



**T2S PROGRAMME OFFICE** 

12 July 2017 V1.1 Contact person: Alejandro del Campo Roiz de la Parra Phone: +49 69 1344 7910 E-mail: <u>T2S.CRG@ecb.int</u>

### Final Summary Meeting of the Change Review Group (CRG) 07 June 2017, from 09:30 to 17:30

held at European Central Bank, Frankfurt

### 1. Introductory session

The Chairperson, Karen Birkel, welcomed the participants. The Chairperson also welcomed the CSD Regulation Task Force (CSDR TF) members Renan van der Wolf of NBB-SSS and Tim Werner of Clearstream who joined the meeting to participate in the discussion on CSDR related Change Requests.

The CRG was informed about the discussion during the Release Management Subgroup (RMSG) Operational Governance workshop which was held on 23 May 2017. As per the principles agreed by the CSD Steering Group (CSG) the CRG will rank Change Requests and share this information with the RMSG. The Operations Managers Group (OMG) would rank the production problems. The RMSG would then define the scope of the Release and would initiate the detailed assessment on the Change Requests and the feasibility assessment on the production problems. The CRG was informed that the new proposal of the T2S Operational Governance Framework will be presented to the CRG during the meeting on 4 July 2017.

The CRG was informed about the CSG resolution to deploy the Change Request T2S-0358-URD (Unblocking of ISINs as part of Corporate Action Handling) as part of 1<sup>st</sup> software package for T2S Release 2.0 (on 19 January 2018 in EAC).

The CRG was informed that considering the high implementation cost of the Change Request T2S-0646-SYS (Pre-formatted operational reports at specific times) the CSDs are currently checking if some of the requirements, e.g. intraday reporting, can be taken out of scope of the Change Request. The updated version of the Change Request will be discussed during the Data Access Task Force (DATF) meeting on 12-13 July 2017 and thereafter the 4CB will conduct another round of detailed

assessment on it. The updated version will be shared with the CRG for discussion during the CRG Telco on 20 July 2017.

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

- The detailed assessment on 10 Change Requests which were candidate for T2S Release 2.0
- The CSDR and ISO related Change Requests which were candidate for T2S Release 3.0
- 2 new Change Requests T2S-0662-SYS and T2S-0663-SYS
- Prioritisation of Change Requests for second slot of detailed assessment for T2S Release 3.0
- Definition of corrective/technical maintenance Change Requests

### 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 procedure<sup>1</sup>.

**T2SACTION-3050**: Change Request T2S-0646-SYS (Pre-formatted operational reports at specific times) - 4CB will compile the various cost drivers mentioned in the CR to ease the forthcoming discussion in the DATF.

<u>Update</u>: As the Change Request will be updated by the DATF to include the revised requirements from the CSDs, the action point is no more valid. The action point was closed.

**T2SACTION-3048**: Change Request T2S-0654-URD (T2S Penalty Mechanism) - The CRG members will provide feedback on the Change Request in a written procedure from 18 to 30 May 2017.

<u>Update</u>: The Eurosystem comments to the CRG feedback were discussed during the CRG meeting on 07 June 2017. The action point was closed.

**T2SACTION-3046**: Change Request T2S-0646-SYS (Pre-formatted operational reports at specific times) - The ECB will seek the CSG guidance on the recovery of the Change Request cost (including the pricing elements). The ECB will also inform the CSG about the possibility that the CSD Regulation might impact the Change Request's requirements and the related additional cost.

<u>Update</u>: As the Change Request will be updated by the DATF to include the revised requirements from the CSDs, the action point is no more valid. The action point was closed.

**T2SACTION-3045**: Change Request T2S-0646-SYS (Pre-formatted operational reports at specific times) - The ECB will seek the Data Access Task Force's feedback on (i) whether the detailed assessment meets their requirements and expectations, and (ii) how they plan to address any potential changes on the operational reports coming from the CSD Regulation, if any.

<sup>&</sup>lt;sup>1</sup> During the written procedure from 12-16 June 2017, the CRG members did not raise any objection for the action points with the status 'pending closure'; hence the action points can be considered closed.

<u>Update</u>: The above points were shared with the DATF for their feedback. The action point was closed.

**T2SACTION-3033**: Production Incident INC204308 (Back-to-back transactions in partial settlement) - The originator of the incident will look at the 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) to assess whether there could be any solution to address the reconciliation issue on the cash side.

<u>Update</u>: The action point remains open.

**T2SACTION-3032**: Production Incident INC204308 (Back-to-back transactions in partial settlement) - The originator of the incident will double-check whether the T2S specifications describe the T2S behaviour experienced for the next CRG meeting.

Update: The action point remains open.

**T2SACTION-3027**: Change Request T2S-0659-SYS (T2S should allow settlement of instructions with an 'AFTER' link to a settled instruction that was subject to conditional securities delivery) - The CRG will follow-up with the steering level on the issue of who will be responsible for paying for this Change Request (is it scope evolution or maintenance) once the preliminary assessment is available

<u>Update</u>: The CSG guidance will be sought during the CSG meeting on 13 June 2017. The action point remains open.

**T2SACTION-3022**: Change Request T2S-0656-URD (T2S should allow a temporary limit for the secondary Credit Memorandum Balance) - The CR initiator agreed to inform their market participants about the CRG feedback on the Change Request i.e. the current functionality available in T2S is sufficient to cover the requirements mentioned in the Change Request and therefore the Change Request is not supported by CRG members.

<u>Update</u>: The CR initiator informed the CRG about the withdrawal of the Change Request. The action point was closed.

**T2SACTION-3021**: Change Request T2S-0653-URD (Partial release functionality) - The CR initiator will update the Change Request to include the requirements specified by the DCPG members. <u>Update</u>: The Change Request was updated to include the requirements specified by the DCPG members. The updated Change Request was discussed during the CRG meeting on 07 June 2017. The action point was closed.

