

T2S PROGRAMME OFFICE

22 November 2016

v1.1

Contact person: Alejandro del Campo Roiz de la Parra

Phone: +49 69 1344 7910

E-mail: T2S.CRG@ecb.int

Summary

Meeting of the Change Review Group (CRG)

26 October 2016, from 9:30 to 17:30

held at European Central Bank

1. Introductory session

The Chairperson, Karen Birkel, welcomed the participants and the new CRG representative of Danmarks Nationalbank, Peter Toubro-Christensen.

The CRG was informed that the aim of the CRG meeting was to discuss the preliminary assessment on the Change Requests, to discuss the updated versions of the Change Requests from the CSDR Task Force and from the market, to discuss the topics of cut-off handling and report management in the context of multi-currency, to discuss the new Change Request for bundling of outbound messages during the night-time settlement (NTS) and the proposal for bundling of messages during real-time settlement (RTS), to present few Change Requests from the backlog of Change Requests and to discuss the Directly Connected Parties Group (DCPG) feedback on the Change Requests from the backlog.

The CRG was informed that the old URL links of the User Detailed Functional Specifications (UDFS) schema version of the UDFS v1.2.1 and previous UDFS versions have been removed. The UDFS schema is available in MyStandards from the UDFS v1.2.1 onwards.

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-2680: Change Request T2S-0590-URD (Include information from the underlying settlement instruction in the T2S 'Bank to customer statement (camt.053)' and in the T2S 'Bank to customer debit credit notification (camt.054) messages for Settlement, Custody/Asset servicing and Reconciliation). The CR initiator will update the Change Request to specify the correct field path for the Bank to customer debit credit notification (camt.054) i.e. the fields are part of the notification block and not part of the statement block (i.e. 'Stmt' to be replaced with 'Ntfcn').

Update: The CRG was informed that the Change Request was updated. The updated Change Request will be discussed during the next CRG meeting. The action point remains open.

T2SACTION-2679: Change Request T2S-0544-URD (Retroactive Cash Restriction (Cash Blocking and Reservation). The ECB will share the Change Request with the SGMS for feedback on the messaging aspects of the Change Request during the SGMS telco on 20 October 2016.

Update: The CRG was informed that the Change Request could not be presented to the Sub-group on Message Standardisation (SGMS) as the telco did not take place. As agreed during the meeting the 4CB would propose an alternative approach for the Change Request. Based on the CRG decision on the proposed approach the CRG may decide to share it with the SGMS, if required. The action point was closed.

T2SACTION-2649: Change Request T2S-0623-SYS (Standing rebalancing of securities positions). The CR initiator and other CSDs impacted by the Change Request (VP securities, Iberclear, Clear stream) will provide their feedback on the questions raised by the 4CB.

Update: The CRG was informed that the feedback on open questions was received from Euroclear and VP Securities. Clearstream and Iberclear confirmed that they did not have any further feedback on the open questions. The action point was closed.

T2SACTION-2647: Change Request T2S-0614-SYS (Matching status should be included in sese.024 status messages for unmatched instructions when a pending reason is reported). CR initiator will inform CRG about the feedback from their client on the updated Change Request in the next CRG meeting in October 2016.

Update: The CR initiator informed that their clients agreed to the updated Change Request. The action point was closed.

¹ During the written procedure from 28 October 2016 till 08 November 2016, the CRG members did not raise any objection for the action points with the status 'pending closure'; hence the action points were considered closed.

T2SACTION-2636: Change Request T2S-0595-SYS (Allow settlement restrictions and settlement instructions to impact positions other than the earmarked restriction type used at the securities account level). The 4CB will provide answers to the questions raised by Clearstream

- 1) if option 3 i.e. not to address the issue via a specific functionality in the T2S software is chosen, then would the settlement instruction remain pending, even after settlement of the settlement restriction and release of the CoSD hold by the administering party?
- 2) if option 3 i.e. not to address the issue via a specific functionality in the T2S software is chosen, could CSDs resolve the situation themselves, e.g. by sending another settlement instruction or settlement restriction to move the positions back to the AWAS position type (or any other position type as stated in the Balance From of the pending settlement instruction)? When and how would such an instruction have to be submitted? Prior/after settlement of the CoSD settlement restriction, prior/after release of the CoSD hold by the administering party, stating any restricting reference or not, etc?

Update: The 4CB explained that for question 1) If situation occurs, the instruction would still be settled, however from a 'wrong' delivering position type (independent from availability of the subposition type in the account) for question 2) CSDs can cancel the settlement instruction under CoSD hold and then reinstruct the instruction after the static data change was performed. The CRG agreed to discuss the answers in detail with the help of examples during the next CRG meeting on 12-13 December 2016. The action point remains open.

T2SACTION-2612: Change Request T2S-0563-URD (Automatic Internal liquidity transfer between RTGS Transit Account and the T2S Dedicated Cash Account in case of RTGS rejection). The ECB will share the Change Request with the WGT2 to clarify if information about posting done in DCA due to RTGS rejection for an outbound liquidity transfer order needs to be included in the Cash Posting Notification (camt.054) message. The WGT2 will update the Change Request if required.

Update: The CRG was informed that the WGT2, the 4CB and the ECB are discussing the way forward on the Change Request. The action point remains open.

T2SACTION-2611: Change Request T2S-0530-URD (One close link database for Eurosystem NCBS and separate database per non-EUR currency). The ECB will check with the Danish Central Bank whether they plan to offer auto-collateralisation in euros as well and whether they will want to have a separate database of close links.

Update: The CRG was informed that the Danish Central Bank is currently analysing the Change Request. The action point remains open.

T2SACTION-2608: UT-PBR-75 (Settlement Instruction settling at DVP cut-off absent from statement of transactions - INC 179344). The 4CB will inform if it would be possible to receive a camt.019 on the new end-of-IDVP event. The 4CB will raise a new Change Request to have a new end-of-IDVP event as a separate event in the T2S daily schedule by the end of September or

beginning of October 2016. The 4CB will reflect in the Change Request detailed assessment how the T2S Actors can migrate from the old to the new configuration (this is under the condition of a positive outcome of the CRG written procedure).

Update: The CRG was informed that the Change Request T2S-0635-SYS (Introduction of new events at the end of cut-off procedures) was raised to introduce a new end-of-IDVP event as a separate event in the T2S daily schedule. The 4CB will reflect in the Change Request detailed assessment how T2S Actors can migrate from the old to the new configuration. The action point was closed.

T2SACTION-2603: Change Request T2S-0611-SYS (Cash Account Postings GUI Screen to include the T2S Actor References). The ECB will inform the SGMS and the CR initiator (WGT2) about the CRG discussions on the Change Request T2S-0611-SYS.

Update: The CRG was informed that the Change Request could not be presented to the SGMS as the telco did not take place. It will be presented during the next SGMS meeting. The action point remains open.

T2SACTION-2591: Change Request T2S-0628-SYS (Add Event Type Code “EDVP” to list of eligible “event trigger” for standing and predefined liquidity transfer orders). The CRG initiator will update the Change Request according to the WGT2 and DCPG feedback afterwards, if needed.

Update: The CRG was informed that the Change Request was updated to add event type code “EDVP” (instead of IDVP) to the list of eligible “event trigger” for standing and predefined liquidity transfer orders. The update was based on the feedback from DCPG. The updated Change Request will be discussed during the next CRG Telco on 16 November 2016. The action point remains open.

T2SACTION-2526: Clarification note from the User Testing Sub Group (UTSG) on recycling period at EOD. The 4CB will include the clarification provided in the UTSG note about the recycling process for pending instructions and recycling period in the UDFS via a next editorial Change Request.

Update: The 4CB informed that the clarification about recycling period at EOD will be included in the next editorial Change Request which will be raised in November 2016. The action point remains open.

T2SACTION-2524: Change Requests which will be part of “Batch 0” for the preliminary assessment. Banca d’Italia will inform ECB next week if CR-439 can be withdrawn.

Update: The CR initiator agreed to withdraw the Change Request. The action point was closed.

T2SACTION-2512: Business value for Change Requests for future releases - The CRG members will provide the business value for all the Change Requests that are on hold, by 18 November 2016.

Update: The CRG was informed that the CRG written procedure for assigning business value to Change Requests for future releases is currently on-going. The action point remains open.

T2SACTION-2432: Change Request T2S-0503-SYS (T2S Actor Reference and T2S Reference of counterparty's settlement instruction should be included in T2S messages sese.024, sese.025 and sese.032 after matching) - The CR initiator (SIX SIS) will await information from SWIFT and check internally with regards to the current solution and inform the CRG about the way forward.

Update: The action point remains open.

3. Approval of the summary of previous meetings

The CRG was informed that the following summaries of the CRG meetings/telcos were updated following the CRG comments.

- Summary of the CRG meeting of 06 September 2016
- Summary of the CRG teleconference of 13 September 2016
- Summary of the CRG teleconference of 22 September 2016
- Summary of the CRG teleconference of 27 September 2016
- Summary of the CRG teleconference of 30 September 2016
- Summary of the CRG teleconference of 10 October 2016

The CRG agreed to approve the summary of the CRG teleconference of 10 October 2016, provided the CRG comments received during the written procedure were incorporated in the summary. The CRG did not raise any objections to the final approval of other summaries.

