

<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> 11/08/2012
<b>Request title:</b> Message-Issues detected during testing incl. ISO Date		<b>Request ref. no:</b> T2S 0401 SYS
<b>Request type:</b> Common		<b>Urgency:</b> Normal
<b>1. Legal/business importance parameter:</b> Medium	<b>2. Market implementation efforts parameter:</b> Low	
<b>3. Operational/Technical risk parameter:</b> Low	<b>4. Financial impact parameter:</b> No cost impact	
<b>Requestor Category:</b> 4CB	<b>Status:</b> Authorised at Steering Level	

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

During the recent tests and quality checks some issues were identified in the area of messages. In total 24 different issues were detected.

The most prominent issue (issue 10) is the following one and therefore pointed out in more detail:

The current design of T2S messages is fully compliant with the ISO 20022 standard and the data type "ISO date" is used within nearly all T2S message schemas. According to the ISO 20022 standard, the specification for the "ISO Date" allows a date format with more than four digits (4 is the minimum) to represent the year.

In line with the ISO 20022 standard, messages entering T2S using a year greater than 9999 (i.e. with more than four digits) are not rejected, as currently no validation is in place to limit the year to four digits as required in T2S. Therefore, incorrect data would be transmitted to the backend modules causing processing errors.

During testing it was observed that the transmission of year-dates with more than four digits could lead to a crash of the system. As the Interface modules can only route 10 chars for the date (YYYY-MM-DD), a "5 digit year" would lead to an incorrect transfer of the date, e.g. YYYYY-MM-D (the second char of the day is missing). In this case a correct further processing will be unfeasible for the back-end modules.

Currently, the tags within xml-files related to ISODate and ISODateTime are not checked according to the correct pattern usage. The dates with wrong pattern submitted within these fields were forwarded to the back-end. The back-end modules/domains allow usage of date format YYYY-MM-DD and Date Time format YYYY-MM-DDTHH:MM:SS.

Furthermore it was detected during testing, that in T2S-payload-messages only local time formats (e.g. 2012-01-29T10:56:00) can be processed, normalised time (e.g. 2012-01-29T10:56:00Z) or UTC-offset (e.g. 2012-01-29T10:56:00+01:00) leads to errors. The UDFS chapter 3.2.2.2 states that messages exchanged in T2S should always refer to CET/CEST, so normalised time is excluded. Whether the addition of UTC-offset is allowed or not is not mentioned.

In order to ensure a smooth user-testing it seems necessary to update the messages in line with the requested changes described below.

---

#### Description of Request:

The 24 different issues shall be described afterwards:

- Several schemas have been customized incorrectly and are missing the fixed values.  
Impacted messages: acmt.011, camt.085, semt.016, reda.019
- Change of used character set in four messages to allow transportation of DN.  
Impacted messages: admi.006, reda.014, reda.017, reda.022
- Update of four messages where Technical Address needs to be changed into DN.  
Impacted messages: admi.006, reda.014, reda.017, reda.022
- Missing restrictions to comply with coexistence mode in one message.  
Impacted message: camt.066