**T2SACTION-3019**: Change Request T2S-0647-SYS (T2S Actors should be allowed to extract bulk of outbound messages in XML format) - The CRG will seek the PMG/ISSG input about in the context of the massive manual resend of messages by the T2S Operator, an assessment of the risk of accepting T2S messages with a previous-used business signature (i.e. signature in the Business

Application Header) in contingency situations as it could also open the door potentially to accept invalid or fraudulent messages as well.

<u>Update</u>: The CRG was informed about the PMG view that the CRG could directly seek the ISSG input on topic of massive manual resend of messages. The action point remains open.

**T2SACTION-2955**: Compression of T2S outbound messages - Euroclear will share with the CRG a detailed description of the cases observed by them where T2S compression did not work as expected/required.

<u>Update</u>: Euroclear has contacted the service desk directly on this point and agreed to close the action point.

### 3. Approval of the summary of previous meetings

The CRG did not raise any objections to the final approval of below Summaries of the CRG meetings/teleconferences

- Summary of the CRG meeting of 30 March 2017
- Summary of the CRG meeting of 24 April 2017
- Summary of the CRG teleconference of 5 May 2017
- Summary of the CRG teleconference of 18 May 2017
- Summary of the CRG written procedure 19 26 May 2017

### 4. Analysis of the Change Requests

### A) Detailed assessment on Change Requests

### Methodology for calculation of operational costs of Change Requests

Some CRG members considered that the updates brought by some Change Requests do not justify their operational costs. They also questioned why operational costs are always applicable and positive and asked how the operational costs related to Change Requests were calculated.

The 4CB informed that the methodology applied to calculate the operational costs is based on a percentage of some of the project phase costs and not from a "real" operational cost. This means that operational costs always increase, irrespective of whether scope increases or decreases.

<u>Action point</u>: The ECB will inform the steering level about the CRG discussion that some CRG members questioned the methodology used for calculation of the operational costs for Change Requests.

### Transparency of the costs related to detailed assessment of Change Requests

The CRG members were of the view that the current information in the detailed assessment on Change Requests does not detail the main cost drivers and therefore does not provide a transparent view on the underlying costs of a Change Request.

Action point: The ECB will inform the steering level about the CRG discussion that some CRG members were of the view that the detailed assessment on the Change Request should include more details on cost drivers.

## Change Request T2S-0446-SYS (Blocking of U2A interface for submitting new instructions to T2S during reconciliation process post RAD (Recovery After Disaster))

The aim of the Change Request is to develop a functionality to allow the T2S Operator to prevent the submission and verification of new U2A instructions, restrictions and cancellations for cash and securities in the T2S GUI during the reconciliation process post RAD.

The Change Request has project phase cost of Euro 198,028.59 and operational cost of Euro 15,646.90.

The CRG was informed that the 'High level description of Impact' section in the Change Request was updated during the detailed assessment to specify the setting of privileges at the access rights configuration level that would ensure that the screens through which T2S Actors can submit various operations will not be accessible during the post RAD reconciliation phase.

A CRG member mentioned that the Change Request would make the A2A mode available for reports and queries during the reconciliation process after RAD. Therefore the CRG member suggested to check with the OMG if there could be a need for update of Manual of Operational Procedures (MOP). Another CRG member raised a point that the Change Request should be classified as 'corrective maintenance' as it did not involve a change to the T2S software. The CRG member also questioned the high cost for implementation of the Change Request considering it involved development of only 2 scripts.

The 4CB agreed to provide the details on the cost related to the Change Request to provide better view on the cost drivers or reasons for the cost considering that the CR required development of only 2 scripts. The 4CB was of the opinion that the Change Request should not be classified as 'corrective maintenance', because it adds a new requirement to the system to block certain activities after a RAD. The 4CB further added that they cannot implement Change Requests for which the status (corrective maintenance vs. enhancement) is not agreed and they will not start any assessment in case the status is controversial.

The CRG agreed to seek the guidance from steering level on the classification of the Change Request. The CRG acknowledged the importance of the Change Request and was in favour of recommending it for approval and inclusion into T2S Release 2.0, subject to CRG agreement on the cost drivers shared by the 4CB. <u>CRG decision</u>: The CRG was in favour of recommending the Change Request for approval and inclusion into T2S Release 2.0, subject to CRG agreement on the cost drivers shared by the 4CB. In addition, some CRG members were of the opinion that the Change Request should be classified as 'corrective maintenance', while other CRG members (the 4CB) had the opposite view, and agreed to seek the guidance from the steering level.

### Action points:

- The ECB will invite OMG to check if MOP update is required for making the A2A mode available for queries and reports during the reconciliation process after RAD.
- The 4CB will provide more details on the cost drivers related to the Change Request.
- The ECB will inform the steering level about the CRG opinion that the Change Request should be classified as corrective maintenance and seek guidance from the steering level on the way forward.

### Change Request T2S-0540-SYS (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 Change Request has project phase cost of Euro 152,743.35 and operational cost of Euro 14,500.64

The CRG agreed to recommend the approval of the Change Request and its inclusion in T2S Release 2.0. The CRG was in agreement that the Change Request should be classified as 'evolution/enhancement'.

<u>CRG decision</u>: The CRG recommended the approval of the Change Request and its inclusion in T2S Release 2.0. The CRG was in agreement that the Change Request should be classified as 'evolution/enhancement'.

## 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 Change Request has project phase cost of Euro 233,146.40 and operational cost of Euro 23,604.65.

The CRG agreed to recommend the approval of the Change Request and its inclusion in T2S Release 2.0. The CRG was in agreement that the Change Request should be classified as 'evolution/enhancement'.