4. Analysis of the Change Requests

(A) Preliminary assessment on Change Requests from batch '1'

Change Request T2S-0346-URD (In the settlement process of an instruction without a link, T2S should consider any other unmatched instructions having a link with it)

The aim of the Change Request is to consider any unmatched instruction which has indicator "WITH" or "BEFO" while settling another instruction to which the unmatched instruction is linked.

The CRG was informed that the Change Request would have an impact on Settlement (SETT), Lifecycle Management and Matching (LCMM) modules/functionalities in T2S and the impact of the Change Request was very high.

The 4CB explained that to be able to identify a link in an unmatched settlement instruction which is linked to another settlement instruction (which does not contain a reciprocal link to the unmatched settlement instruction) T2S needs to check all the unmatched instructions before settlement of any transaction. Such a check would have a negative performance impact on the start of day (SOD) and during the real-time settlement (RTS). The 4CB recommended the use of workarounds i.e. to ensure that the settlement instruction which contains link is instructed before the settlement instruction to which it is linked or make use of reciprocal links.

The CR initiators agreed to withdraw the Change Request considering the high negative impact on performance on SOD and during the RTS period.

CRG decision: The CRG took note that the CR initiators agreed to withdraw the Change Request considering the high negative impact on performance at SOD and during the RTS period.

Action points: The ECB will inform the CSD Steering group (CSG) about the withdrawal of the Change Request.

Change Request T2S-0355-URD (New securities account flag “negative position only”)

The aim of the Change Request is to add a new option to the “negative position indicator” attribute of the securities account which indicates that only negative positions can be held in that account. Currently the options ‘only positive positions’ and ‘positive as well as negative positions’ are possible.

The CRG was informed that the Change Request would have an impact on A2A, U2A, SETT, Long-term Statistical datastore (LTSI), Static Data (SD) modules/functionalities in T2S and that the impact of the Change Request was high.

The CR initiator confirmed that the flag “negative position only” is intended to be used for issuance accounts, mirror accounts and inter-CSD accounts. It need not be extended to the CSD participants account as these accounts are not likely to have a negative balance. The CR initiator further informed that the 4CB could choose the implementation option to apply the logic only for issuance account, mirror account and Inter-CSD accounts or to apply it to all the account, whichever is easier. The CR initiator agreed to update the Change Request to specify that securities account flag “negative position only” would be relevant for the issuance accounts, mirror accounts and inter-CSD accounts.

The CR initiator explained they added a footnote² in the Change Request to explain that in case the account is flagged as ‘negative positions only’, T2S should still allow to hold positive positions that have been ‘blocked’ or ‘reserved’, and that in case of COSD blocking, the mirror account could result in further negative in the deliverable position (AWAS) and would simultaneously result in a corresponding positive balance in the blocked position (COSP). However the total balance at the account level would remain unchanged (i.e. negative). The CR initiator confirmed that the provision check is performed per position and no provision check is performed at the level of the securities account.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

Action points: The CR initiator will update the Change Request to specify that securities account flag “negative position only” would be relevant for the issuance accounts, mirror accounts and inter-CSD accounts.

² Extract from Change Request T2S-0355-SYS: “It should still be possible to hold positive blocked or reserved positions on accounts flagged as “Negative only”. In particular, it should be possible to have positive COSP positions on such accounts.”¹

* Footnote 1: “This is required to enable COSD blocking also on mirror or inter-CSD accounts. In such cases, the COSD process will debit the AWAS position (which is getting even more negative) and credit the COSP position (which can be positive only). It should be noted that this process leaves the total position on the affected account unchanged”

Change Request T2S-0359-URD (Change of hold/release should be notified to counterparty before the Intended Settlement Date)

The aim of the Change Request is to communicate hold statuses of the counterparty also before the Intended Settlement Day (ISD).

The CRG was informed that the Change Request would have an impact on LCMM modules/functionalities in T2S and the impact of the Change Request was medium.

The CR initiator agreed to update the Change Request specify the User Requirements affected by the Change Request.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment. The CRG agreed that the Change Request also impacts the User Requirements Document (URD).

Action points: The CR initiator will update the Change Request to specify the User Requirements affected by the Change Request.

Change Request T2S-0436-URD (Client-collateralisation: allow payment banks to set up their own list of close links)

The aim of the Change Request is to decouple the list of close links, as currently the same list is used by the Central Bank and its Payment Banks. This would allow Payment Banks to create and maintain their own list of close links for client-collateralisation.

The CRG was informed that the Change Request would have an impact on U2A, SETT, LTSI, SD modules/functionalities in T2S and the impact of the Change Request was medium.

The 4CB recommended the implementation of the Change Request along with the Change Request T2S-0530-URD (One close link database for Eurosystem NCBs and separate database per non-EUR currency) and Change Request T2S-0572-SYS (A2A message to remove close links).

The 4CB agreed to update a typo in the preliminary assessment section of the Change Request as below: “Recommendation to be assessed and implemented together with CR-0530 and ~~CR-0574~~ CR-0572”.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment and that there are synergies with the Change Request T2S-0530-URD (One close link database for Eurosystem NCBs and separate database per non-EUR currency) and the Change Request T2S-0572-SYS (A2A message to remove close links), therefore a joint implementation is favourable.

Action points: The 4CB will update the preliminary assessment section in the Change Request to correct the following typo “Recommendation to be assessed and implemented together with CR-0530 and ~~CR-0574~~ CR-0572”

Change Request T2S-0515-SYS (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 CRG was informed that the Change Request would have an impact on U2A, SETT, LTSI, LCMM modules/functionalities in T2S and the impact of the Change Request was high.

The CRG discussed that the use of Case 2 restrictions on securities (intraday blocking of ISIN) could be considered as a possible solution to prevent settlement of instructions after the maturity date of ISIN is reached. A software change may be required only for extension of the 'n' number of days after the maturity date of the ISIN.

A CRG member mentioned that the generic exception specified in the Change Request that T2S should consider CCP PFOD (payment free of delivery) instructions as an exception and allow them to be settled even after the maturity date of the ISIN has reached could be complex to implement since T2S does not identify CCP as a party type in T2S³. CSDs could use case 2 restrictions using movement type = ZERO in combination with the CCP BIC as instructing party to identify "CCP PFODs" and to exclude them from blocking. This would require an update of the restriction rule parameters for case 2 restriction on securities, as the movement type is currently only supported for parties and accounts.

The CRG agreed to inform the Corporate Actions Sub-group (CASG) about the CRG discussions on the Change Request and consider updating the Change Request based on the CRG feedback. The CASG will also be informed to correct a typo in the Change Request: "should not settle except for CCP PFOD instructions settling 0 (zero) ~~amount~~ quantity of the old ISIN against cash".

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

Action points:

- The CRG will inform the CASG about the CRG discussions on the Change Request for their consideration and potential update of the Change Request if they deem it necessary:
 - the use of case 2 restriction for blocking of ISIN could be a potential workaround,
 - as per the current Change Request CCP PFOD instructions should be allowed to settle 'n' days after the maturity date of an ISIN, however exceptions to CCP instructions is not possible since CCP is not a party type in T2S. However CSDs could use case 2 restrictions using movement type = ZERO in combination with the CCP BIC as instructing party to identify "CCP PFODs" and to exclude them from blocking.

³ If CASG reconfirms the requirement that CCP instructions need to be processed differently, then it needs to be considered how to deal with this exception when using the workaround based on case 2 restrictions.

- there is a typo in the Change Request: “should not settle except for CCP PFOD instructions settling 0 (zero) ~~amount~~ quantity of the old ISIN against cash”.
- The 4CB will check whether the Change Request still has a high impact after the CR initiator provides the requested clarifications.

Change Request T2S-0520-SYS (Add new fields to T2S messages sese.020, sese.024 and sese.025 needed for CA processing)

The aim of the Change Request is to replicate the linkage sequence, if present in the settlement instruction (sese.023), to the status advice message (sese.024) and settlement confirmation (sese.025) and to add the reason code for cancelation due to transformation and the Corporate Action Event Identifier in the cancellation instruction (sese.020).

The CRG was informed that the Change Request would have an impact on A2A, U2A, LCMM modules/functionalities in T2S and the impact of the Change Request was medium.

The 4CB recommended implementation of the Change Request along with the Change Request T2S-0546-SYS (Indication for time-critical settlements (“settlement till” time-stamp)).

The CRG confirmed that the Market Infrastructure reference (MITI) of the instruction for market claims and transformations (sese.023) populated in the linkage sequence should be included in the status advices and settlement confirmation in all cases independently of the linkage type of the instruction and not only for the INFO linkage type as currently stated in the Change Request. The CRG agreed to correct a typo in the message path for sese.024 and sese.025:

/SciesStlmTxStsAdv/Lnkgs/PrcgPos/Cd/INFO instead of

/SciesStlmTxStsAdv/Lnkgs/PrcgPos/Cd/Cd/INFO

/SciesStlmTxConf/Lnkgs/PrcgPos/Cd/INFO instead of

/SciesStlmTxConf/Lnkgs/PrcgPos/Cd/Cd/INFO’.