5. ActiveCurrencyAndAmount\_SimpleType is not ISO 20022 compliant in one message.  
Impacted message: camt.065
6. Customization of Exact4AlphaNumericText needs to be corrected in one message.  
Impacted message: reda.015
7. Multiplicity of Organisation component to be corrected in one message.  
Impacted message: acmt.015
8. One schema published with UDFS 1.2.1 does not contain any T2S specific restrictions.  
Impacted message: reda.049
9. In total six messages have not been aligned with Standards Release 2012.  
Impacted messages: camt.009, camt.010, camt.011, camt.012, camt.018, camt.019
10. Restriction of data types "ISO Date" and "ISO DateTime" to allow only dates using exact four digits to indicate the year.  
Pattern Check in schema files (for inbound & outbound messages) can be used to filter out invalid date formats as follows:  
Restriction of Datatype ISODate and ISO DateTime with the following pattern Regex:
  - ISODate [0-9]{4,4}\-[0-9]{2,2}\-[0-9]{2,2}
  - ISODateTime [0-9]{4,4}\-[0-9]{2,2}\-[0-9]{2,2}[T][0-9]{2,2}:[0-9]{2,2}:[0-9]{2,2}[\S]\*
  - Only for head.001/BAH which supports the "ISONormalisedDateandTime" here the following pattern Regex will be used:  
[0-9]{4,4}\-[0-9]{2,2}\-[0-9]{2,2}[T][0-9]{2,2}:[0-9]{2,2}:[0-9]{2,2}[Z]
11. The field length of "Internal System User Reference" has to be aligned with head.001.  
Impacted message: head.002
12. "Delivering Settlement Parties" and "Receiving Settlement Parties" have two different customisations of the same Message Component with different elements.  
Impacted message: semt.019
13. Whereas in the pdf the BIC for FinInstnID is mandatory, the same field is marked as optional within the schema. The definition has to be mandatory and therefore the schema has to be updated.  
Impacted message: acmt.026
14. An update of reda.017 regarding data type reduction for tag OrgnlBizQry is required.  
Impacted message: reda.017
15. A correction of semt.017 regarding the timestamp is required. It has to be defined as "datetime".  
Impacted message: semt.017
16. An update of reda.006 tag "SchemeName" (mandatory and fixed value "RT") is required.  
Impacted message: reda.006
17. The camt.073 and camt.081 need to be corrected regarding several elements.  
Impacted messages: camt.073, camt.081
18. Correction of acmt.007 and acmt.015 regarding one element.  
Impacted messages: acmt.007, acmt.015
19. Correction of semt.031 & semt.033 regarding FaceAmount.  
Impacted messages: semt.031, semt.033
20. Correction of camt.019 regarding code list.  
Impacted message: camt.019
21. Correction of colr.002 regarding two elements.  
Impacted message: colr.002
22. Correction of semt.018 regarding the mapping within the pdf- & html-documentation.  
Impacted message: semt.018
23. Correction of reda.007 regarding the supplementary data inclusion component and parameters.  
Impacted message: reda.007
24. There is a need of correction of semt.017 regarding the mapping and the "Use in T2S" within the pdf- & html-documentation.  
Impacted message: semt.017

**Submitted annexes / related documents:**

The updated schemas of the impacted messages will be available after the approval under the following link:

<http://www.bundesbank.de/Redaktion/EN/Documentation/4zb/HtmlDoc/v1.2.1/CR/CR-Overview.pdf>

The below document with the detailed information about the changes to be performed within the messages will be available in the Document Change Notice of September 2013 (to be confirmed):

T2S\_0401\_SYS\_Message-Issues detected during testing incl. ISODate\_TrackingTable.xls

---

**Proposed wording for the SYS Change request:**

To solve the detected issues the following modifications are necessary;

1. In several messages the use of fixed values is not displayed correctly or missing in the UDFS. The impacted data-types are the following:
  - MessageId/CreationDateTime (Chapter 3.3.1.3 acmt.011)
  - GenericIdentification20\_T2S\_01 (Chapter 3.3.3.39 camt.085)
  - GenericIdentification25\_T2S\_01 (Chapter 3.3.7.5 semt.016)
  - GenericIdentification1 (Chapter 3.3.6.13 reda.019)

I.e. that the html-documentation for camt.085 for example does provide a fixed value, which is not present in the schema and must be added.

2. The currently used "Character X Set" does not support the "=" which is part of the DN. Therefore a new Character Set supporting the use of the DN has to be defined.
  - impacted UDFS-Chapter:
    - Chapter 3.3.2.2 admi.006
    - Chapter 3.3.6.8 reda.014
    - Chapter 3.3.6.11 reda.017
    - Chapter 3.3.6.16 reda.022

3. The four mentioned messages need to be amended in order to allow only the DN (e.g. within reda.014 the element PtyCreReq\Pty\TechAdr will be adjusted. Currently reda.014, reda.017 and reda.022 allow BIC in the technical address component. These branches must be pruned as only DNs can be used.  
For admi.006 additionally a new field has to be introduced to support the full length of DN 256MaxText (Party Technical Address): RsndReq/RsndSchCrit/Rcpt/NmAndAdr/Nm.

- impacted UDFS-Chapter:
  - Chapter 3.3.2.2 admi.006
  - Chapter 3.3.6.8 reda.014
  - Chapter 3.3.6.11 reda.017
  - Chapter 3.3.6.16 reda.022

For admi.006 the below mentioned elements (currently allowing 35 characters only) will be replaced by the field RsndReq/RsndSchCrit/Rcpt/NmAndAdr/Nm (to support the full length of DN 256MaxText):

- RsndReq/RsndSchCrit/Rcpt/PtryId/Id
- RsndReq/RsndSchCrit/Rcpt/PtryId/Issr

4. It is necessary to modify the published camt.066 since this version does not contain any coexistence restrictions. These are necessary to comply with the coexistence mode in T2S.