<u>CRG decision</u>: The CRG recommended the approval of the Change Request and its inclusion in T2S Release 2.0. The CRG was in agreement that the Change Request should be classified as 'evolution/enhancement'.

## Change Request T2S-0577-SYS (T2S should allow a report configuration with validity of one day)

The aim of the Change Request is to allow setup of report configuration for one day by modifying the Business Rule DRCV050 so that Valid To date could be equal to or greater than the Valid From date. The Change Request has project phase cost of Euro 63,437.23 and operational cost of Euro 5,253.53.

A CRG member mentioned that the implementation cost of the Change Request was very high as compared to the benefits derived from the Change Request and therefore they would not be in favour of recommending the approval of it. Another CRG member questioned the recurring cost associated with the Change Request since it would involve only a one time update of a specific Business Rule. The 4CB agreed to share more details on the cost drivers for the Change Request.

The CRG agreed that the recommendation on the Change Request (i.e. approval or rejection) should be taken after the cost related details are available.

<u>CRG decision</u>: Some CRG members indicated that the cost of the Change Request seemed very high considering the functional change requested and asked the 4CB to provide further details on the cost drivers before a recommendation can be taken on the Change Request (i.e. approval or rejection). Action points: The 4CB will provide more details on the cost drivers related to the Change Request.

## 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))

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 Change Request has project phase cost of Euro 147,186.87 and operational cost of Euro 15,257.91.

The CRG agreed to recommend the approval of the Change Request and its inclusion in T2S Release 2.0. The CRG was in agreement that the Change Request should be classified as 'evolution/enhancement'.

<u>CRG decision</u>: The CRG recommended the approval of the Change Request and its inclusion in T2S Release 2.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement'.

## Change Request T2S-0632-SYS (To increase the default number of rows to be displayed from 10 to 100 rows per page)

The aim of the Change Request is to increase the number of rows displayed on all the screens from 10 rows per page to 100 rows per page by default.

The Change Request has project phase cost of Euro 88,481.39 and operational cost of Euro 7,546.38.

A CRG member mentioned that the implementation cost of the Change Request was very high as compared to the benefits derived from the Change Request and therefore they would not be in favour of recommending the approval of it.

The 4CB agreed to share more details on the cost drivers for the Change Request.

The CRG agreed that the recommendation on the Change Request (i.e. approval or rejection) should be taken after the cost related details are available.

<u>CRG decision</u>: Some CRG members indicated that the cost of the Change Request seemed very high considering the functional change requested and asked the 4CB to provide further details on the cost drivers before a recommendation can be taken on the Change Request (i.e. approval or rejection). <u>Action points</u>: The 4CB will provide more details on the cost drivers related to the Change Request.

<u>reaction points</u>. The 4CD will provide more details on the cost arrivers related to the change request.

## Change Request T2S-0640-SYS (Bilaterally Agreed Treasury Management (BATM) operations to be applied on bilateral basis only)

The aim of the Change Request is to amend T2S behaviour to ensure that a transaction is considered eligible for BATM settlement only if the ADEA (Accept After Regular Settlement Deadline) flag is set in both legs of the transaction.

The Change Request has project phase cost of Euro 35,686.59 and operational cost of Euro 3,503.08 The CRG was informed about the updates made to the Change Request during the detailed assessment for a minor editorial change to rectify the reference to the page numbers in the User Detailed Functional Specifications (UDFS).

A CRG member mentioned that the Change Request should be classified as 'corrective maintenance' since the Change Request aims to align the system behaviour with the core meaning of BATM, i.e. treasury management operations which have to be agreed <u>bilaterally</u> (as per the name) in order to be effective. This change of system behaviour is required because T2S currently considers the indication of BATM by only one party as sufficient to apply the BATM cut-off for the whole transaction.

The 4CB was of the opinion that the Change Request should not be classified as 'corrective maintenance', because the current functionality would be in line with the UDFS. A CRG member mentioned that the description in the UDFS was added later on via an Editorial CR in order to describe the current T2S processing logic. But according to the CRG member, adding a certain processing description to the UDFS would not make it correct from a requirements point of view. A reference was also made to the Framework Agreement (FA) which states that a corrective maintenance may also relate to an error in the specification. The 4CB on the other hand pointed out that the Editorial CR was distributed for review to all CRG members and that the CRG had previously accepted the editorial change and thus the current T2S processing logic.

The CRG acknowledged the importance of the Change Request and was in favour of recommending it for approval and inclusion into T2S Release 2.0. However the CRG was of the opinion that the Change Request should be classified as 'corrective maintenance' and agreed to seek the guidance from the steering level. <u>CRG decision</u>: The CRG acknowledged the importance of the Change Request and was in favour of recommending it for approval and inclusion into T2S Release 2.0. However some CRG members were of the opinion that the Change Request should be classified as 'corrective maintenance', while other members (the 4CB) had the opposite view and agreed to seek the guidance from the steering level.

<u>Action points</u>: The ECB will inform the steering level about the diverging opinions in the CRG whether the Change Request should be classified as corrective maintenance and seek guidance from the steering level on the way forward.

## Change Request T2S-0645-SYS (Character Set X: Align discrepancies between UDFS, UHB, DMT and SWIFT Handbook)

The aim of the Change Request is to align the discrepancy of definition of set X characters between UDFS, UHB, DMT and SWIFT handbook by disallowing '{' and '}' as valid characters.

The Change Request has project phase cost of Euro 68,176.66 and operational cost of Euro 5,591.44 The CRG was informed about update made to the Change Request during the detailed assessment to remove {} from the SWIFT X character set. A CRG member pointed that the Change Request needs to be further updated to remove the "'{' - Opening curly bracket" in the section 'Proposed wording' of the Change Request.