The CRG agreed to inform the CASG about the CRG discussions on the Change Request and update the Change Request based on the CRG feedback.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment and that there are synergies with the Change Request T2S-0546-SYS (Indication for time-critical settlements (“settlement till” time-stamp)), therefore a joint implementation is favourable.

Action points:

- The CRG will inform the CASG about the CRG discussions on the Change Request for their consideration and potential update of the Change Request if they deem it necessary:
 - if the Market Infrastructure reference (MITI) of the instruction for market claims and transformations (sese.023) is populated in the linkage sequence should be included in the status advices and settlement confirmation in all cases independently of the linkage type of the instruction (sese.023) and not only for the INFO linkage type as the Change Request states now.

- there are some typos in the Change Request as the paths described for sese.024 and sese.025 are not aligned with the sese.023. They should read:

/SctiesStlmTxStsAdv/Lnkgs/PrcgPos/Cd/INFO instead of

/SctiesStlmTxStsAdv/Lnkgs/PrcgPos/Cd/Cd/INFO

/SctiesStlmTxConf/Lnkgs/PrcgPos/Cd/INFO instead of

/SctiesStlmTxConf/Lnkgs/PrcgPos/Cd/Cd/INFO

Change Request T2S-0525-SYS (Provide Restriction Type name and description in reason code due to Market Specific Restriction Types)

The aim of the Change Request is to provide restriction type name and restriction type description (in U2A as well as A2A) in the status message rejected/put on hold due to MSRT rule.

The CRG was informed that the Change Request would have an impact on A2A, U2A, LCMM, LTSI, SD modules/functionalities in T2S and the impact of the Change Request was high.

The 4CB informed that the Change Request title needs to be updated as follows: “Provide Restriction Type name and description in reason code due to Market Specific Restriction Types”. Additionally the Change Request needs to be updated to clarify

- If the restriction type and description should be provided for negative rules as well or if the information is required only for positive rules
- If the settlement restrictions and realignment/auto-collateralisation instructions are also in the scope of the Change Request
- that based on the agreement reached on UT-PBR-040 it was decided to report rule ID in the Graphical User Interface (GUI) as well.

The CR initiator agreed to provide the clarification to open questions via mail and agreed to update the Change Request.

The 4CB agreed to check if the current impact indicator ‘high’ needs to be revised after the clarifications on the open questions are provided.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

Action points:

- The CR initiator will update the Change Request title as follows “Provide Restriction Type name and description in reason code due to Market Specific Restriction Types”. The CR initiator will provide clarifications on the questions raised by the 4CB and update the Change Request to reflect the clarifications.
- The 4CB will check whether the Change Request still has a high impact after the CR initiator provides the requested clarifications.

Change Request T2S-0530-URD (One close link database for Eurosystem NCBS and separate database per non-EUR currency)

The aim of the Change Request is to implement one common close link database for all Eurosystem NCBs and a separate close link database for each non-Eurosystem NCB in T2S.

The CRG was informed that the Change Request would have an impact on U2A, SETT, LTSI, SD modules/functionalities in T2S and the impact of the Change Request was high.

The 4CB recommended implementation of the Change Request along with the Change Request T2S-0436-URD (Client-collateralisation: allow payment banks to set up their own list of close links) and Change Request T2S-0572-SYS (A2A message to remove close links), therefore a joint implementation is favourable.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment and that there are synergies with the Change Request T2S-0436-URD (Client-collateralisation: allow payment banks to set up their own list of close links) and Change Request T2S-0572-SYS (A2A message to remove close links), therefore a joint implementation is favourable.

Change Request T2S-0541-URD (Bulk-release functionality (U2A) for settlement instructions)

The aim of the Change Request is to implement a bulk-release functionality for settlement instructions in the T2S GUI to allow T2S GUI users to release pending settlement instructions according to specific selection criteria.

The CRG was informed that the Change Request would have an impact on U2A, LCMM, SD modules/functionalities in T2S and the impact of the Change Request was medium.

The CRG was informed that that functionality would have high impact on T2S GUI in terms of performance and transaction processing security. The 4CB explained that due to the concurrent user activities it is possible that all the instructions selected by the user for release may not be released if another user has cancelled or released any of the selected instructions simultaneously. The CRG members mentioned that the issue related to concurrent user activities could be handled by appropriate reporting of status and timestamp for settlement instructions.

The original purpose of the Change Request was to limit the bulk-release functionality to the release of party hold for auto-collateralisation reimbursement instructions, but the Change Request was scoped more general to include all settlement instructions and all hold types in T2S. The CRG discussed if the current scope of the Change Request would have a negative impact on the GUI performance. If performance issues were identified, it should be checked by the CRG whether the scope of the Change Request should be restricted. However the CR initiator already informed that they were not in favour of limiting the scope of the Change Request. A CRG member mentioned that the issue with concurrent event could arise even if the scope is restricted to auto-collateralisation releases only. As a result, scope limitation would not solve the issue.

The CRG was of the view that the detailed assessment, if performed, should address the following points:

- the impact on T2S GUI performance in case of bulk-release functionality for all settlement instructions and on all types of hold.

- how the ‘risk’ of concurrent usage will be handled i.e. T2S might not be able to release all instructions selected by the user due to concurrent activities on the same instruction by another user.

The CR initiator requested that for design of the GUI the 4CB should propose an approach that would have a minimum performance impact.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

Action points: The 4CB will check whether the Change Request still has a medium impact based on the clarifications provided by the CR initiator during the meeting.

Change Request T2S-0546-SYS (Indication for time-critical settlements (“settlement till” time-stamp))

The aim of the Change Request is to have a “settlement till” time-stamp to indicate that an earlier settlement than the end of the business day is intended or required.

The CRG was informed that the Change Request would have an impact on A2A, U2A, LCMM, SETT, LTSI modules/functionalities in T2S and the impact of the Change Request was high.

The CR initiator agreed to confirm if the scope of the Change Request needs to be extended to the U2A mode as well. The CR initiator further informed that the required ISO CR has not yet been raised and therefore they prefer not to consider the Change Request for Release 2.0.

The 4CB recommended implementation of the Change Request along with the Change Request T2S-0520-SYS (Add new fields to T2S messages sese.020, sese.024 and sese.025 needed for CA processing). However, considering the dependency on the ISO CR, implementation of the CR-520 may not be linked to the CR-546.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment and that there are synergies with the Change Request T2S-0520-SYS (Add new fields to T2S messages sese.020, sese.024 and sese.025 needed for CA processing), therefore a joint implementation is favourable.

Action points: The CR initiator will check whether the indication of the time-critical is required in U2A mode as well.

Change Request T2S-0568-SYS (T2S should allow system-wide SME and Security CSD link search via T2S GUI)

The aim of the Change Request is to update the T2S GUI screen to allow system-wide SME and Security CSD links search.

The CRG was informed that the Change Request would have an impact on U2A, SD modules/functionalities in T2S and the impact of the Change Request was medium.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

Change Request T2S-0572-SYS (A2A message to remove close links)

The aim of the Change Request is to allow removing close links via an A2A message for both Central Banks (in the context of Central Bank auto-collateralisation) and payment banks (in the context of client-collateralisation)

The CRG was informed that the Change Request would have an impact on A2A, SD modules/functionalities in T2S and the impact of the Change Request was medium.

The 4CB recommended implementation of the Change Request along with the Change Request T2S 0436 URD (Client-collateralisation: allow payment banks to set up their own list of close links) and T2S-0530-URD (One close link database for Eurosystem NCBs and separate database per non-EUR currency)

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment and that there are synergies with the Change Request T2S 0436 URD (Client-collateralisation: allow payment banks to set up their own list of close links) and T2S-0530-URD (One close link database for Eurosystem NCBs and separate database per non-EUR currency), therefore a joint implementation is favourable.

Change Request T2S-0574-URD (Applying additional haircuts to own-used assets in T2S Central Bank auto-collateralisation)

The aim of the Change Request is to apply additional haircuts to own-used assets in T2S Central Bank auto-collateralisation.

The CRG was informed that the Change Request would have an impact on A2A, U2A, SETT, SD modules/functionalities in T2S and the impact of the Change Request was high.

The CRG agreed to remove the option (i) i.e. T2S should be able to accept two valuations per security and Central Bank from the Change Request.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

Action points:

- The CR initiator will update the Change Request to remove option (i) i.e. T2S should be able to accept two valuations per security and Central Bank.

Change Request T2S-0586-SYS (PRCY for leg CB in sese.032 for reimbursement auto-collateralization)

The aim of the Change Request is to include the pending reason code PRCY (CounterpartyInstructionOnHold) in the auto-collateralisation reimbursement instruction (sese.032 Messages) sent to the credit provider.

The CRG was informed that the Change Request would have an impact on A2A, LCMM, SETT, LTSI modules/functionalities in T2S and the impact of the Change Request was medium.

The 4CB recommended implementation of the Change Request along with the Change Request T2S-0588-SYS (Inclusion of the DCA in the auto-collateralisation messages i.e. T2S generated instructions (sese.032) and the corresponding settlement confirmations (sese.025))

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment and that there are synergies with the Change Request T2S-0588-SYS (Inclusion of the DCA in the auto-collateralisation messages i.e. T2S generated instructions (sese.032) and/or the corresponding settlement confirmations (sese.025)), therefore a joint implementation is favourable.