- impacted UDFS-Chapter:
  - Chapter 3.3.3.20 camt.066

Coexistence restricted types must be applied to the following fields:

/IntraBalMvmntInstr/CorpActnEvtId/Id (here restrict Max35Text to allow 16 characters only)  
 /IntraBalMvmntInstr/IntraBal/BalFr/QtyBrkdown/LotNb/Issr  
 /IntraBalMvmntInstr/IntraBal/BalFr/QtyBrkdown/CshSubBalTp/Issr  
 /IntraBalMvmntInstr/IntraBal/BalFr/QtyBrkdown/CshSubBalTp/SchmeNm.

5. ActiveCurrencyAndAmount\_SimpleType used for the attribute extension definition has been renamed in camt.065. This renaming is not ISO 20022 compliant because both elements must have the same name with the extension suffixed with "\_SimpleType".

- impacted UDFS-Chapter:

Chapter 3.3.3.19 camt.065

Elements to be removed are:

- ActiveCurrencyAndAmount
- ActiveCurrencyAndAmount\_SimpleType

The element to be renamed is RestrictedFINActiveCurrencyAndAmount\_SimpleType\_T2S\_1 (new: RestrictedFINActiveCurrencyAndAmount\_SimpleType )

The fields which are impacted are the following:

- /LmtUtltsnJrnlRpt/RptOrErr/BizRpt/LmtRpt/LmtJrnl/JrnlNtry/Amt/AltWthCcy
- /LmtUtltsnJrnlRpt/RptOrErr/BizRpt/LmtRpt/LmtJrnl/Lmt/Amt/Amt/AltWthCcy
- /LmtUtltsnJrnlRpt/RptOrErr/BizRpt/LmtRpt/LmtJrnl/Lmt/AvlblAmt/Amt/AltWthCcy
- /LmtUtltsnJrnlRpt/RptOrErr/BizRpt/LmtRpt/LmtJrnl/Lmt/UtltsnAmt/Amt/AltWthCcy

6. The customization of Exact4AlphaNumericText has been customized in the same way within one message (and currently there are two different kind of customization required within this message).

- impacted UDFS-Chapter:

Chapter 3.3.6.9 reda.015

While the MessageIdentification (PtyQry\MsgId\ReqTp\Prtry\ld) requires the following three codes

- PYLI Party List Query
- PYRD Party Reference Data Query
- PYRS Restricted Party Query

they are incorrect within the RestrictionIdentification (PtyQry\SchCrit\RstrctnId). The code list will be dropped from RestrictionIdentification.

7. The multiplicity of the Organisation component has to be amended to as it is currently incorrect in the schema and inconsistent within the UDFS documentation.

- impacted UDFS-Chapter:

Chapter 3.3.1.4 acmt.015

Within the UDFS page 885 the element is stated to be mandatory while the schema presents it as optional. The schema needs to be aligned.

8. The published schema of reda.049 does not contain any T2S specific restrictions. This has to be aligned to show the specific T2S-requirements and allow for correct schema validation.

- impacted UDFS-Chapter:

Chapter 3.3.6.42 reda.049

For example the CashAccount component requires the dropping of IBAN choice element as in other messages (AcctLkCreReq\AcctLk\CshAcct), and the following three elements need to be removed as they are not used by T2S:

- AcctLkCreReq\MsgOrgtr
- AcctLkCreReq\MsgRcpt
- AcctLkCreReq\SplmtryData

9. Six messages have not been aligned with the Standards Release 2012. In order to be in line with the specifications of T2S the messages have to be updated with the latest version of SR 2012.

- impacted UDFS-Chapter:

Chapter 3.3.3.5 camt.009

Chapter 3.3.3.6 camt.010

Chapter 3.3.3.7 camt.011

Chapter 3.3.3.8 camt.012

Chapter 3.3.3.9 camt.018

Chapter 3.3.3.10 camt.019

Furthermore Appendix 4.1 might be impacted due to Business Rule updates (e.g. where elements are removed the applied business rules need to be removed as well. In places where new elements appear new or existing Business Rules may need to be applied to ensure business validation).

10. Restriction of Data types to allow only four digits for year-indication:
  - impacted UDFS-Chapter:
    - Chapter 3.2.2. Time zones
      - All** 130 message chapters are impacted

Addition of patterns within ISODate and ISODateTime restricting the usage of the datatypes to prevent the use of invalid date formats.