Another CRG member raised a point that the Change Request should be classified as 'corrective maintenance' as it was only an alignment of discrepancies between T2S documents.

The 4CB mentioned that the Change Request involved change in the software. Additionally maintenance of the T2S specification documents also involves operational cost. The 4CB was of the opinion that the Change Request should not be classified as 'corrective maintenance'.

The CRG agreed to seek the guidance from steering level on the classification of the Change Request. The CRG acknowledged the importance of the Change Request and was in favour of recommending it for approval and inclusion into T2S Release 2.0.

<u>CRG decision</u>: The CRG acknowledged the importance of the Change Request and was in favour of recommending it for approval and inclusion into T2S Release 2.0. However some CRG members were of the opinion that the Change Request should be classified as 'corrective maintenance' while other members (the 4CB) had the opposite view and agreed to seek the guidance from the steering level.

### Action points:

- The ECB will inform the steering level about the diverging opinions in the CRG whether the Change Request should be classified as corrective maintenance and seek guidance from the steering level on the way forward.
- The CR initiator will update the Change Request to remove the "'{' Opening curly bracket" in the section 'Proposed wording' of the Change Request.

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

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

The CRG took note that the cost of the Change Request is borne by the 4CB.

The CRG was informed about the updates made to the Change Request to clarify the current design of the report management in the context of multi-currency. Event-triggered reports are always generated as soon as Report Management receives the respective event trigger. Hence in case of a closing day for a particular currency the respective currency dependent event will not be triggered and therefore the report configured for that event and currency will not be generated.

The CRG agreed to recommend the approval of the Change Request and its inclusion in T2S Release 2.0. The CRG was in agreement that the Change Request should be classified as 'corrective maintenance'.

<u>CRG decision</u>: The CRG recommended the approval of the Change Request and its inclusion in T2S Release 2.0. The CRG was of the opinion that the Change Request should be classified as 'corrective maintenance'.

## Change Request T2S-0649-SYS (Handling of leading and trailing "blanks" and "/" in A2A and U2A names and Identification attributes)

The aim of the Change Request is to prohibit the use of leading blanks followed by "/" at the beginning or trailing blanks preceded by "/" in inbound messages to ensure valid outbound messages. The Change Request has project phase cost of Euro 100,944.46 and operational cost of Euro 9,782.68 The CRG was informed about the update made to the Change Request during the detailed assessment to add the proposed wordings for the UHB.

The CRG agreed to seek the guidance from steering level on the classification of the Change Request. The CRG acknowledged the importance of the Change Request and was in favour of recommending it for approval and inclusion into T2S Release 2.0.

<u>CRG decision</u>: The CRG acknowledged the importance of the Change Request and was in favour of recommending it for approval and inclusion into T2S Release 2.0. However some CRG members were of the opinion that the Change Request should be classified as 'corrective maintenance' while other members (the 4CB) had the opposite view and agreed to seek the guidance from the steering level.

<u>Action points</u>: The ECB will inform the steering level about the diverging opinions in the CRG whether the Change Request should be classified as corrective maintenance and seek guidance from the steering level on the way forward.

### B) Change Requests positioned by the CRG as mandatory for T2S Release 3.0

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 that the Change Request was updated to specify the path for the timestamp in the message schema for sese.024, semt.014, sese.032, semt.027, semt.029, semt.017, semt.018, semt.016 and semt.034.

The CRG agreed to recommend the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to regulation').

<u>CRG decision</u>: The CRG recommended the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to regulation)'.

## 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 agreed to recommend the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to regulation)'.

<u>CRG decision</u>: The CRG recommended the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to regulation)'.

## 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 allegement notification (sese.028) and the statement of allegements (semt.019)

The CRG agreed to recommend the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to regulation)'.

<u>CRG decision</u>: The CRG recommended the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to regulation)'.

## 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 table for mapping the new CFI standard and the categories of financial instruments as required by the CSDR, was still under consideration by CSDR TF. The CSDR TF will validate it during their next meeting on 12 June 2017. In case common agreement is reached on the mapping table then the Change Request could be withdrawn.

The CRG agreed to keep the Change Request on hold until further notification from CSDR TF.

<u>CRG decision</u>: The CRG agreed to keep the Change Request on hold until further notification from CSDR TF.

## 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)

The aim of the Change Request is to differentiate between pending settlements instructions for which settlement at the Intended Settlement Date (ISD) is still possible and for which settlement at the ISD is no longer possible.

The CRG agreed to recommend the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to regulation)'.

<u>CRG decision</u>: The CRG recommended the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to regulation)'.

## Change Request T2S-0612-SYS (Alignment of T2S Messages with ISO Maintenance Releases 2013 - 2017)

The aim of the Change Request is to align messages used in T2S with the latest ISO version 2017.

The CRG was informed that the Change Request was updated to specify the list of messages that need to be updated in the new ISO version.

The CRG agreed to update the title of the Change Request to specify that it will align T2S messages up until the ISO 2017 version.

The 4CB informed that during the detailed assessment on the Change Request they would check the feasibility to deliver the non-binding XSD earlier than 8 weeks ahead of deployment of the Change Request in the UTEST environment.

The CRG agreed to recommend the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement due to standards'.

<u>CRG decision</u>: The CRG recommended the Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver the Change Request in T2S Release 3.0. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to standards)'.

<u>Action points</u>: The CR initiator will update the Change Request to modify the title of the Change Request as 'Alignment of T2S Messages with ISO Maintenance Releases <u>2013 - 2017</u>'

### Change Request T2S-0654-URD (T2S Penalty Mechanism)

The aim of the Change Request is to provide settlement penalty identification, calculation and reporting mechanism that enables CSDs to be compliant with CSDR requirements.

