

<b>General Information (Origin of Request)</b>		
<input type="checkbox"/> User Requirements (URD) <input checked="" type="checkbox"/> Other User Functional or Technical Documentation (SYS)		
<b>Request raised by:</b> 4CB	<b>Institute:</b> 4CB	<b>Date raised:</b> 19/05/2016
<b>Request title:</b> Alignment of T2S Messages with ISO Maintenance Releases 2013 - 2017		<b>Request ref. no:</b> T2S 0612 SYS
<b>Request type:</b> Common	<b>Urgency:</b> Normal	
<b>1. Legal/business importance parameter:</b> High	<b>2. Market implementation efforts parameter:</b> High	
<b>3. Operational/Technical risk parameter:</b> High	<b>4. Financial impact parameter:</b> High	
<b>Requestor Category:</b> 4CB	<b>Status:</b> Allocated to a release	

**Reason for change / expected benefits / business case:**

In order to align the messages used in T2S with the latest ISO version available, the implementation of ISO Maintenance Releases 2013 - 2017 is required.

Currently, the T2S messages are based on ISO Maintenance Release 2011/2012. In order to stick to the latest developments on ISO-level, it is strongly recommended to migrate to the latest message versions available. Only this can avoid any inconsistencies with the ISO 20022 standard.

Further to that, the alignment with ISO Maintenance Releases 2013-2017 can be seen as a pre-condition for the future changes required due to the CSDR-impact. Since the CSDR-requirements will lead to ISO changes too, the messages need to be adapted anyway to the latest versions.

**Description of Requested Change:**

The alignment of the T2S messages with ISO Maintenance Releases 2013 - 2017 leads to several changes on the messages. These high level-changes are listed below. However, not every high-level change on the ISO base message finally entailed a change in the T2S customized message. Therefore the detailed description of the updates can be found within the attached tracking table to this CR.

Amongst others the following changes impact the ISO base-messages:

- Remove duplicates from all ISO20022 messages

This was an exercise performed by the ISO 20022 RA and the scope was to remove components from the ISO 20022 repository which were duplicated – resulting from parallel developments (that is strictly identical components –for the elements, cardinality of the elements and definitions), but with different message component names. Removing the duplicates, in most cases impacted the resulting schemas, but there is no impact on the instances. This is a pure technical change to reduce the number of components used in the ISO 20022 repository.

- Align definitions of Corporate Actions events codes in MT and MX

- Realign transaction type

- Update ISIN and CFI Patterns

the change to patterns ensures that the validation of the current ISIN and CFI standard is fully correct:

- for CFI, the old pattern was validating CFI from 1 to 6 characters, but the standard specifies that all CFIs

- have exactly 6 characters
  - for ISIN, the old pattern was allowing digits in the 2 country code, characters at the beginning and characters in the last check digit, the new one has been further restricted to check that the country code pattern only contain non digit characters and the check digit only contains 0 to 9.
- Migration of schemas to ISO 20022:2013
- The ISO20002:2013 is the latest version of the ISO 20022 Standard against which the schemas are generated. This has nothing to do with the schemas themselves.
- The current version of the schemas used on T2S are generated with the ISO20022:2004 version of the ISO 20022 Standard. The only difference in the schemas is the choice components structure for which a technical nesting level has been removed.

- Add a brokerage qualifier in field 17B to denote exclusion / inclusion in settlement amount
- Correction in code values for Code list "ProcessingPosition1Code"
  - The values existing in the code list "ProcessingPosition1Code" should be aligned with the values of the processing position codes lists used in the other settlement and reconciliation messages. Indeed, the code values are identical but their abbreviations and definition differ, which is not correct. Therefore ProcessingPosition1Code will be changed to ProcessingPositionXCode. Impacted by this change are the sese.030 and sese.031.
- MT/MX Align Reconciliation and Corporate Action message event type
- New code in STCO to indicate the security transaction is not for accounting.
- Coexistence definitions to ISO 15022 Standard have been deleted.
- Align definitions of TRCI and TCTR qualifiers with the definition in Triparty Collateral Management messages
- Clarify definitions of repo maturity date extension and early call
- Amend Definition of CAEV//EXTM Extension of Maturity
- Amend Name & Definitions of Partial Redemption Events