Change Request T2S-0588-SYS (Inclusion of the DCA in the auto-collateralisation messages i.e. T2S generated instructions (sese.032) and the corresponding settlement confirmations (sese.025))

The aim of the Change Request is to include the DCA of the counterparty in the auto-collateralisation messages i.e. Securities Settlement Transaction Generation Notification (sese.032) and the corresponding Securities Settlement Transaction Confirmation (sese.025).

The CRG was informed that the Change Request would have an impact on A2A, SETT modules/functionalities in T2S and the impact of the Change Request was medium.

The CR initiator confirmed that the scope of the Change Request should be limited to the central bank auto-collateralisation although the impact might be higher than implementing it for client- and central bank auto-collateralisation.

The 4CB recommended implementation of the Change Request along with the Change Request T2S-0586-SYS (PRCY for leg CB in sese.032 for reimbursement auto-collateralization), therefore a joint implementation is favourable.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment and that there are synergies with the Change Request T2S-0586-SYS (PRCY for leg CB in sese.032 for reimbursement auto-collateralization), therefore a joint implementation is favourable.

Change Request T2S-0604-SYS (T2S generated instructions should inherit priority from the underlying settlement instructions)

The aim of the Change Request is to ensure that T2S generated settlement instructions are assigned the same priority as the priority specified in the underlying settlement instruction. Currently T2S generated settlement instructions and settlement restrictions are assigned normal priority irrespective of the priority assigned to the underlying settlement instruction.

The CR initiator confirmed that no new message is generated for T2S generated Settlement Restriction (T2SgSR) creation and that the priority of the underlying settlement instruction existing at the time of creation of T2SgSR should be assigned to the T2SgSR (i.e. any modification of priority of the underlying instruction after creation of the T2SgSR will not be considered for the priority of the

T2SgSR). The CR initiator agreed to update the Change Request to clarify these points based on the proposal provided by the 4CB.

The CRG was informed that the Change Request would have an impact on SETT, LCMM modules/functionalities in T2S and the impact of the Change Request was medium.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

Action points:

- The CR initiator will consider the 4CB proposal to update the wording of the Change Request with regards to (concrete 4CB proposal to be provided):
 - no new message is generated for T2S generated Settlement Restriction (T2SgSR) creation therefore the reference to 'semt.013' should be replaced with 'Settlement Restriction' in the Change Request .
 - the priority of underlying settlement instruction existing at the time of creation of T2SgSR will be assigned to the T2SgSR (i.e. any modification of priority of the underlying instruction after creation of the T2SgSR will not be considered for the priority of the T2SgSR).

Change Request T2S-0620-SYS (Allow CSDs to query for all positions in a given security via T2S GUI)

The aim of the Change Request is to allow CSDs to query for all positions in a particular ISIN across all securities accounts within the data scope of the CSD.

The CRG was informed that the Change Request would have an impact on U2A, LTSI modules/functionalities in T2S and the impact of the Change Request was medium.

The CR initiator informed that the functionality is likely to be used only during the exceptional scenarios and therefore the frequency of usage may not be very high.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

Change Request T2S-0631-SYS (The field “value date” should be defaulted to the current business date in the Immediate Liquidity Transfers Screen)

The aim of the Change Request is to fill in the field “Value date” as current business date by default on Immediate Liquidity Transfer Screen.

The CRG was informed that the Change Request would have an impact on U2A modules/functionalities in T2S and the impact of the Change Request was low.

CRG decision: The CRG took note of the T2S functionalities/modules impacted by the Change Request following the 4CB preliminary assessment.

(B) Change Requests stemming from the CSG Task Force on CSD Regulation and other related CRs

The CRG was informed that based on the outcome of the joint written procedure of CRG and CSDR Task Force in July 2016 about which channels (e.g. A2A, U2A, queries, reports, etc.) should be used to report the specific information required by the CSDR, the Change Requests were updated to include the relevant channels.

The Change Requests will be considered for detailed assessment from 20 February 2017 till 19 May 2017. However the timing of detailed assessment could change depending on the decision of European Commission on the endorsement of CSDR. If the implementation of CSDR is delayed then the detailed assessment on the Change Request would be postponed to ensure that the available timeframe is used for detailed assessment of other Change Requests. It was confirmed that these Change Requests will remain to be part of the business value exercise. If the Change Requests are rated 'high' then CRG could decide to still conduct the detailed assessment on these Change Requests irrespective of the timeline for CSDR implementation.

The CRG was informed that the Change Request T2S-0609-SYS (T2S must be able to report 'PENF' settlement status for settlement instructions for which settlement at the Intended Settlement Date (ISD) is no longer possible) was still being discussed by the CSDR Task Force. It will be presented to the CRG for discussion after the requirements are finalised by the CSDR task force. Also the Change Request T2S-0608-SYS (T2S should be enhanced to maintain and report types of financial instruments as described in the CSDR Level 2 Technical Standards) has been put on hold by the CSDR until further clarification is received from European Securities and Markets Authority (ESMA).

The CRG was informed that the next T2S Releases are being discussed by the Release Management Subgroup (RMSG). The current proposal is that CSDR related Change Requests should be handled via an existing planned release, although this would depend on the timeline specified. Additionally this T2S Release could be planned to accommodate the Change Requests related to the multi-currency and any other important Change Requests. A CRG member mentioned that in the context of this T2S Release, it is important to discuss handling of specific and common Change Requests. If previously certain Change Requests were considered as common because they were required for the migration of wave 1 and wave 2 CSDs, then the Change Requests that could be specific for an institution but necessary for the migration of the institution to the T2S platform would also need to be treated as common Change Request.

The Chairperson informed that the framework agreement explains the parameters that need to be considered for classifying a Change Request as specific or common. Certain questions need to be asked to decide if a Change Request can be considered as specific. Up to now, all the Change Requests have been raised as common Change Requests. However a specific Change Request should not be considered as negative. From the process point of view a specific Change Request would cater to the specific requirements of an institution and would have a cost attached to it. From scoping and

prioritisation perspective also a specific Change Request would not be scored in the same way as a common Change Request.

Change Request T2S-0600-SYS (T2S reporting functionality must be enhanced to allow the retrieval of the settlement instructions and their related SF1 (accepted) /SF2 (matched) timestamps via A2A in an efficient and standard way)

The aim of the Change Request is to enhance the T2S reporting mechanism to provide the accepted timestamp (SF1) and matched timestamp (SF2) of settlement instructions.

The CRG was informed about the updated Change Request to remove the requirement of inclusion of SF1 and SF2 in the Securities Settlement Transaction Query Response (semt.027) and Intra Position Movement Query Response (semt.029).

A CRG member mentioned that the Change Request could be needed for insolvency procedure and hence it could be considered for implementation earlier than the CSDR Change Requests.

CRG decision: The CRG agreed to keep the Change Request on hold and discuss it during the CRG meeting in December 2016 during the T2S future releases scoping exercise.

Change Request T2S-0606-SYS (T2S should maintain and report information related to ‘Place of Trade’ and ‘Place of Clearing’ of a settlement instruction consistently across T2S messages)

The aim of the Change Request is to maintain the record of ‘Place of Trade’ and ‘Place of Clearing’ of settlement instructions in T2S and report both the fields in the instruction queries, reports and status messages.

The CRG was informed about the updated Change Request to remove the requirement of inclusion of place of trade and place of clearing from Settlement Transaction Query Response (semt.027)

CRG decision: The CRG agreed to keep the Change Request on hold and discuss it during the CRG meeting in December 2016 during the T2S future releases scoping exercise with a possible clearer view on the CSDR implementation deadline.

Change Request T2S-0607-SYS (T2S must be able to identify, store, and report settlement information related to buy-in transactions consistently across T2S messages)

The aim of the Change Request is to include the ISO transaction code buy-in (BIYI) in the settlement instruction (sese.023), the settlement instruction status advice (sese.024), the statement of pending instructions (semt.018), the allegation notification (sese.028) and the statement of allegations (semt.019).

The CRG was informed about the updated Change Request to specify that the Data Migration Tool (DMT) files should be updated to input the ISO transaction type code ‘BIYI’. This is in line with the general guideline agreed by the Operations Managers Group (OMG) to always update DMTs whenever they were impacted.

CRG decision: The CRG agreed to keep the Change Request on hold and discuss it during the CRG meeting in December 2016 during the T2S future releases scoping exercise with a possible clearer view on the CSDR implementation deadline.

(C) Other Change Requests from the market for future T2S Releases

Change Request T2S-0358-URD (Unblocking of ISINs as part of Corporate Action Handling)

The aim of the Change Request is to ensure that ISINs blocked for corporate actions are automatically unblocked by T2S on successful completion of settlement of corporate actions.

The CRG was informed about the mixed response received from the CRG for the written procedure about the implementation approach proposed by the 4CB. Some CRG members expressed that they would use the functionality, some CRG members supported the approach proposed by the 4CB although they would not use the functionality whereas one CRG member indicated that they did not see any benefit from the functionality.

One CRG member suggested that the proposed implementation approach suggested by the 4CB should be adjusted to make it more generic since an approach based on specific assumptions/ considering specific needs of an institution would mean that other institutions would find it difficult to use the functionality. The CR initiator mentioned that they are open for any modification to the proposed implementation approach as long as it fulfils their requirements and it is feasible to implement it in the due course.