The CRG members were informed that the Change Request will be updated based on the feedback provided by them during the written procedure. All the relevant comments from CRG would be shared with the CSDR TF for further discussion during their meeting on 12 June 2017.

The CRG was informed that for the purpose of calculation of penalties the T2S calendar will be followed. In case of difference in the opening days for a particular CSD (opening day in T2S, but closing day in the internal systems of a participating CSD) it would be in the responsibility of that CSD to ensure that the penalties calculated by T2S for the blocked CSD (blocked on T2S due to CSD internal closing day) are not charged to the clients. In addition it was clarified that in case of a closing day in one of the T2S currencies, a cash penalty would not be calculated on DVP/PFOD instructions in the given currency. CSDR TF members mentioned that they will organise the drafting of a rule book which shall describe common calculations and procedures to be applied by all CSDs subject to CSDR, including non-T2S CSD. This shall ensure a joint application of cash penalties across CSDs.

Regarding the daily price list a CRG member asked how prices shall be provided for securities which do not have a Securities Maintaining Entity (SME) in T2S. Another member remarked that potentially such situation is not possible in T2S SDMG, because there are checks in place to ensure that there is an SME defined in any case<sup>2</sup>. The 4CB will check this and report back to the CRG and potentially CSDR TF if required.

Another question that was raised during the discussion was concerning the framework agreement (FA) and how the new T2S penalty mechanism would be reflected in the FA. It was clarified that this topic is with the CSDR TF.

As a last point it was clarified that it is foreseen to provide an A2A solution for the removal of penalties, in case CSDs require a correction of the penalties automatically calculated by T2S.

<sup>&</sup>lt;sup>2</sup> After the meeting it was clarified that a security CSD link can be defined without a SME flag.

The 4CB mentioned that they plan to start the detailed assessment on the Change Request at the end of June 2017 for the URD chapters that were not expected to undergo further updates. The Chapters which were expected to be updated after the CSDR meeting will be considered for detailed assessment once the final version of the Change Request was available.

Thus the CRG agreed to keep the Change Request on hold and not to recommend it for detailed assessment at this stage.

The CRG agreed to discuss the updated Change Request in a teleconference, which will be organised before the next CRG meeting on 4 July 2017 so that it can be recommended for the detailed assessment potentially. The CRG took note that even at the end of June 2017 the Change Request may not be stable. However it would be worth starting a detailed assessment knowing that the scope is very close to stable, for the purpose of having an approximate estimate of cost of the Change Request. In case some working assumptions considered for the detailed assessment are later on not confirmed by the regulator, the CRG would discuss on the way forward at that point of time.

<u>CRG decision</u>: The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement (due to regulation)'. The CRG agreed to keep the Change Request on hold. Action points:

- The CRG feedback on the Change Request will be shared with the CSDR TF for their consideration.
- The 4CB will clarify whether it is possible in T2S Static Data to have a security without SME. If this would be possible, the responsible entity for feeding of daily prices for such securities would have to be defined (based on the current working assumption that the SME CSD is responsible for loading this data in T2S).

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

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

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

The CRG was informed about the updates made to the Change Request to incorporate below changes suggested by the Directly Connected Parties Group (DCPG) during the written procedure on the Change Request.

- Additional condition for an underlying instruction to be accepted for partial release i.e. the remaining quantity to settle is equal or higher than the released quantity

- If the partial release was accepted by T2S, the party and counterparty should receive sese.024 (Securities Settlement Transaction Status Advice) on ISD with the pending reason code FUTU and with the narrative that a partial release has been requested, including the information of the quantity that was partially released

- Sese.031 (Securities Settlement Condition Modification Status Advice) should indicate the status 'completed', if the transaction was fully settled according to the release quantity or the status 'denied', if the transaction did not settle.

The CR initiator explained that if the CRG would decide for a new pending reason code to inform the counterparty about the partial release, it would require an ISO CR. This could delay the implementation of the Change Request and therefore they would prefer to use a narrative.

Some CRG members were of the view that if the counterparty needs to be updated about the partial release request then the status update should be sent to them immediately after T2S has accepted the partial release, which could be prior to the ISD. In the absence of any clear preference from the CRG on this point, CR initiator decided to keep requirement as it is. This is also similar to the existing T2S reporting for hold/release to the counterparty (full quantity), which is currently only done from ISD onwards.

The CRG discussed the situation when a partial release request on the original instruction is already pending and a T2S Actor sends another partial release request on the same original instruction, if T2S should add the partial release quantities of the two partial release requests, or if the new partial release request should overwrite the quantity sent by earlier request. The CR initiator agreed to update the Change Request to incorporate both the options, as there was no clear preference by CRG. It was agreed that the 4CB decide on the preferred option from the implementation perspective during the preliminary assessment of the Change Request.

In the context of the discussion on the topic if the partial settlement of partial release should be allowed or not, the CR initiator also agreed to update the Change Request with the two options and the 4CB would decide on the preferred option for implementation during the preliminary assessment on the Change Request.

The CR initiator acknowledged that the use of narrative to report the partial release quantity as mentioned in the Change Request was not a clean solution and agreed to seek advice from the Sub-Group for Message Standardisation (SGMS) whether this could be supported from a standards point of view nonetheless. Also, the CRG would welcome any alternative solution proposed by SGMS to report the quantity that was partially released, using existing fields. The CRG clearly preferred not to opt for a solution which requires an ISO CR, as this would delay the process and such ISO CR might face opposition from the international community. The CR initiator also confirmed that the functionality should be available in A2A and U2A mode.

