if the Change Request is still required.

CRG decision: The CRG agreed to keep the Change Request on hold.

Action points:

- The 4CB will share with the CRG the additional information to be considered in case processing of the 'old' signature is not possible on Directly Connected T2S Actor's (DiCoA) side.
- The CRG will provide the feedback if
 - the resending options provided by T2S i.e. via T2S GUI (U2A), via admi.006 - Resend Request (A2A) and massive manual resend by T2S Service Desk are sufficient or if they

require additional solutions in T2S to extract messages from T2S which previously failed to be delivered.

- it is acceptable not to change the business signature provided in the BAH in case of massive manual resend (T2S changes the signature in the Data Exchange Protocol (DEP) Header).
- CRG members require receiving a new BAH signature then they need to provide more detailed information about (i) why the usage of the 'old' signature is not sufficient and (ii) whether they could develop a tool to send Resend Request messages (admi.006) so that they can get the outbound messages with a new BAH signature.

Change Request T2S-0648-SYS (Enhancement of operational resilience in multi-currency context)

The aim of the Change Request is to allow the configuration of currency dependent events for each of the T2S currencies to ensure that the delay in a currency dependent cut-off for one currency does not lead to a delay in the cut-off for other currencies.

The CRG was informed about the updates made to the Change Request following the feedback from the CRG during the written procedure to specify below points

- (i) Changes will be applicable for any other currency joining T2S in future
- (ii) EOD can be started only after the last currency specific event has triggered for all currencies
- (iii) List of currency configurable reports specified in the Change Request³ is applicable only for the ISO version of the reports and the flat-file reports cannot be configured per currency
- (iv) Further minor wording updates in the Scope Defining Documents (e.g. change of cut-off events can be done only in contingency situations)

The CRG took note of the updated Change Request and agreed that that the detailed assessment should be conducted on the updated version of the Change Request.

CRG decision: The CRG agreed that the detailed assessment should be conducted on the updated version of the Change Request.

Change Request T2S-0653-URD (Partial release functionality)

The aim of the Change Request is to create a functionality of 'partial release' which would allow CSD participants to release a transaction for part of the quantity.

³- Statement of Accounts

- Statement of settled intra-position movements
- Statement of Transactions
- Statement of Pending Instructions
- Current Settlement Day Cash Information Report
- Following Settlement Day Cash Forecast Report
- Statement of settled intra-balance movements
- Statement of pending intra-balance movements
- Statement of pending amendment instructions for Intra-Balance Movements
- Statement of executed amendment instructions for Intra-Balance Movements
- Statement of pending cancellation instructions for Intra-Balance Movements
- Statement of executed cancellation instructions for Intra-Balance Movements

The CRG was informed about the different views from the CRG during the written procedure on the Change Request. The outcome of the written procedure showed that one CRG member supported the Change Request; three members considered that it was not required whereas 2 members had a neutral view on it.

The CR initiator presented the updated Change Request following the feedback from the CRG. The updated Change Request specifies that

- A CSD participant amends the original instruction to specify the quantity to be released.
- The partially released quantity should be presented for settlement and recycling during the partial settlement window only.
- The entire release quantity should be considered for settlement if sufficient resources are available. In case of insufficient resources the instruction should not be settled and re-set to hold completely.

The CR initiator was of the view that splitting (i.e. cancellation of an existing instruction and re-instructing multiple instructions) could not be considered as suitable alternate solution for the Change Request as it could involve many adaptations on the CSD participant's side and would also create issues in reconciliation. Also a power of attorney (POA) or agreement of counterparties is required in case of splitting. Shaping (i.e. breaking a large ticket into smaller transactions prior to sending to T2S) was also mentioned as potential workaround. However the CR initiator pointed that some of the CCPs are not in favour of implementing shaping on their side. Some other T2S Actors e.g. banks clarified that they do not offer this functionality and that the introduction of shaping would require many adaptations to their internal systems.

Another CRG member mentioned that currently their clients do not allow them to perform partial release in OTC instructions. Therefore there was no business case for introduction of the functionality. In this context, the CRG acknowledged that the functionality would not necessarily improve the settlement efficiency, rather it is likely to be used for a small set of transactions.