The CRG discussed the proposal suggested by a CRG member to unblock the ISIN when none of the related Corporate Action instructions are 'pending' instead of unblocking the ISIN when one of the corporate action FOP (free of payment) instructions is 'settled'. The CR initiator explained that they have two distinct pools of instructions related to corporate action i.e. FOP and PFOD. It is necessary that the FOP instructions are settled first and ISINs are unblocked before the settlement of PFOD instructions since the securities subject to partial redemption should be available for auto-collateralisation to ensure that sufficient liquidity is available for the settlement of PFOD instructions. The CR initiator mentioned that the alternate solution proposed by a CRG member would not be in line with their requirements. If T2S identifies that none of the instructions related to Corporate Action is 'pending' it would unblock the ISIN even if in reality the instructions have not yet arrived or would arrive late. Also it would mean that the sequence of FOP and PFOD settling one after the other would not be ensured. The CRG agreed that the 4CB proposed implementation option should be the one to be reflected in the Change Request.

The 4CB informed that they were analysing the volumetric assumptions provided by the CRG members and would present the analysis during the CRG Telco on 16 November 2016. A CRG member clarified that the number of ISINs affected for their institution is few thousands per day. The 4CB informed that if the current approach needs to undergo change then the detailed analysis may not start in February 2017 but only later.

Action points:

- The 4CB will analyse the volumetric assumptions provided by the CRG members and present the analysis during the CRG telco on 16 November 2016.
- The ECB will rectify a typo in the feedback of Clearstream: ‘Number of ISINs affected - • a ~~few~~ ~~1000~~ few thousand ISINs per day’ in outcome of the CRG written procedure

Change Request T2S-0439-SYS (Decoupling of the link between securities and cash accounts for settlement and the link for the provision of collateral)

The aim of the Change Request is to allow the decoupling of securities accounts which are used to provide collateral from the securities accounts which are used for the settlement of securities on the same dedicated cash account (DCA).

The CR initiator recalled that CR-439 was a second option added by the CRG to the original draft of another Change Request T2S-0429-SYS. Since the domestic market which initiated CR-429 was only interested in the first option (the proposal made in June 2013 to enhanced the flexibility of the CMB structure, granting counterparties the possibility to use the BIC11, together with the wild card pattern, instead of the BIC8 when setting up the primary CMB), the CR initiator confirmed that T2S-0439-SYS can be withdrawn..

CRG Decision: The CRG took note that the CR initiator withdrew the Change Request.

Change Request T2S 0444 BFD (User authentication without USB-token/SmartCard for GUI-access)

The Change Request aims to remove the USB-token/smart card as the only means of authentication to connect to T2S via the Graphical User Interface.

The CRG was informed that the Change Request will not be considered for the preliminary assessment for the time being. The preliminary assessment can be conducted at the time the contracts with the network service providers (NSP) are renewed.

CRG Decision: The CRG agreed to postpone the preliminary assessment on the Change Request.

Change Request T2S-0503-SYS (T2S Actor Reference and T2S Reference of counterparty’s settlement instruction should be included in T2S messages sese.024, sese.025 and sese.032 after matching)

The aim of the Change Request is to provide counterparty’s T2S Actor reference and counterparty’s T2S reference (i.e. counterparty’s Market Infrastructure Transaction Identification - MITI) in the receiving/delivering parties block or the message’s supplementary data in the post-match status advice (sese.024), settlement confirmation (sese.025) and T2S generated realignment instruction (sese.032).

The CRG was informed that during the CRG written procedure majority of the CRG members expressed that disclosing the counterparty reference in the sese.024, sese.025 and sese.032 would not result in any data confidentiality issue. The CRG was further informed that the CR initiator is investigating a possibility to raise an ISO CR.

A CRG member mentioned that the Change Request is important from the perspective of out-CSD settlement which involves 3 legs of instructions - client, out CSD and realignment instruction. In case of out-CSD settlement if the logical order of messages is not followed (e.g. settlement confirmation message is received before the matched confirmation) it becomes difficult for T2S Actors to identify which 3 instructions actually belong to the related T2S transaction and hence which status updates/settlement confirmations are still missing. Therefore T2S Actors need to wait until all the messages are received. Inclusion of the MITI reference of the matched counterparty instruction in the messages would help in such scenario.

The CRG agreed that the Change Request can be considered mature from a content point of view and is ready for the preliminary assessment. The preliminary assessment would be done based on the assumption that an ISO CR will be raised. The CRG took note that once the outcome of the business value indicator exercise was available the T2S community could consider raising an ISO CR for this Change Request, if required.

CRG decision: The CRG agreed that the Change Request can be considered mature from a content point of view and therefore, it is ready for its preliminary assessment. The preliminary assessment would be done based on the assumption that an ISO CR will be raised.

Change Request T2S-0508-SYS (Automated scripts for clean-up of dynamic data of leaving CSD in contingency scenario)

The aim of the Change Request is to develop automated scripts for clean-up of dynamic data of leaving CSD in a contingency scenario.

The CRG was informed that the Migration Sub-group is still checking if the Change Request is required.

CRG Decision: The CRG agreed to postpone the preliminary assessment on the Change Request.

Change Request T2S-0531-SYS (Digital signature at application level for flat file reports)

The aim of the Change Request is to add a business signature (signature at BAH/BFH level) in the flat file reports developed by the Change Request T2S-0494-SYS.

The 4CB informed that currently there is a lack of experience with flat file reports in production. Therefore the CRG should consider postponing the preliminary assessment on the Change Request.

The CRG agreed to postpone the Change Request, however it was clarified that the Change Request would still remain to be part of ranking exercise and would be discussed in the context of next Release scoping exercise. The CRG agreed to inform the CSG RMSG about the CRG decision to postpone the preliminary assessment on the Change Request.

A CRG member informed that they would make use of flat file reports for the statement of holdings (semt.002).

CRG Decision: The CRG agreed to postpone the preliminary assessment on the Change Request.

Action points: The ECB will inform CSG, RMSG about the 4CB proposal to postpone the preliminary assessment due to the lack of experience on performance issues related to the flat files reports in production. The Change Request will still be part of the next Release scoping exercise.

Change Request T2S-0540-URD (Alignment of U2A and A2A cash forecast information)

The aim of the Change Request is to separately display the sum of pending cash movements that debit and credit a DCA in A2A messages related to the cash forecast information.

The CRG was informed about the updates made to the Change Request to specify that the information of the cash forecast in A2A message should be separated in

- “to be debited (LT)”,
- “to be debited (SI)”,
- “to be credited (SI)”.

The CRG agreed that the Change Request can be considered mature from a content point of view and is ready for the preliminary assessment.

CRG Decision: The CRG agreed that the Change Request can be considered mature from a content point of view and therefore, it is ready for its preliminary assessment.

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

The aim of the Change Request is to input the settlement reference of an existing settlement instruction into the cash restriction to block/reserve cash for the settlement of the specific instruction that already existed in T2S.

The 4CB informed that they would make an alternative proposal for the Change Request during the CRG Telco on 16 November 2016. The Change Request in its current form could not be recommended for implementation as the proposal specified in the Change Request is complex to implement.

The 4CB asked if similar functionality will be required on the securities side as well. The CRG mentioned that currently no business case has been identified for similar functionality on securities side. Such functionality is less important on the securities side, as other functionalities such as the linking of instructions can be used.

Action points: The 4CB will propose a change in the implementation approach of the Change Request during the CRG Telco on 16 November 2016.

Change Request T2S-0556-SYS (Modification of cash forecast for the current and following business day after DVP cut-off)

The aim of the Change Request is that the current settlement day cash information report and the cash forecast query, if initiated after the DVP cut-off, should only include instructions which can be settled during the current business day. Similarly the following settlement day cash forecast report and the

Cash Forecast Query, if initiated after the DVP cut-off, should also include instructions pending from previous days which cannot settle during the current business day, and will only be re-attempted for settlement on the next business day.

The CRG agreed that the Change Request can be considered mature from a content point of view and is ready for the preliminary assessment.

CRG Decision: The CRG agreed that the Change Request can be considered mature from a context point of view and therefore, it is ready for its preliminary assessment.

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 matching of unmatched instructions submitted by an insolvent party (or on its behalf) and aiming at debiting one of its accounts (securities account or DCA).

The CRG agreed to confirm with the OMG if the Change Request is required in the context of the insolvency procedures.

Action points: The ECB will confirm with the OMG if the Change Request is required.

Change Request T2S-0562-URD (Overnight liquidity balance on the T2S Dedicated Cash Account in case of contingency scenario)

The aim of the Change Request is to allow the T2S EOD to start in exceptional circumstances when the DCA balances cannot be swept to the Real Time Gross Settlement (RTGS).

The CRG was informed about the updated Change Request to remove option 2 from the Change Request i.e. when a DCA balance cannot be swept to the RTGS, T2S debits the DCA and credits the RTGS transit account.