The CRG was informed that the Securities Market Practice Group (SMPG) members did not support the introduction of partial release functionality (except for one member) due to the complexity, high implementation costs, low benefits, low demand for the functionality among end investors given that there are alternatives/workarounds which are applied in non-T2S markets today (e.g. splitting and shaping). CRG member agreed that the updated Change Request will be sent to the DCPG in order to give them the opportunity to re-evaluate their previous view on the Change Request, based on the updated requirements.

As the Change Request will be further updated the CRG agreed to keep it on hold. The CRG was of the opinion that it should be classified as 'evolution/enhancement'.

<u>CRG decision</u>: The CRG agreed to keep the Change Request on hold. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement'.

### Action points:

- The CR initiator will update the Change Request to specify that the
  - The partial release Functionality should be available in A2A as well in U2A mode
  - The partial settlement of partial release should be allowed or not (the 4CB will assess during the preliminary assessment which option is preferable from an implementation perspective)
  - Overwrite or sum-up the partial release quantity instructed by an amendment even when the earlier partial release on the original instruction was still pending for execution (the 4CB will assess during the preliminary assessment which option is preferable from an implementation perspective)
- The ECB will share the Change Request with the SGMS for the advice on below messaging aspects
  - o how the partial release should be instructed in the sese.030
  - how the partial release should be reported in sese.024

## Change Request T2S-0658-SYS (T2S should allow and process already matched instructions with deviating settlement parameters on DELI and RECE legs)

The aim of the Change Request is to allow processing of the deviating settlement parameters (i.e. settlement transaction type, hold status, modification/cancellation allowed flag) in the delivery and receiving leg of an already matched instruction.

The CRG was informed that following the feedback from the CRG during the written procedure, the Change Request was updated to add the code pair TRPO/TRVO under 'Settlement Transaction Type'. The CRG was informed that the SMPG did not support the duplication of the Settlement Parameters block since the business need was not considered sufficiently high to justify the impact of the change on the message. The SMPG rather recommended duplication of each field individually as part of the existing Settlement Parameters block, once needed.

The CRG was informed that the Change Request would require an ISO CR which needs to be submitted to the ISO during May 2018. The CR initiator suggested that ISO CR should be raised only after the result of the prioritisation exercise is available, so as to have a better view on the business value of the Change Request.

The CRG agreed to recommend the launch of preliminary assessment on the Change Request. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement'.

<u>CRG decision</u>: The CRG recommended to launch the preliminary assessment on the Change Request. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement'.

## Change Request T2S-0662-SYS (Possibility to extract bulk of settlement instruction details in csv format in case T2S reporting has not been produced)

The aim of the Change Request is to ensure that the information related to settlement instruction can be extracted in csv format from T2S GUI in case of exception scenarios.

The CR initiator informed that due to incorrect configuration of parameters in the message subscription and report configuration, no T2S outbound messages and reports were generated. The Change Request was raised to ensure that the information in the form of csv files is available to participants for the reconciliation purpose in such event of report not being set-up / getting generated.

A CRG member mentioned that the Change Request was similar to the T2S-0647-SYS (T2S Actors should be allowed to extract bulk of outbound messages in XML format). However the CR initiator clarified that the CR-647 was about outbound messages not being received by clients due to unavailability of service provider whereas CR-662 was about the messages that were not created due to wrong configurations and not due to issues at the level of T2S middleware or network service provider (NSP).

The 4CB suggested that in case clients did not receive intraday reports then they could always subscribe to the statement of pending transactions as a workaround. The 4CB stressed that in case of availability of alternatives or workarounds, T2S users should try to use these functionalities rather than raising a Change Request.

The 4CB suggested the CR initiator to check if the problem specified in the Change Request was a result of not configuring the correct parameters in the testing environment; in that case the correct configuration and testing the scenarios could resolve the issue. The 4CB also asked the CR initiator to confirm that the attributes requested in the csv extract were different from the attributes provided in the equivalent XML status notifications and reports. The CR initiator agreed to confirm these points in the next CRG meeting. In addition the initiator was requested to provide information about the expected frequency of use of such a tool.

The CRG agreed to put the Change Request on hold. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement'.

<u>CRG decision</u>: The CRG agreed to put the Change Request on hold. The CRG was of the opinion that the Change Request should be classified as 'evolution/enhancement'.

Action points: The CR initiator will

• check if the problem specified in the Change Request was a result of not configuring and testing the correct parameters in the testing environment.

• clarify why the attributes requested in the csv extract differ from the attributes provided in the equivalent XML status notifications and reports

### Change Request T2S-0663-SYS (Treatment of change of fractional digit for cases of ISIN with settlement type nominal and change of settlement type)

The aim of the Change Request is to address static data updates of the denomination currency for securities denominated in face amount and the changes to settlement type that trigger a FD increase or no FD change in an automated way.

The CRG was informed that the Change Request was raised in the context of an incident INC164770. The Change Request would handle the scenarios of change of Fractional Digits (FD) for securities denominated in FAMT that were not handled by the Change Request T2S-0538-SYS (Change of fractional digit of Settlement Unit Multiple (SUM) of securities).

A CRG member mentioned that the Change Request needs to be updated to specify that LLS procedure is required for the cases of FD decrease where positions or pending instructions exist.

The CRG agreed to recommend the updated Change Request for detailed assessment and asked the 4CB to check the feasibility to deliver it in T2S Release 2.0. The CRG was of the opinion that the Change Request should be classified as 'corrective maintenance'.

<u>CRG decision</u>: The CRG agreed to make some changes to the Change Request and recommended the updated Change Request for detailed assessment. The CRG asked the 4CB to check the feasibility to deliver it in T2S Release 2.0. The CRG was of the opinion that the Change Request should be classified as 'corrective maintenance'.

<u>Action points</u>: The CR initiator will update the Change Request to specify that the LLS procedure is required for the cases of FD decrease where positions or pending instructions exist.