The CR initiator mentioned that in the context of CSD Regulation (CSDR) penalty regime the functionality would prove to be beneficial as it could have a positive impact on the amount of cash penalties due to the reduction of the quantity of the settlement fails at the end of the day.

A Directly Connected Parties Group (DCPG) representative supported the functionality and mentioned that they would like to use it depending on their client needs. The CRG agreed to share the Change Request with the DCPG to gather their feedback on the functionality and check if they would like to use it, if available.

The 4CB indicated their preference for the re-use of the standard partial settlement functionality for the execution of partial releases instead of executing them immediately at any time during the RTS. Due to the fact that the settlement of the partially released quantity is eligible for settlement only during the partial settlement window, the CRG discussed if a more suitable pending reason code for the status reporting of the modified instruction would be needed, as the code 'FUTU' as suggested in

the Change Request may not be correct since the instruction is not available for settlement immediately.

The CRG also discussed potential validations which should be applied in order to accept/reject a partial release request. The CR initiator was of the view that a partial release should be rejected if the partial settlement indicator was set to NPAR. Such rejection could be used as an alert at an early stage to the participant which had instructed the partial release. Another CRG member on the other hand was of the opinion that there was a possibility that after a partial release request, one of the counterparties could change the partial settlement parameter flag in the original instruction from NPAR to PART in which case the partially released quantity could still be considered for settlement during the partial settlement window.

On the discussion about the preferred status reporting related to the modification request, two main alternatives were presented;

1. T2S to send a SecuritiesSettlementConditionModificationStatusAdvice (sese.031) 'completed' immediately, i.e. as soon as the instruction is flagged for partial release
2. T2S to send the status 'completed' only after the settlement of the partially release quantity was executed, i.e. during/after the partial settlement window only.

It was agreed to ask for DCPG feedback on the two alternatives.

Upon a suggestion from a CRG member, the CRG agreed to modify the wording in the Change Request to specify that

- After T2S has settled the partially released quantity of the settlement instruction the remaining quantity in the same original instruction is marked with the status 'hold' (i.e. no new instruction is created for the remaining quantity)
- If the partial release is executed, both party and counterparty receive a settlement status reporting on ISD

During the discussion CRG representatives from the Italian market highlighted that they see a strong need to discuss a procedure for the definition of common and specific change requests, as their market has not indicated a need for this Change Request.

CRG decision: The CRG agreed to share the Change Request with the DCPG for feedback.

Action points:

- The ECB will share the Change Request with the DCPG for the feedback
 - on the features of the partial release functionality as proposed in Change Request and
 - if they would like to use the functionality of partial release, if available.
- The ECB will update the Change Request on behalf of the CR initiator to specify that
 - After T2S has settled the partially released quantity of the settlement instruction the remaining quantity in the same original instruction is marked with the status 'hold' (i.e. no new instruction is created for the remaining quantity)
 - If the partial release is executed, both party and counterparty receive a settlement status reporting on ISD

Change Request T2S-0656-URD (T2S should allow a temporary limit for the secondary Credit Memorandum Balance)

The aim of the Change Request is to allow payment banks to specify intraday external guarantee, client collateralisation and unsecured credit limits for a specific day which should be automatically replaced by the original limit at the EOD.

The CRG was informed that currently payment banks adjust the secondary Credit Memorandum Balance (CMB) limit during the day in case an additional limit needs to be granted to the client. These adjusted limits need to be reset manually at the end of the day to ensure that the increased limit does not continue on the next day. The Change Request would mitigate the operational risk, in case the manual resetting of limits to the original amount is not performed at the end of the day.

A CRG member mentioned that a same topic was discussed during the GUI workshop, though the request was from another angle. The proposal discussed during the GUI workshop was to create a temporary CMB limit by introducing a field 'valid to' on the screen 'Limit - New/Edit Screen'.

The 4CB informed that it could be possible to reset the CMB limit at the end of the day using the current T2S functionality for defining new CMBs, but they would need some further analysis to confirm. The 4CB agreed to share the result of the investigation during the CRG meeting on 24 April 2017.

As the possibility of using existing T2S functionality to address the functionality requested in the Change Request will be checked, the CRG agreed to put the Change Request on hold.