A further update to the Change Request was proposed by the 4CB to specify that 'T2S will not consider intraday case 2 restrictions on DCAs during the automated cash sweep'. The CRG was informed that concerns were raised by the ECB (in their role as Central Bank / WGT2 member) regarding the inclusion of the update related to the case 2 restriction, as the intention of the Change Request was not to avoid the cash sweep from failing but to manage the follow up of the failure. The 4CB clarified that they recommend keeping the update in the Change Request, however any other problems (other than case 2 restriction) that could lead to failure of cash sweep were not in the scope of the Change Request. Currently at the time of cash sweep if intraday blocking is detected then the responsible NCBs will be informed and the blocking needs to be removed manually. The additional requirement in the Change Request would mean that manual intervention would not be required any longer. One CRG member mentioned that in the context of insolvency it would be useful that the cash sweep works automatically even if the intraday restriction is in place, whereas others were of the view that especially in insolvency situations it would be crucial to be aware of any reasons which prevent

the removal of the cash to the connected RTGS account. The CRG agreed to provide their views on the addition of the requirement of case 2 restriction during the written procedure.

Some NCB members of the CRG mentioned that the Change Request is important from the point of view of Central Banks, as in the current situation any malfunctioning in T2S preventing the cash sweep can imply the deletion of the end-of-day positive DCA balances. Taking into account the discussion held on this topic among several WGT2 members, they are ready to support its deployment as soon as possible, under the condition that the following actions will be performed before the implementation of the Change Request:

- i) to transpose into the Public TARGET2 Info Guide the principles related to reserve calculations and automatic marginal lending facilities already included in the TARGET2 MoP, for the procedures that must be followed in case liquidity remain on DCAs overnight due to the malfunctioning of the cash sweep in T2S;
- ii) to investigate whether updates to the TARGET2 Guideline will become necessary, to ensure that the penalties are not imposed on banks in case the liquidity was not transferred to the RTGS system. If required, such updates shall be done at the earliest possible opportunity, in order to avoid that banks are forced to request compensation, as it may happen today, in case marginal lending is triggered by the missing transfer of DCA balances to the RTGS accounts.

CRG Decision: The CRG agreed to inform the WGT2 about the CRG discussion on the Change Request and to ask for their feedback. The CRG took note that the Change Request was preliminary assessed as part of batch 0.

Action points:

- The CRG members will provide feedback on whether they agree with 4CB proposal that T2S should not consider intraday case 2 restrictions on DCAs during the automated cash sweep as this will ensure that DCA balances can be swept to the RTGS account despite the possible presence of an intraday case 2 restriction on the DCA.

Change Request T2S-0563-URD (Automatic Internal liquidity transfer between RTGS Transit Account and the T2S Dedicated Cash Account in case of RTGS rejection)

The aim of the Change Request is to automatically generate internal liquidity transfers debiting the RTGS Dedicated Transit account and crediting the payment bank DCA in case of RTGS rejection for an outbound liquidity transfer order.

The CRG was informed that WGT2, 4CB and ECB are currently discussing the way forward on the Change Request and that the Change Request can therefore not be considered mature.

Change Request T2S-0590-SYS (Include information from the underlying settlement instruction in the T2S ‘Bank to customer statement (camt.053)’ and in the T2S ‘Bank to customer debit credit notification (camt.054) messages for Settlement, Custody/Asset servicing and Reconciliation)

The aim of the Change Request is to include the ISIN, the corporate action event type and the CA event identification, the securities account and the settled quantity in the Bank to Customer Statement (camt.053) and Bank to customer debit credit notification (camt.054).

The CRG discussed the Change Request in the context of discussion related to the clarification note for on discrepancy between camt.053 and camt.054 messages. The CR-590 requires that the settled quantity available in securities settlement transaction confirmation (sese.025) should be provided in the camt.053 and camt.054. The CRG was informed that in case of several partial settlements executed during the same NTS sequence, camt.053 reports each of the posting whereas sese.025 reports the cumulative values. Therefore it may not be logical to report the settled quantity of sese.025 in camt.053 message. On the other hand the settled quantity of sese.025 can be used to populate the camt.054 message as both the messages report cumulative values (quantity and amount).

The CR initiator reconfirmed the need to receive information on the settled quantity and highlighted that this requirement should not be removed from the Change Request. The initiator agreed to discuss the topic with the ECB and 4CB and update the Change Request if necessary.

The CRG agreed that the Change Request can be considered mature from a content point of view and is ready for the preliminary assessment. The 4CB will assess during the preliminary assessment the easiest implementation option to report the settled quantity in camt.053 and camt.054 messages.

CRG Decision: The CRG agreed that the Change Request can be considered mature from a content point of view and therefore, it is ready for its preliminary assessment. The 4CB will assess during the preliminary assessment the easiest implementation option to report settled quantity in camt.053 and camt.054 messages.

Change Request T2S-0608-SYS (T2S should be enhanced to maintain and report types of financial instruments as described in the CSDR Level 2 Technical Standards)

The aim of the Change Request is to include the following categories of financial instruments in T2S: “SHRS”, “SOVR”, “DEBT”, “SECU”, “ETFS”, “UCIT”, “MMKT”, “EMAL”, “OTHR”.

The CRG was informed that the preliminary assessment on the Change Request should be postponed since the Change Request has been kept on hold by the CSDR taskforce.

CRG Decision: The CRG agreed to postpone the preliminary assessment on the Change Request.

Change Request T2S-0611-SYS (Cash Account Postings GUI Screen to include the T2S Actor References)

The aim of the Change Request is to include the T2S Actor references on the Cash Account Postings screen, which would provide reconciliation references to the users. Currently the Cash Account Postings screen provides a T2S Internal Reference, however this reference cannot be reconciled with any previously known information.

The CRG agreed that the Change Request can be considered mature from a content point of view and is ready for the preliminary assessment. The preliminary assessment will be based on the assumption

that a new reference block will be available in the camt.006 message to include the relevant T2S Actor references.

CRG Decision: The CRG agreed that the Change Request can be considered mature from a content point of view and therefore, it is ready for its preliminary assessment. The preliminary assessment will be based on the assumption that a new reference block will be available in the camt.006 message to include the relevant T2S Actor references.

Change Request T2S-0613-SYS (T2S should give the possibility to receive outbound T2S messages bundled in files)

The aim of the Change Request is to allow T2S actors (CSDs, NCBs, DCPs) to subscribe to the receipt of outbound messages into files based on a number of criteria.

The CRG was informed that the preliminary assessment on the Change Request should be postponed as a new implementation approach proposed by the 4CB for bundling of messages during RTS is currently under discussion. However the Change Request would still remain to be part of the ranking exercise and would be discussed in the context of next Release scoping exercise.

CRG Decision: The CRG agreed to postpone the preliminary assessment on the Change Request.

Change Request T2S-0614-SYS (Matching status should be included in sese.024 status messages for unmatched instructions when a pending reason is reported)

The aim of the Change Request is that T2S shall inform the matching status 'unmatched' whenever a pending status is reported for an unmatched instruction.

The CRG was informed about the updated Change Request to include the message usage: No hold remains. The CR initiator informed that their clients have agreed to the updated Change Request; additionally they also require the earlier version of the Change Request which requests that T2S should not generate status advice messages (sese.024) for status changes of unmatched instructions which are currently reported with pending reason code FUTU (Awaiting Settlement Date). Only if the settlement instruction is matched and released from any hold status a status advice with pending reason code FUTU should be generated.

A CRG member mentioned that the two requests would be contradicting each other. However the CR initiator was of the opinion that the two Change Requests would complement each other. The CR initiator agreed that the current version of the Change Request should remain as it is. The initiator will also inform their clients about the CRG discussion. If the clients still wished to keep both the requirements, a new Change Request should be raised for the older version of the current Change Request.

The CRG took note that the Change Request is under preliminary assessment.

CRG decision: The CRG agreed to the updated version of the Change Request and took note that the preliminary assessment on the Change Request has already been started and will consider the updates made.

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

The aim of the Change Request 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 Securities Account (SAC) or earmarking position to another SAC or earmarking position.

The CRG was informed that the CR initiator and other CSDs impacted by the Change Request have provided feedback to the open questions raised by the 4CB.

The CRG agreed that the Change Request can be considered mature from a content point of view and is ready for the preliminary assessment.

CRG Decision: The CRG agreed that the Change Request can be considered mature from a content point of view and therefore, it is ready for its preliminary assessment.

Change Request T2S-0628-SYS (Add Event Type Code "EDVP" to list of eligible "event trigger" for standing and predefined liquidity transfer orders)

The aim of the Change Request is to allow addition of event type code "EDVP" to the list of eligible events for Standing/Pre-defined Liquidity Transfer Orders to transfer liquidity from T2S DCA to RTGS.

The CRG was informed about the updates made to the Change Request to specify that the event type code 'EDVP'(End of DVP cut-off) instead of IDVP should be added to list of eligible event trigger for standing and predefined liquidity transfer orders.

The CRG agreed that the Change Request can be considered mature from a content point of view and is ready for the preliminary assessment.

CRG Decision:

- The CRG agreed that the Change Request can be considered mature from a content point of view and therefore, it is ready for its preliminary assessment.
- The ECB will share the updated Change Request with the CRG.

Change Request T2S-0629-SYS (Enhance Cash Forecast Query and Report to display CORP related cash movements separately)

The aim of the Change Request is to differentiate the cash movements related to corporate action activities and other settlement activities in the cash forecast query and report.