### 5. Scope of T2S Release 3.0

### Presentation on Change Requests on hold for future releases

The CRG was informed that the prioritisation exercise needs to be initiated in view of future releases including the upcoming Release 3.0 that is planned for June 2019. The CRG will rank the Change Requests from functional point of view and provide this information to the RMSG who will scope the Change Requests for upcoming releases.

The CRG was given an overview of all the Change Requests that are currently in the backlog including the new Change Requests which were not ranked during the previous prioritisation exercise. The CRG has positioned the (i) Change Requests required for being compliant to the CSDR and (ii) T2S upgrade to a newer version of ISO20022 Standard as mandatory for the T2S Release 3.0. The 4CB will perform the detailed assessment on these Change Requests from 26 June to 30 October 2017. For the remaining Change Requests CRG would be invited to provide a business value during the written procedure until 11 August 2017. The CRG can assign the new business values or decide to keep the business values they assigned to Change Requests during the earlier prioritisation exercise.

The CRG was further informed that categorisation of Change Requests i.e. corrective/maintenance or enhancement should not influence the prioritisation exercise.

The CRG was informed that it was important to seek DCPG inputs on the Change Request which are relevant for DCPs as this input will be considered as one of the parameters for ranking of the Change Requests. Currently T2S-0652-SYS (Increase the limit of distinct values for the parameters relating to message subscriptions) and T2S-0658-SYS (T2S should allow and process already matched instructions with deviating settlement parameters on DELI and RECE legs) were identified as Change Requests relevant for DCPs. The CRG agreed to share their view during written procedure if any other Change Requests should be shared with DCPs for feedback.

### Action points:

- The CRG agreed to provide their view about which new Change Requests should be shared with the DCPG for their feedback, which is considered as one of the input parameters for the prioritisation exercise.
- The CRG agreed to provide the business values for the new Change Requests and old Change Requests on optional basis during a written procedure until 11 August 2017.

#### 6. Any other business

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

The 4CB informed that the methodology applied to calculate the operational costs is based on a percentage of some of the project phase costs and not from a "real" operational cost. This means that operational costs always increase, irrespective of whether scope increases or decreases. Therefore after implementation of the Change Request T2S-0515-URD (Allow instructions from CSD participants for n days after maturity date of security) the operational costs of the CR-471 would still remain.

The CRG took note of the methodology for the calculation of the operational costs (i.e. percentage of some of the project phase costs). The CRG discussed that this has to be more transparent and the steering level should be informed. The CRG acknowledged that the discussion related to the cost assessment of CR-471 does not have any impact on the implementation schedule of the CR-515.

<u>CRG decision</u>: The CRG took note that the software change (i.e. addition of a new business rule) brought by the Change Request T2S-0471-SYS (Deferred processing of maturity/expiry date update in T2S) is not completely removed, but changed, and therefore, the operational costs of the CR471 will be kept after the implementation of the Change Request T2S-0515-URD.

#### Corrective/technical maintenance Change Requests

The CRG was informed that the Framework Agreement in schedule 7, chapter 5.2 states that "Common Changes" are classified as

- "corrective maintenance" (i.e. fixing of errors in coding, design or detailed specifications (bug fixes)" and
- "technical maintenance" (i.e. software adaptations and/or testing activities imposed by changes of the hardware or the operating system or other infrastructural software packages within certain resource limits) will not be charged separately."

In particular, the CRG was of the view that the T2S-0655-SYS (T2S should allow updates of maturity date for matured ISINs) can be considered as enhancement, whereas T2S-0650-SYS (T2S to prevent duplicate sequence numbers after a Recovery After Disaster) should be considered as corrective maintenance. However the 4CB was of the view that the CR-650 should also be categorised as enhancement, as it requests to assign specific values for the sequence number after RAD, which is to be seen as a new requirement that will be added to T2S.

A CRG member mentioned that it would be beneficial to have the classification displayed in the Change Request. The ECB agreed to analyse whether the current Change Request template could be enhanced to display this information.

The CRG noted that the definition provided in the FA, when put into practical usage, proved to lead to differing opinions on the categorisation of CRs in the CRG. The CRG then agreed that the topic of classification of the Change Request was more for the discussion at the steering level. The CRG agreed to seek guidance from the steering level on the topic and inform them about the CRG view that current definition of the 'corrective/technical maintenance Change Requests' in the Framework Agreement need to be rephrased to bring about more clarity.

Action points:

- The ECB will analyse whether the current Change Request template can be enhanced to present the new parameter for classifying the type of the Change Request.
- The ECB will inform the steering level about the CRG view that the current definitions of the 'corrective/technical maintenance Change Requests' in the Framework Agreement need to be rephrased to bring about more clarity.
- The ECB will inform the steering level about the lack of transparency with regard to the calculation of the operational costs of Change Requests.

# CRG request for CSG guidance on INC204677 (Settlement Instructions settle despite Case 2 blocking restriction on ISIN) and UT-PBR-079 (Settlement problems for linked instructions in the context of COSD)

The CRG discussed about the incident 204677 where a transaction was subject to a positive Case2 restriction rule for one leg and subject to a negative Case2 restriction rule for the other leg. As a result of the application of the negative rule, the transaction was settled in T2S. The CRG member who raised the incident was of the opinion that T2S should not have settled the transaction once it identified that one leg of the transaction is subject to a positive rule. Settlement of the transaction was

in the view of the CRG member not in line with T2S specification and therefore the CRG member expected that the incident should be treated as defect and fixed by the 4CB.

The 4CB on the other hand was of the opinion that the current system behaviour is in line with the specification, i.e. if any instruction complies with a restriction rule, positive or negative, the rule is applied on transaction level and thus the application of a negative rule on one instruction excludes the transaction from any Case2 blocking. They mentioned that otherwise, if the system behaviour would be different, this could lead to issues in the corporate actions processing and some corporate actions might be blocked from settlement.