CRG decision: The CRG agreed to put the Change Request on hold.

Action points: The 4CB will investigate if the functionality requested in the Change Request can be addressed via existing T2S functionality for defining the CMB. The 4CB will share the outcome of their investigation during the CRG meeting on 24 April 2017.

C) Editorial Change Request

Change Request T2S-0657-SYS (Multiplex Editorial Change Request on GFS, UDFS and UHB)

The aim of the Change Request is to introduce editorial changes to the GFS, UDFS and UHB.

The CRG agreed to provide the feedback on the Change Request during the written procedure on the Change Request till 18 April 2017.

Action points: The CRG will provide the feedback on the Change Request during a written procedure by 18 April 2017.

5. Input requested by the User Testing Sub-group

UT-PBR-079 (Multilateral: settlement problems for linked instructions in the context of CoSD – INC 185482)

During user testing activities, it was observed that an instruction stating a link with type 'AFTER' to an instruction subject to Conditional Securities Delivery (COSD) was not settled after the instruction on COSD Hold was released and settled.

The user expected that after the underlying instruction subject to COSD was released and settled, the instruction which has link 'AFTER' to the COSD should be submitted to settlement. A CRG member mentioned that once the instruction on COSD Hold is released and settled, it is no longer an instruction on 'COSD Hold' and therefore the instruction stating the link 'AFTER' to the settled COSD instruction should be submitted to settlement.

The CRG discussed the UTSG clarification note UT-PBR-079 - Multilateral: settlement problems for linked instructions in the context of COSD (INC 185482).

The 4CB presented the clarification note and conveyed their view that T2S works according to the specifications/design. The Business Rules (BR) SPST028⁴ and SPST029⁵ specified in the UDFS prevent the settlement of instructions and restrictions stating non-reciprocal links to an instruction under COSD Hold. This ensures that the linked instructions do not interfere with the COSD processing.

During the eligibility check T2S attempts to create internal links. The eligibility check is performed at the Intended Settlement Date (ISD), after the COSD analysis. The 4CB explained that due to the before-mentioned Business Rules, T2S does not create the related internal links in case a non-reciprocal link is pointing to a settlement instruction under COSD Hold. This way the settlement of the instruction under COSD is not dependent on any other instruction and it will therefore settle once the COSD hold is released by the administering party. On the other hand, the instruction stating the link 'AFTER' remains pending in T2S unless the user removes the link manually or cancels the instruction.

The CRG acknowledged that existing BR SPST028 and SPST029 should continue to be applicable for instructions with link 'BEFORE' and 'WITH' linked to the instructions on COSD Hold, but it could be expected from a business point of view that they should not be applied for instructions with link 'AFTER. For the instruction with link 'AFTER', T2S should create an internal link so that the instruction can be presented for settlement after the linked instruction subject to COSD was settled.

A CRG member agreed to draft a Change Request for the release of settlement instruction stating the link 'AFTER' to an instruction on COSD Hold after the instruction on COSD is released and settled. The CRG acknowledged that no impact on users is foreseen. If the before mentioned Change Request would be implemented, the instruction with the link 'AFTER' to a COSD instruction would be

⁴ SPST028: A settlement Instruction cannot be submitted to a settlement attempt if it states a link WITH, BEFORE or AFTER an instruction that is under COSD Hold where this latter has no link to this instruction. Such a link will not prevent the settlement of the instruction on COSD Hold.

⁵ SPST029: A settlement restriction cannot be submitted to a settlement attempt if it states a link WITH, BEFORE or AFTER an instruction that is under COSD Hold where this latter has no link to this instruction. Such a link will not prevent the settlement of the instruction on COSD Hold.

presented for settlement (without any manual intervention) after the instruction on COSD Hold is released and settled.

CRG decision: The CRG was of the view that, from a business point of view, after the release of an instruction on COSD Hold and its settlement, instructions that have a link 'AFTER' to the instruction previously on COSD Hold should be submitted for a settlement attempt. From the CRG member's perspective, this is line with the UDFS reading; however, the 4CB think that it is not.

Action point: A CRG member will draft a Change Request for the release of settlement instruction stating the link 'AFTER' to an instruction on COSD Hold after the instruction on COSD is released and settled. The Change Request will be shared with the CRG during the meeting on 24 April 2017. The discussion about financing of the Change Request is pending and it will be discussed separately outside the CRG.