The CRG was informed about the updates made to the Change Request to specify that only instructions with a securities transaction type code "CORP" will be considered for displaying cash movements related to corporate action. All other securities transaction type codes, e.g. "TRAD", "CLAI" and "TRAN", will be part of the "non CORP" position.

The CR initiator informed that they do not prefer to merge the Change Request with T2S-0630-SYS (Enhance Cash Forecast Query and Report to display expected aggregated cash movements, with separate status Hold or Released).

The CRG agreed that the Change Request can be considered mature from a content point of view and is ready for the preliminary assessment. The 4CB preliminary assessment would be based on the

assumption that this Change Request is implemented along with the Change Request T2S-0630-SYS (Enhance Cash Forecast Query and Report to display expected aggregated cash movements, with separate status Hold or Released).

CRG decision: The CRG agreed that the Change Request can be considered mature from a content point of view and therefore, it is ready for its preliminary assessment. The 4CB preliminary assessment would be based on the assumption that the CR-629 is implemented along with the Change Request T2S-0630-SYS (Enhance Cash Forecast Query and Report to display expected aggregated cash movements, with separate status Hold or Released).

Change Request T2S-0630-SYS (Enhance Cash Forecast Query and Report to display expected aggregated cash movements, with separate status Hold or Released)

The aim of the Change Request is to differentiate the aggregated cash movements for settlement instructions with status 'Hold' and 'Released' in the cash forecast query and report

The CRG was informed about the updates made to the Change Request to specify that the settlement instructions with the status 'on hold' and with the status other than on hold will be considered to display cash movements.

The CR initiator informed that they do not prefer to merge the Change Request with T2S-0629-SYS (Enhance Cash Forecast Query and Report to display CORP related cash movements separately).

The CRG agreed that the Change Request can be considered mature from a content point of view and is for the preliminary assessment. The 4CB preliminary assessment would be based on the assumption that this Change Request is implemented along with the Change Request T2S-0629-SYS (Enhance Cash Forecast Query and Report to display CORP related cash movements separately).

CRG decision: The CRG agreed that the Change Request can be considered mature from a content point of view and therefore, it is ready for its preliminary assessment. The 4CB preliminary assessment would be based on the assumption that the CR-630 is implemented along with the Change Request T2S-0629-SYS (Enhance Cash Forecast Query and Report to display CORP related cash movements separately).

Change Request T2S-0633-SYS (Multiplex Editorial Change Request on UDFS and UHB)

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

The CRG was informed that based on the feedback from CRG members the Change Request was updated to modify the wordings of the Change Request. Item 1 (Discrepancy between camt.053 and camt.054) and Item 11 (Removal of Party BIC field from the User Access Rights - Search Screen) need to be discussed in detail.

Item 1 (Discrepancy between camt.053 and camt.054)

The 4CB presented the clarification note to explain about the current discrepancy between statement of accounts (camt.053) and bank to customer debit credit notification (camt.054) messages and proposed a change in the wordings of the UDFS to reflect this discrepancy. The 4CB explained that in case of multiple partial settlements of the same instruction during a given NTS sequence, this results

in multiple postings for cash and securities. On the cash side camt.053 reports (based on subscription) each of the posting made during the sequence whereas camt.054 which is sent at the end of every sequence reports the cumulative cash amount of all postings. Hence multiple postings in camt.053 when cumulated would match with the settlement amount reported in camt.054.

On the securities side only one sese.025 is sent at the end of every sequence with the cumulated quantity and amount for the sequence. No message on the securities side displays individual securities postings. The individual postings are only available via queries.

The CRG agreed to include the item 1 (Discrepancy between camt.053 and camt.054) in the Change Request after changing the current wordings in the Change Request to reflect the clarifications provided in the presentation.

Item 11 (Removal of Party BIC field from the User Access Rights - Search Screen)

The CRG discussed the clarification note presented by the 4CB to explain the current T2S design related to the implementation of the user access rights query in the context of Change Request T2S-0445-SYS (User Access Rights Report). As per the current implementation the CSD users can only retrieve access rights related to the other users linked to the CSD. While submitting the query the user need not select the party BIC since T2S automatically identifies the parent and party BIC of the user submitting the query and returns the relevant users. It was acknowledged that this implementation is not fully in line with the requirement in CR445 which states that users belonging to CSDs/NCBs should also be able to query information related to DCP admin users previously created by a user of the CSD/NCB.

The 4CB proposed two approaches that could be considered as possible enhancement to the already implemented solution. Proposal 1 would allow CSD/NCB users to retrieve the access rights of all the users belonging to the CSD/NCB and the access rights of all their DCP admin users, independent from who created the admin users (CSD/NCB users, DCP users or T2S operator). Proposal 2 would allow CSD/NCB users to retrieve the access rights of all the users belonging to the CSD/NCB and the access rights of only those of their DCP admin users which were created by any of the CSD/NCB users. However the CSD/NCB users will not be able to query access rights of their DCP admin users which were created by the users not belonging to the CSD/NCB. 4CB mentioned that proposal 2 was more complex and would require a more severe change to the data base structure.

The CRG members agreed to confirm their requirement related to user access rights review query i.e. if the current implementation of CR-445 (showing all the users, including party administrators, belonging to the same party running the query) is fine, or if they need to enhance the current functionality for CSDs and NCBs in order to see the access rights of all the users belonging to their party as well as administrators of the parties under their system entity created by the CSD/NCB users. The CRG agreed to remove the item 11 (Removal of Party BIC field from the User Access Rights - Search Screen) from the Change Request.

CRG decision: The CRG agreed to update the wording of the item 1 (Discrepancy between camt.053 and camt.054) and keep it in the Change Request and remove item 11 (Removal of Party BIC field from the User Access Rights - Search Screen) from the Change Request.

Action points:

- The 4CB will update the Change Request to modify the wordings of item 1 (Discrepancy between camt.053 and camt.054) and remove item 11 (Removal of Party BIC field from the User Access Rights - Search Screen).
- The CRG will provide their feedback on the updated Change Request via a written procedure.
- The ECB will share the presentation on the item 11 (Removal of Party BIC field from the User Access Rights - Search Screen) with the CRG.
- The CRG members will check internally the requirements related to user access rights review query i.e. if the current implementation of CR-445 (showing all the users, including party administrators, belonging to the same party running the query) is fine, or if they need to enhance the current functionality for CSDs and CBs in order to see the access rights of all the users belonging to their party as well as administrators of the parties under their system entity created by the CSD/CB users.

Cut-off handling and report enhancements in the context of multiple currencies

The CRG was informed about the mixed responses from the CRG members during the written procedure on the cut-off handling and report enhancements in the context of multiple currencies. Some CRG members supported the proposal for configuration of events based on the currency, one CRG member expressed that the IDVP should not be currency dependent, few members mentioned that the report management needs to be enhanced in the context of multiple-currency, some of the CRG members requested more details before they could provide their feedback.

The 4CB explained that in the absence of currency dependent cash events it is possible that any problem related to cash sweep for DKK could lead to delay in the cash sweep for Euro or vice-versa. To ensure that the issue related to one currency does not block the T2S settlement day for other currency, cash events in T2S should be made currency dependent. The Change Request proposed by the 4CB would introduce separate cash events for DKK and Euro. The Return Business Day Information message (camt.019) would be sent to inform the change of status of the system to RTMC (Real Time Settlement Closure) whenever the first IDVP cut-off is reached. A CRG member remarked that the notification of the change of the status of the system to RTMC would not be correct if the currencies in T2S would be set-up at different times for the DVP cut-off and this behaviour would not be possible to handle in an automated way.

The CRG discussed that as a result of introduction of currency dependent events T2S actors would receive two reports once the cut-off for DKK and Euro is reached e.g. a report will be generated at the DKK IDVP cut-off and at the Euro IDVP cut-off. If the cut-off for both the currencies was reached at the same time both the reports would contain identical information, whereas the information in the reports may differ if the cut-off for both the currencies was not at the same time. The CRG members pointed that this behaviour is not acceptable as receiving two reports would mean that a T2S actor

needs to pay twice for the same report. Separation of currency dependent events and report configuration cannot be seen as separate issues and these need to be handled together.

A CRG member mentioned that a delay in a cash related event is foreseen in case of any issue related to the corresponding RTGS system. Therefore only those events which are related to RTGS should be made currency specific. The CRG discussed that IDVP (Intraday DVP cut-off), CSRC (Intraday cash settlement restrictions cut-off), RLCR (Settlement restrictions release) and potentially other cut-offs could remain currency independent. Also if IDVP is made currency dependent then it would not be appropriate to send the camt.019 after the first IDVP is triggered. The camt.019 would inform T2S actors that the system is in real time closure whereas the RTS would still be going on for the other currency. Instead the camt.019 should be sent after the last IDVP is reached. Any request for a change of sending of camt.019 RTMC (Real-Time Settlement Closure) was strongly objected by the 4CB.

The CRG agreed to share the feedback about which cut-off events available for report configuration in T2S are currently used by them for configuration of reports and which cut-off events in T2S should be made currency specific to ensure that the delay in a currency specific cut-off for one currency (due to an issue with the corresponding RTGS system) does not lead to a delay in the same cut-off for other currencies.