The incident initiator clarified that this risk would not apply for already matched instructions and for transactions where both legs are instructed with ISO Transaction Code 'CORP'.

According to the 4CB the related UDFS examples do not refer to already matched scenarios or scenarios where both legs of a transactions are instructed in a certain way. Instead, the UDFS describes the corporate actions handling for a single instruction subject to a negative restriction rule. In their view all UDFS examples should be valid for any instruction pattern and therefore a specific instruction pattern as mentioned by the initiator (e.g. already matched or both instructions containing the same ISO Transaction Code) should not be assumed. The 4CB further mentioned that the UDFS examples would no longer be applicable for all scenarios if the T2S behaviour for the application of Case2 restrictions would be changed. Therefore the 4CB strongly favoured to keep in the CSG presentation the bullets mentioning the potential negative side effects of such a change on the corporate actions handling.

The incident initiator and other CSD representatives in the CRG on the other hand requested to remove the risks from the presentation. Since CSDs always specify the correct ISO transaction code (CORP/CLAI) when instruction a corporate action and in addition, in domestic cases, corporate actions are always instructed by CSDs as already matched, the risks would never materialise.

The CRG chairperson agreed on the approach proposed by the CSDs and not to mention any side effects to the CSG. The presentation should rather focus on the different options on the way forward, namely whether CSG acknowledges the incident as a defect or is of the opinion that the T2S behaviour is in line with the specification.

It was also mentioned that not only a change in T2S behaviour would have side effects on users, but that with the latest findings from the incident, CSDs are also advised to re-assess their current restriction rules framework if they had initially specified their Case 2 restrictions based on wrong assumptions of the T2S processing logic.

It was agreed that independent from the CSG decision, an update of the UDFS would be required in order to describe the system behaviour.

Regarding UT-PBR-079 (Settlement problems for linked instructions in the context of COSD), the CRG was informed that the topic will be sent to CSG for their guidance. No further CRG discussion was required as the main parties in conflict on this matter (the incident initiator on one hand and the

4CB on the other hand) both agreed that the slides to be presented to the CSG would describe the issue in a neutral and fair way.

### Action points

- The ECB will track that after the outcome of the CSG discussion, either a regular CR (market request) or an editorial CR will be raised to update the UDFS.
- The CSDs will re-assess their current restriction rules framework if they had initially specified their Case 2 restrictions based on wrong assumptions of the T2S processing logic.

### More granular Change Request cost impact

The 4CB informed the CRG that based on the analysis of current classification of Financial Impact Indicator i.e. high, low, medium, 70% of the Change Requests were falling in the range of financial impact indicator 'Medium'. To provide more granular view to the results of the preliminary assessment the 4CB proposed to categories the financial impact indicator as follows:

- very high Change Requests with an investment cost of more than 700.000 €
- high Change Requests with an investment cost between 700.000 €- 400.000 €
- medium Change Requests with an investment cost between 400.000 €- 200.000 €
- low medium Change Requests with an investment cost between 200.000 €- 100.000 €
- low Change Requests with an investment cost of less than 100.000 €

The CRG agreed to additional categories of financial impact parameters proposed by the 4CB.

<u>CRG decision</u>: The CRG was of the opinion that the proposal made by the 4CB to categorise the financial impact indicator into 5 categories i.e. very high, high, medium, low-medium, low would provide more granular view to the results of the preliminary assessment.

### PMG Task Force on improvements to the T2S GUI

The CRG was informed that during the PMG Task force on GUI on 10 April 2017 the participants were of the view that increasing the logout time to more than 10 minutes would lead to an improvement in the GUI user experience. The security expert feedback on this topic is being sought from the Information Security Sub-group (ISSG).

The PMG confirmed that the Task Force should continue analysing the inefficient GUI workflows.

The CRG was informed that the 4CB presented the following 3 options that could lead to improved performance of the GUI.

- 1. Shift of presentation layer to local client side
- 2. Shift of parts of the business layer to local client side
- 3. Caching of presentation layer to local client side

The 4CB preference was for further analysis of option 3 owing to drawbacks associated with the other two options. However, the PMG concluded that the 4CB should investigate further options for the GUI improvement and should put all possible options on the table independently of their feasibility which could then be discussed with the market.

### Delivery planning of T2S documentation update for Change Requests in T2S Release 2.0

The CRG was informed about the delivery plan of the T2S documentation update for Change Requests in T2S Release 2.0. The CRG took note that the documentation update for Change Requests in T2S Release 2.0 would be available on 2 March 2018, i.e. before the deployment of the Change Requests in the UTEST environment on 30 March 2018.

Participant's organisation	Name of participant	
European Central Bank	Ms Karen Birkel	Chairperson
European Central Bank	Mr Alejandro Del Campo Roiz de la Parra	Rapporteur
European Central Bank	Ms Madhura Satardekar	
European Central Bank	Mr David Weidner	
European Central Bank	Mr Arpit Bhargava	
European Central Bank	Ms Assitan Diallo	
European Central Bank	Mr Rémy Al Sbinati	
4CB	Mr Arno Friederich	
4CB	Mr Dirk Beiermann	
4CB	Ms Anke Wagner-Gluth	
4CB	Mr Victorien Goldscheider	
4CB	Ms Maria Vila	
4CB	Mr Massimiliano Renzetti	
4CB	Mr Michael Jennings	
4CB	Mr Alexander Topel	
4CB	Ms Franziska Zoltan	
4CB	Mr Alberto Almazan	

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Banque de France	Mr Christian Leboutet
Banca d'Italia	Mr Michele Zaccagnino
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Ms Jennifer Cryan Fleming
Mr Ton van Andel