The full list of changes which were part of the ISO MRs 2013 - 2017 ("ISO CRs") can be found here: [http://www.iso20022.org/catalogue\\_of\\_change\\_requests.page](http://www.iso20022.org/catalogue_of_change_requests.page)

The implementation of T2S-CR-612 is a prerequisite for the implementation of the following T2S-CRs. For these CRs the 4CB has raised dedicated ISO-CRs:

- T2S-CR-519 (ISO-CR-512)
- T2S-CR-520 (ISO-CR-510 & ISO-CR-511)
- T2S-CR-587 (ISO-CR-610)
- T2S-CR-600 (ISO-CR-608)
- T2S-CR-609 (ISO-CR-609)

Besides the incorporation of the ISO Maintenance Release the 4CB detected some obsolete elements within several query responses. The block <BizErr> is available within XSD but never be used as errors and rejection reasons are only be provided via <OprlErr>. The block <BizErr> will be pruned as only <OprlErr> is used.

These changes and the affected query response message will be reflected in detail within the tracking table, too.

Within the CRG written procedure finished by 10/07/2017, it was agreed to include the removal of the

Generator Parameters currently used in the T2S Usage Guidelines in CR-612. The removal implies changes in the name of datatypes mentioned in the UDFS. These changes are documented in a separate spreadsheet attached to this CR.

The spreadsheet "Datatype Names - UDFS" in the Annex is listing those datatypes that are included in the UDFS document. The other spreadsheet "Datatype Names - Schema" is comparing all datatype names between T2S R2.0 – UDFS v3.0 and T2S R3.0 – UDFS v4.0 XSD schemas. Please note that these changes are caused either by the removal of the generator parameter or just because of the ISO maintenance. A change of a datatype name does not imply a change in the datatype and respectively in the XSD schema. Most of the changes happen if there was a change on the ISO base message/datatype, but it is independent whether the T2S messages are impacted by the schema change or not, i.e. if an element has changed that is removed from the T2S customized message, the datatype name of the base message changes and this name change is automatically reflected in the T2S schemas.

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**Submitted annexes / related documents:**

See file entitled T2S\_0612\_SYS\_attachment, which includes all the changes to the T2S messages.

The annex shows only the relevant changes for T2S, i.e. all changes that are not applied to the T2S messages are not included as they represent new functionalities for which dedicated CRs are needed.

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**Proposed wording for the Change request:**

The UDFS will be updated in line with the necessary changes due to the Standards Release up to 2016.

The below listed T2S messages are impacted by the MRs 2013 - 2017. The updates will be reflected in the corresponding UDFS-version and in the respective deliveries for message specification at MyStandards.

acmt.007, acmt.010, acmt.011, acmt.015, acmt.019, acmt.025, acmt.026, admi.005, admi.006, admi.007, camt.003, camt.004, camt.005, camt.006, camt.009, camt.010, camt.011, camt.012, camt.018, camt.019, camt.024, camt.025, camt.050, camt.051, camt.052, camt.053, camt.054, camt.064, camt.065, camt.066, camt.067, camt.068, camt.069, camt.070, camt.071, camt.072, camt.073, camt.074, camt.075, camt.076, camt.077, camt.078, camt.079, camt.080, camt.081, camt.082, camt.083, camt.084, camt.085, colr.001, colr.002, head.001, head.002, reda.006, reda.007, reda.008, reda.009, reda.010, reda.012, reda.013, reda.014, reda.015, reda.016, reda.017, reda.018, reda.019, reda.020, reda.021, reda.022, reda.023, reda.024, reda.025, reda.026, reda.027, reda.028, reda.029, reda.030, reda.031, reda.032, reda.033, reda.034, reda.035, reda.036, reda.037, reda.038, reda.039, reda.040, reda.041, reda.042, reda.043, reda.044, reda.045, reda.046, reda.047, reda.049, reda.050, reda.051, semt.002, semt.013, semt.014, semt.015, semt.016, semt.017, semt.018, semt.019, semt.020, semt.022, semt.025, semt.026, semt.027, semt.028, semt.029, semt.030, semt.031, semt.032, semt.033, semt.034, semt.040, sese.020, sese.021, sese.022, sese.023, sese.024, sese.025, sese.027, sese.028, sese.029, sese.030, sese.031, sese.032, supl.021

A detailed overview of the impacts on the T2S message schema files will be provided in the annex to this Change Request for the start of the detailed assessment.