The CRG also agreed to inform OMG about the CRG discussion on the cut-off handling and report enhancements in the context of multiple currencies.

Action points:

- The ECB will inform OMG about the CRG discussion on the cut-off handling and report enhancements in the context of multiple currencies.
- The CRG will provide their feedback in a written procedure
 - which cut-off events available for report configuration in T2S are currently used by them for configuration of reports.
 - which of the cash related cut-off events in T2S (available/not available for report configuration) should be made currency specific to ensure that the delay in a currency specific cut-off for one currency (due to an issue with the corresponding RTGS system⁴) does not lead to a delay in the same cut-off for other currencies.

5. Bundling of outbound messages

Change Request T2S-0637-SYS (T2S enhanced bundling of messages during night-time settlement reporting)

The aim of the Change Request is to reduce the NTS reporting phase to deliver outbound files at a considerably earlier point of time.

⁴ 4CB: Please be aware that not only an issue on RTGS side could lead to a delay, but also instructions (with a currency leg) can lead to a delay. For instance, a DVP with a Cash leg of DKK can block the IDVP part for the Euro, if the IDVP is defined for all currencies, because the IDVP can only be closed if all DVPs could be considered. In this case this could lead to a postponement of the Cash Sweep of both RTGS systems instead of impacting “only” one RTGS system.

The 4CB informed that the topic of bundling of messages during the NTS and RTS should be considered as separate workstreams. Based on the recommendation of OMG the Change Request for enhancement in bundling of messages during the NTS has been raised. The OMG has also recommended to consider the Change Request for implementation as soon as possible.

The CRG was informed that disabling of file size parameter would reduce the technical checks performed by T2S and would result into quicker response time for outbound messages during the NTS. Additionally camt.019 with code RTMS (real-time settlement closure) sent at the end of NTS would inform the recipient of the message about the total number of files sent during the NTS.

A CRG pointed that the status RTMS in camt.019 is used to indicate the start of the real time settlement and hence a more appropriate status should be used to inform about the number of files sent during NTS. The 4CB agreed to update the Change Request to introduce a new code in camt.019 to inform about the number of messages. This way the new camt.019 could not be confounded with existing camt.019 messages used to inform about the current T2S system status. The CRG was informed that the field for indicating the number of messages sent needs to be un-pruned from the current camt.019. It was confirmed that only one additional camt.019 will be sent at the end of the NTS and not after each sequence. In case the outbound files were split, the number of messages would include the count for the split files as well. The camt.019 will be sent to the party who was the recipient of the outbound messages and not to the party who had configured the outbound messages on behalf of the recipient.

The 4CB informed that if the CRG recommends the Change request for detailed assessment then the detailed assessment could be delivered during December 2016.

The CRG agreed to inform OMG about the CRG discussion on the Change Request.

CRG decision: The CRG recommended to launch the detailed assessment on the Change Request in principle, subject to certain changes that are incorporated in the Change Request.

Action points:

- The 4CB will update the Change Request to specify an appropriate status code in the camt.019 for the final message instead of reusing the existing status code 'RTMS'.
- The CRG will inform OMG about the CRG discussion on the Change Request.

Presentation on bundling of outbound messages during real-time settlement

The 4CB presented a revised approach for bundling of messages during the RTS.

The 4CB informed that functionality would be optional and that a T2S party could configure the functionality as yes/no i.e. if they would like to opt for bundled messages during the RTS or not . Any additional configurations would not be possible due to the operational complexity and performance impact. The time interval for receipt of bundles would be around 2 - 5 minutes and the interval will be fixed for all the recipients. The 4CB agreed to confirm on an average how many files could be included in a bundle and how many messages would be bundled in the file if the time interval for bundles is foreseen as 2 minutes.

A CRG member asked if the Change Request could also include the requirement to bundle all the messages at the end of the partial window. The 4CB informed that this requirement could be considered in a separate Change Request. It was further informed that earlier the requirement was to

bundle the messages based on the future ISD, however it would lead to complexities and therefore the parameter of future ISD will not be considered.

Overall it was observed that there was a low appetite within the CRG to have a bundling of messages during the RTS. The CRG acknowledged that the main objective of such changes is cost saving and the best way to address it would be adjustment to the T2S pricing policy. The chairperson informed that the topic was reported to the PMG, OMG and CSG earlier however no action has been taken yet. The CRG agreed to highlight the CRG discussion to the OMG once again and inform OMG that the delta reports could be used as an alternative to subscribing the reports from the perspective of messaging cost.

The CRG agreed to share their feedback in a written procedure if they would like to use the functionality of bundling of T2S outbound messages during RTS as proposed by the 4CB, if it is made available.

In addition, a CRG member informed that currently at the EOD they do not get the information if they have received the last settlement messages or reports (e.g. semt.002), such information would help them to plan their reconciliation activity. It would be helpful if the code of the last sequence number of the message/report would be reported in the camt.019. The 4CB informed that the CRG member could consider raising a separate Change Request for the requirement.

Action points:

- The ECB will inform OMG about the CRG discussion that there was a low appetite in the CRG for bundling of outbound messages during the real-time settlement. Also from the perspective of messaging cost it was suggested that users could make use of delta reports rather than subscribing to the real time messages.
- CRG members will provide feedback via a written procedure if they agree with the proposal shared by the 4CB for bundling of outbound messages during real-time settlement and if they would like to use the functionality if it is implemented.

6. Resolution of the backlog of Change Requests

The CRG was reminded about the ongoing written procedure for assignment of business value indicator to the Change Requests in backlog. Since the new business value indicators 'Not Required (NR)' and 'Negative' have been introduced in the current exercise it was decided that if a CRG member decides not to score a particular Change Request then the value 'zero' would be assigned to such Change Request. This would ensure that scoring of the Change Request is not impacted if some members assign the value 'NR' and some decide not to score the Change Request at all.

Presentation on remaining CRs on hold for future releases - 'Remaining CRs'

The ECB presented the Change Requests in the backlog which have not yet been preliminary assessed by the 4CB⁵.

DCPG feedback on Change Requests relevant for DCPs

The CRG was informed about the outcome of the DCPG feedback on the backlog of Change Requests that were relevant for the DCPs. The CRG members were invited to consider the feedback of DCPG while assigning the business value to the Change Requests in the backlog.

⁵ During a written procedure after the meeting, from 04 – 10 November 2016, the CGR agreed to launch the preliminary assessment on the following 9 Change Requests. The Change Requests will be preliminary assessed from 16 November 2016 – 07 December 2016.

- Change Request T2S-0503-SYS (T2S Actor Reference and T2S Reference of counterparty's settlement instruction should be included in T2S messages sese.024, sese.025 and sese.032 after matching)
- Change Request T2S-0540-URD (Alignment of U2A and A2A cash forecast information)
- Change Request T2S-0556-SYS (Modification of cash forecast for the current and following business day after DVP cut-off)
- Change Request T2S-0590-SYS (Include ISIN and Message Identification in the T2S 'Bank to customer statement (camt.053)' message)
- Change Request T2S-0611-SYS (Cash Account Postings GUI Screen to include the T2S Actor References)
- Change Request T2S-0623-SYS (End of Day rebalancing of securities positions)
- Change Request T2S-0628-SYS (Add Event Type Code "EDVP" to list of eligible "event trigger" for standing and predefined liquidity transfer orders)
- Change Request T2S-0629-SYS (Enhance Cash Forecast Query and Report to display CORP related cash movements separately)
- Change Request T2S-0630-SYS (Enhance Cash Forecast Query and Report to display expected aggregated cash movements, with separate status Hold or Released)

<u>Participant's organisation</u>	<u>Name of participant</u>	
European Central Bank	Ms Karen Birkel	Chairperson
European Central Bank	Ms Madhura Satardekar	
European Central Bank	Mr David Weidner	
4CB	Ms Mariana Shkurtova	
4CB	Mr Dirk Beiermann	
4CB	Mr Michael Schwinzert	
4CB	Mr Massimiliano Renzetti	
4CB	Mr Alexander Topel	
4CB	Ms Natalia Canalejo	
4CB	Mr Miguel Martinez	
4CB	Ms Wilma Jagomast	
4CB	Mr Victorien Goldscheider	
Deutsche Bundesbank	Ms Melanie Gulden	
Bank of Greece	Mr Yorgos Korfiatis	
Banque de France	Mr Hervé Angebaud	
Banque de France	Mr Jocelyn Brossard	
Banca d'Italia	Mr Luca Rissolo	
Danmarks Nationalbank	Mr Peter Toubro-Christensen	
De Nederlandsche Bank	Mr Erik Beunen	
Banque Nationale de Belgique	Mr Koen Geenen	
Clearstream	Mr Markus Glück	
Iberclear	Ms Pilar Sanchez	
Monte Titoli	Mr Umberto Granata	
Société Générale	Mr Olivier Pierre Laurent Leveque	
LCH Clearnet	Mr Pierre Peczi	
Deutsche Bank	Ms Britta Woernle	

VP Securities

Ms Susanne Hass

Euroclear

Ms Mathilde Joannet

ABN AMRO

Mr Ton Van Andel

BBVA

Mr Daniel Saeta Martinez

Centrálny depozitár cenných
papierov SR, a.s.

Mr Juraj Aksamít