6. Input requested by the Operations Managers Group

Presentation on PBI200623 - Sequencing not correct

The CRG was informed about the OMG topic related to the production defect with PBI-200623 (Sequencing not correct). Due to the parallel processing in T2S, multiple activities performed on the same object around the change of business day could lead to inconsistent sequence numbers in the related status advice and confirmation messages. The OMG requested CRG feedback from functional perspective.

Example: when an instruction is submitted close to the change of business day (e.g. 18:45), the sequence number date in the 'matched' status notification could be associated to day D, while the sequence number date of the 'accepted' status notification could be associated with the day D+1, due to the fact that with parallel processing the matched status notification could reach the sequencing module earlier than the accepted status notification. This has led to sorting issues in the backend systems of some T2S Actors and therefore the status advices could not be processed automatically. A manual intervention on T2S Actor side was required.

This issue mainly occurs if a large number of requests (instructions, modifications, etc.) are sent to T2S towards the change of business day and therefore a lot of status updates are executed and sent to the sequencing mechanism around that time.

The CRG was informed about two possible options for correction of the issue -

Option A – Message sequence number will include the business date on which the status notification is created. This solution would require a change in the sequencing logic to ensure that the business date included in the sequence number of the status notification message is same as the date on which the notification was created rather than when it reached the sequencing module.

The solution would require no change on the T2S Actor side; however it might not be feasible to implement the changes before the implementation of T2S Release 1.3.

Option B – Not to include the business date in the message sequence number. This solution would mean that the sequence number of the status notification does not include any business date. The format of the sequence number would be changed to ensure that more digits in the sequence number are allowed than the current ones.

The solution would have impact on the T2S User Requirements Document (URD), T2S User Detailed Functional Specifications (UDFS) and T2S Actors, who use the business date provided in the sequence number of the status notification for processing in their internal systems.

A CRG member mentioned that their internal systems make use of the business date specified in the sequence number of the status notification and hence they would option B is not possible for them.

The CRG was of the view that option A (i.e. message sequence number to include the business date on which the status notification is created) was a preferred solution from functional perspective. The CRG acknowledged that until the solution to the problem is in place, T2S Actors should avoid sending requests (instructions, modifications, etc.) very close to the change of business day as a mitigation measure.

The CRG agreed to inform the OMG about the CRG discussion and its preference for the option A.

CRG decision: The CRG recommended a solution where the date linked to the message sequence number is equal to the business date on which the status notification is created (option A). The CRG members were of the view that, until the fix for the production problem is implemented, T2S Actors should avoid sending requests (instructions, modifications, etc.) very close to the change of business day as a mitigation measure.

Action points: The CRG will inform the OMG about the CRG discussion and its preference for the solution option (A) i.e. Use the business date on which the status notification is delivered to the T2S users.

7. Any other business

Status of the work on future T2S penalty mechanism and outcome of the related CRG written procedures 1 to 10 March 2017

The CRG was informed that the feedback to the CRG comments on the draft of penalty mechanism document was shared with them. The CSDR TF is currently drafting the Change Request on the penalty mechanism.

Observations about T2S behaviour experienced after migration wave 4

A CRG member presented their observations about T2S platform where unexpected outcome were experienced.

- Back-to-back Partial Settlement Loops (INC 204308) – In case of transaction where A delivers securities to B and B delivers securities to A and if sufficient resources were not available, it was observed that during the partial settlement window the available securities triggered partial settlement of the available quantity between the two accounts multiple times, until the whole

transaction quantity was settled.

- Settlement despite case 2 blocking (INC 204677) – It was observed that an instruction was settled even when one leg of the transaction was subject to the case 2 restriction (i.e. case 2 restriction on ISIN to block if instructing party is XYZ). This was actually caused by the other leg that was subject to case 2 exception (i.e. instructed by XYZ). The CRG member's view was that this was in conflict with the UDFS.
- Partial settlement despite WITH linking (INC 204713) – During the NTS processing a settlement restriction which was linked to a settlement instruction with the link type 'WITH' so that the SI delivered the position required for settlement of the SR was settled partially (lower quantity than the quantity stated in the settlement instruction) although the SI actually delivered the positions required for settlement. It appeared that the resources were used by another instruction before the linked restriction could be settled.
- COSD logic not mature – The CRG was also informed about the incidents/PBIs raised in the context where COSD logic did not work as specified.