The implementation of the MRs 2013 - 2017 will also upgrade the version of the below messages. The following example illustrates the change of the message version:

SecuritiesSettlementTransactionInstructionV07 (sese.023.001.07) (sese.023.001.07)

The following message versions will be updated:

acmt.007.001.02, acmt.010.001.02, acmt.011.001.02, acmt.015.001.02, acmt.019.001.02, acmt.025.001.02, acmt.026.001.02, camt.003.001.06, camt.004.001.07, camt.005.001.07, camt.006.001.07, camt.010.001.07, camt.011.001.06, camt.012.001.06, camt.019.001.06, camt.024.001.05, camt.025.001.04, camt.050.001.04,

camt.051.001.04, camt.052.001.06, camt.053.001.06, camt.054.001.06, camt.069.001.02, camt.070.001.03, camt.071.001.02, semt.002.001.09, semt.013.001.04, semt.014.001.05, semt.015.001.06, semt.016.001.06, semt.017.001.07, semt.018.001.08, semt.019.001.06, semt.020.001.05, semt.022.001.03, sese.020.001.05, sese.021.001.04, sese.022.001.04, sese.023.001.07, sese.024.001.08, sese.025.001.07, sese.027.001.05, sese.028.001.06, sese.029.001.04, sese.030.001.07, sese.032.001.07, sese.031.001.07

Some T2S messages<sup>1</sup> have not been migrated to avoid unnecessary work as the only changes would have been editorial changes in the datatype names. The datatype (pattern) itself would not have changed. With the next ISO maintenance release CR (R4.2 in November 2020) we will catch up the migration of these messages, too.

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#### High level description of Impact:

The T2S messages are impacted by the ISO Maintenance Releases 2013 - 2017. The relevant message updates will be reflected in the corresponding UDFS-version and in the respective deliveries for message specifications at MyStandards.

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#### Outcome/Decisions:

- \* CRG meeting on 24 May 2016: The CRG put the Change Request on hold for the T2S Release 2.0 potentially.
- \* CRG meeting on 07 June 2017: 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'.
- \* Operational Managers Group on 19 June 2017: During a written procedure from 9 to 19 June 2017, the Operations Managers Group did not identify any blocking operational impact of the Change Request.
- \* Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) on 19 June 2017: Following a written procedure from 09 to 19 June 2017, the AMI-SeCo was in favour of launching the detailed assessment on the Change Request.
- \* CSD Steering Group on 20 June 2017: Following a written procedure from 09 to 20 June 2016, the CSD Steering Group was in favour of launching the detailed assessment on the Change Request.
- \* RMSG meeting on 10 November 2017: The RMSG asked the 4CB to check the feasibility to deliver it as a standalone CR in the T2S Release 3.0.
- \* RMSG meeting on 14 December 2017: The RMSG proposed to the T2S Steering Level the Change Request as the first scoping element for the R3.0.
- \* CRG meeting on 15 December 2017: The CRG recommended the Steering Level the approval of the Change Request and its inclusion in the T2S Release 3.0
- \* Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) on 2 January 2018: Following a written procedure from 21 December 2017 to 2 January 2018, the AMI-SeCo was in favour of approving the Change Request and its inclusion in T2S Release 3.0.
- \* CSD Steering Group on 3 January 2018: Following a written procedure from 22 December 2017 to 3 January 2018, the CSG adopted the resolution to approve the Change Request and its inclusion in T2S Release 3.0.
- \* CRG on 4 September 2018: the CRG agreed to recommend to the T2S Steering Level the approval of minor updates to the CR and its annex
- \* AMI-SeCo on 8 October 2018: The AMI-SeCo has agreed to the recommendations of the CRG to confirm authorisation of this Change Request detailed assessed in R3.0.
- \* CSG meeting on 10 October 2018: The CSG took note that the CRG reviewed and agreed on the updated version of this Change Request included in the STP for R3.0
- \* NECSG on 26 October 2018: The NECSG adopted the resolution to authorise the updated version of CR-612 included in the STP for R3.0.
- \* MIB on 5 November 2018: The MIB authorised the updated version of CR-612 included in the STP for R3.0.

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<sup>1</sup> These messages are: camt.009; camt.018; reda.014; reda.015; reda.016; reda.018; reda.019; reda.020; reda.022; reda.023; reda.026; reda.028; reda.031; reda.032; reda.035; reda.036; reda.038; reda.039; reda.041; reda.042; reda.044; reda.049; reda.050; reda.051



## EUROSYSTEM ANALYSIS – GENERAL INFORMATION

<b>Impact On T2S</b>	<b>Static data management</b>		<b>Interface</b>	
	x	Party data management		Communication
	x	Securities data management	x	Outbound processing
	x	T2S Dedicated Cash account data management	x	Inbound processing
	x	Securities account data management		
	x	Rules and parameters data management		
	<b>Settlement</b>		<b>Liquidity management</b>	
	x	Standardisation and preparation to settlement		Outbound Information Management
		Night-time Settlement		NCB Business Procedures
		Daytime Recycling and optimisation		Liquidity Operations
		Daytime Validation, provisioning & booking	<b>LCMM</b>	
		Auto-collateralisation	x	Instructions validation
				Status management
	<b>Operational services</b>			Instruction matching
		Data Migration		Instructions maintenance
	x	Scheduling	<b>Statistics, queries reports and archive</b>	
		Billing		Report management
		Operational monitoring		Query management
			x	Statistical information
			x	Legal archiving
		All modules (Infrastructure request)		
		No modules (infrastructure request)		
		Business operational activities		
	Technical operational activities			

<b>Impact on major documentation</b>		
<b>Document</b>	<b>Chapter</b>	<b>Change</b>
Impacted GFS chapter		
Impacted UDFS chapter	Chapter 3 Chapter 4,2.2	Changes outlined in the tracking xls must be considered in the UDFS.
Additional deliveries for Message Specification	acmt.007.001.01 AccountOpeningRequest acmt.010.001.01 AccountRequestAcknowledgement acmt.011.001.01 AccountRequestRejection acmt.015.001.01 AccountExcludedMandateMaintenanceRequest acmt.019.001.01 AccountClosingRequest acmt.025.001.01 AccountQueryList acmt.026.001.01 AccountListReport camt.010.001.05 ReturnLimit camt.019.001.04 ReturnBusinessDayInformation reda.006.001.01 SecurityCreationRequest reda.007.001.01 SecurityMaintenanceRequest reda.008.001.01 SecurityCreationStatusAdvice reda.009.001.01 SecurityActivityAdvice reda.010.001.01 SecurityQuery reda.012.001.01 SecurityReport	Changes are outlined in tracking xls.