The 4CB informed that they will update the clarification notes shared with the OMG to add the explanations provided by the CRG member. The updated clarification notes will be shared with the CRG in preparation of the CRG meeting on 24 April 2017.

Compression of T2S outbound messages

A CRG member mentioned that they have received uncompressed outbound messages from T2S in cases where they expected compression to be applied. However other CRG members did not report experiencing similar issues.

The CRG member agreed to share with the CRG a detailed description of the cases where they had expected to receive compressed messages but it did not work as expected.

Action points: Euroclear will share with the CRG a detailed description of the cases observed by them where T2S compression did not work as expected/required.

Common vs Specific Change Request

Two CRG members expressed that the definition of 'common' and 'specific' Change Requests needs to be clarified further. Some Change Requests are important for the evolution of the T2S platform, however some Change Request are beneficial for only certain participants. In their opinion, the Change Requests that do not benefit/are not supported by the entire T2S community should be considered as 'specific'. However it was acknowledged that the definition of a 'common CR' considered strictly in this way, there would probably be no Change Requests which would be required by every member of the T2S community. Another member of the CRG remarked that evolution is necessary on an IT platform, for it to stay current and without any changes, it would become unusable; i.e. a balance needs to be found. The chairperson suggested that in this sense may be better

to consider if a Change Request benefits the common platform, so that even if a participant does not strictly require it, a consensus could be found.

A CRG member who was in favour of differentiating between common and specific Change Requests mentioned that each market participant should be asked whether they want to finance a Change Request or not, because they had not raised many Change Requests and do not want to pay for Change Requests which they do not need.

The ECB agreed to share the definition of 'common' and 'specific' Change Requests as defined in the T2S framework agreement (FA) with the CRG during the CRG meeting on 24 April 2017.

<u>Participant's organisation</u>	<u>Name of participant</u>	
European Central Bank	Ms Karen Birkel	Chairperson
European Central Bank	Mr Alejandro Del Campo Roiz de la Parra	Rapporteur
European Central Bank	Ms Madhura Satardekar	
European Central Bank	Mr David Weidner	
European Central Bank	Mr Arpit Bhargava	
European Central Bank	Ms Charlotte Haendler	
European Central Bank	Mr Alexander Müller	
4CB	Mr Arno Friederich	
4CB	Ms Shkurtova Mariana	
4CB	Ms Wilma Jagomast	
4CB	Mr Dirk Beiermann	
4CB	Ms Natalia Canalejo	
4CB	Mr Miguel Martinez	
4CB	Mr Victorien Goldscheider	
4CB	Mr Massimiliano Renzetti	
4CB	Mr Michael Jennings	
Danmarks Nationalbank	Mr Peter Toubro-Christensen	
Danmarks Nationalbank	Mr Frederik Jorst	
Deutsche Bundesbank	Ms Melanie Gulden	
Bank of Greece	Mr Yorgos Korfiatis	
Banque de France	Mr Brossard Jocelyn	
Banca d'Italia	Mr Luca Rissolo	
Banque centrale du Luxembourg	Mr Alexandre Briand	
Banco de España	Ms Anca Parau	
De Nederlandsche Bank	Mr Erik Beunen	
Iberclear	Ms Pilar Sanchez	
Euroclear	Mr Dan Toledano	
VP Securities	Mr Kristoffer Kjelse Soenderlev	
Clearstream	Mr Markus Glück	
Monte Titoli	Mr Umberto Granata	
Centrálny depozitár cenných papierov SR, a.s.	Mr Juraj Aksamit	
NBB-SSS	Mr Koen Geenen	

ABN AMRO Clearing
BNP Paribas Securites Services
Deutsche Bank
LCH Clearnet
CITI
Societe Generale

Mr Ton van Andel
Mr Giorgio Ferraro
Ms Britta Woernle
Mr Pierre Peczi
Ms Jennifer Cryan
Mr Olivier Leveque