	<p>                     reda.013.001.01 SecurityDeletionRequest                      reda.017.001.01 PartyReport                      reda.021.001.01 SecuritiesAccountReport                      reda.024.001.01 CollateralValueCreationRequest                      reda.025.001.01 EligibleSecuritiesCreationRequest                      reda.027.001.01 CloseLinkCreationRequest                      reda.029.001.01 SecurityMaintenanceStatusAdvice                      reda.030.001.01 PartyDeletionRequest                      reda.033.001.01 SecuritiesAuditTrailQuery                      reda.034.001.01 SecuritiesAuditTrailReport                      reda.037.001.01 SecuritiesAccountAuditTrailReport                      reda.040.001.01 CashAccountAuditTrailReport                      reda.043.001.01 PartyAuditTrailReport                      reda.045.001.01 SecurityCSDLLinkCreationRequest                      reda.046.001.01 SecurityCSDLLinkMaintenanceRequest                      reda.047.001.01 SecurityCSDLLinkStatusAdvice                      camt.064                      camt.065                      camt.066                      camt.072                      camt.073                      camt.078                      camt.079                      camt.084                      camt.085                      semt.013                      semt.016                      semt.018                      semt.022                      semt.026                      semt.027                      semt.028                      semt.029                      semt.034                      sese.021                      sese.022                      sese.023                      sese.030                      sese.032                 </p> <p>                     Message documentation for all T2S messages on MyStandards including message examples                      camt.067, camt.068, camt.075, camt.080, camt.081, camt.082, camt.083, semt.002, semt.014, semt.015, semt.017, semt.019, semt.020, semt.025, semt.030, semt.031, semt.032, semt.033, semt.040, sese.020, sese.024, sese.025, sese.027, sese.028, sese.029, sese.031                 </p>	<p>                     Update of messages to SR 2017 (see annex)                      Delivery of new schemas containing changes applied by Maintenance Releases 2013 – 2017 described in the tracking table.                 </p>
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		Update all examples related to these messages to align them with the new version number and with the changes applied by MRs 2013 – 2017 described in the tracking table.		
UHB	NA			
Other documentations				
Links with other requests				
Links	Reference		Title	
<b>OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT</b>				
Summary of functional, development, infrastructure and migration impacts				
<p>Messages: Detailed schema/ MyStandard updates outlined in tracking table document. The message updates described in the annex have to be implemented along with the update of message examples.</p> <p>LCMM: The internal function in charge of adapting the inbound and outbound messages to internal T2S flows needs to be updated in order to identify changes in the schemas (e.g. new possible values, codes, changes in paths).The design of the GUI screens needs to be adapted to the latest ISO when applicable.</p> <p>Main cost drivers: - Due to the latest Standard Releases, 103 schemas have to be updated and hence need to be imported into the code and all changes described in the tracking table (i.e. change of paths, addition of new codes, etc.) for each message taken into account into the code. - Regression test of all updated messages need to be performed.</p> <p>INTF:</p> <p>Main cost drivers: - Updating the message schemas with the changes introduced by SR 2013-2017. - Listing the changes in detail in the tracking table attached to the CR and checking the impact on the UDFS. - Updating the message examples to be compliant with the SR 2017 version of the messages. - Testing the correct message handling and usages for more than 100 messages and checking the overall compliance with T2S functions. - Testing the overall inbound and outbound communication of A2A and U2A. - Updating the existing automated regression test sets as well as running regression tests campaigns.</p> <p>SETT : Main cost drivers - Updating the message schemas with the changes introduced by SR 2013-2017 within UDFS - Updating the message examples to be compliant with the SR 2017 version of the messages. - Testing the messages and checking the overall compliance with T2S functions. - Updating the existing automated regression test tool and matrices - Regression test campaign</p> <p>The 4CB has assessed two options for the implementation of CR-0612:</p> <ul style="list-style-type: none"> <li>• Option A: CR-0612 coupled with CR-0600, CR-0606, CR-0607 and CR-0609</li> <li>• Option B: Standalone implementation of CR-0612</li> </ul> <p><b><u>Impact of standalone implementation (Option B):</u></b> The decoupling of the CR-0612 from the CR-0600, CR-0606, CR-0607 and CR-0609 would lead mainly to increase in the testing effort resulting from the loss or planned synergies. Development effort will also increase. High number of test cases (also some regression) have to be readapted twice for the stand-alone delivery of CR-0612 and the other CRs.</p>				
Summary of project risk				
None.				
Security analysis				
No potentially adverse effect was identified during the security assessment.				





04 December 2017

**Cost assessment on Change Request  
Option A (CR-0612 coupled with CR-0600, CR-0606, CR-0607  
and CR-0609)**

T2S-612-SYS – Alignment of T2S Messages with ISO Maintenance Releases 2013 - 2017			
One-off	Assessment costs*		
	- Preliminary	2,000.00	Euro
	- Detailed	20,000.00	Euro
One-off	Development costs	1,019,711.08	Euro
Annual	Operational costs		
	- Maintenance costs	85,842.71	Euro
	- Running costs	0.00	Euro

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



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## Cost assessment on Change Request Option B (Standalone implementation of CR-0612)

<b>T2S-612-SYS – Alignment of T2S Messages with ISO Maintenance Releases 2013 - 2017</b>			
One-off	Assessment costs*		
	- Preliminary	2,000.00	Euro
	- Detailed	20,000.00	Euro
One-off	Development costs	1,057,551.43	Euro
Annual	Operational costs		
	- Maintenance costs	88,777.16	Euro
	- Running costs	0.00	Euro

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