Formats should be as follows:

  - ISODate format is YYYY-MM-DD
  - ISODateTime format is YYYY-MM-DDTHH:MM:SS.
  - 3.2.2. Time zones
11. The field length of "Internal System User Reference" (\Xchg\PyldDesc\AppISpfcInf\SysUsr) has to be restricted from 140 characters to 35 Characters:
  - Impacted chapter: 3.3.5.2 BusinessFileHeaderV01 (head.002.001.01)
12. The message components "Delivering Settlement Parties" and "Receiving Settlement Parties" have two different customisations of the same Message Component (PartyIdentification52) showing different elements. The message component within SctiesStlmTxAllgmtRpt\AllgmtDtIs\RcvgStlmPties needs to be aligned to be the same as in SctiesStlmTxAllgmtRpt\AllgmtDtIs\DlvrgStlmPties.
  - Impacted chapter: 3.3.7.8 SecuritiesSettlementTransactionAllegementReportV03 (semt.019.001.03)
13. The schema has to be updated to set the FinInstnID as mandatory.
  - Impacted chapter: 3.3.1.7 AccountListReportV01 (acmt.026.001.01)

Within the PDF documentation of the message the element is stated to be mandatory while the schema presents it as optional. The schemas need to be aligned.
14. The format for OrgnlBizQry (Max35Text) has to be adjusted to ResrestrictedFINXMax16Text.
  - Impacted chapter: 3.3.6.11 PartyReportV01 (reda.017.001.01)
15. Instead of "date" the "datetime" should be used for the EffectiveSettlementDate (SctiesTxPstngRpt\FinInstrmDtIs\Tx\TxDtIs\FctvStlmDt\Dt).
  - Impacted chapter: 3.3.7.6 SecuritiesTransactionPostingReportV03 (semt.017.001.03)
16. The "SchemeName" has to be set as mandatory. Furthermore, the field must be populated with a fixed value "RT".
  - Impacted chapter: 3.3.6.1 SecurityCreationRequestV01 (reda.006.001.01)

The field "SchemeName" related to the "RestrictionType" should be mandatory in both messages reda.006 and reda.007. The reda.006 message (SctyCreReq\Scty\FinInstrmAttrbts\Rstrctn\RstrctnTp\PrtryRstrctn\SchmeNm) needs to be aligned.
17. For camt.073 and camt.081 one priority (0002) has to be added as possible value for the original IntraBalance within the element "UndrlygIntraBal" (IntraBalMvmntModReqStsAdvC/UndrlygIntraBal/Prty/Nmrc in camt.073) and (IntraBalMvmntModRpt/RptOrErr/Mods/Mod/UndrlygIntraBal/Prty/Nmrc in camt.081).
  - Impacted chapter: 3.3.3.27 IntraBalanceMovementModificationRequestStatusAdviceV01 (camt.073.001.01)
  - 3.3.3.35 IntraBalanceMovementModificationReportV01 (camt.081.001.01)
18. The cardinality for the "Org" component has to be set to 1...1 (mandatory).
  - Impacted chapter: 3.3.1.1 AccountOpeningRequestV01 (acmt.007.001.01)
  - 3.3.1.4 AccountExcludedMandateMaintenanceRequestV01 (acmt.015.001.01)

Within the UDFS section the element is stated to be mandatory while the schema presents it as optional. The schemas need to be aligned.
19. The "FaceAmount" has to be corrected within component "FinancialInstrumentQuantity1Choice".
  - Impacted chapter: 3.3.7.17 SecuritiesSettlementConditionsModificationRequestReportV01

(semt.031.001.01)

3.3.7.19 SecuritiesTransactionCancellationRequestReportV01 (semt.033.001.01)

Within the HTML-documentation the element is RestrictedFINImpliedCurrencyAndAmount while in the schema it is RestrictedFINDecimalNumber. The schemas need to be aligned.

20. The code "RTMP" has to be removed from status code list within the schema (RtrBizDayInf\RptOrErr\BizRpt\BizDayOrErr\BizDayInf\SysSts\Sts\Prtry\ld) as it is not used by T2S. RTMP will be replaced by RTMS.

Impacted chapter: 3.3.3.10 ReturnBusinessDayInformationV04 (camt.019.001.04) incl. example

4.2.2 T2S proprietary codes

The definition column of code list of Exact4AlphaNumericText\_STAT\_T2S in chapter 4.2.2 shall also reflect name of the code.

21. The datatype SecuritiesPosition1Type\_T2S\_1 needs to be amended (deletion of codes BLCK, DELI and RSRV) as well as the datatype FinancialInstrumentQuantity1Choice (pruning of <FaceAmount>) as they are not used in T2S.

Impacted chapter: 3.3.4.2 CollateralValueReportV01 (colr.002.001.01)

4.2.2 T2S proprietary codes

22. The "T2S-Mapping" within the pdf-& html-documentation of semt.018 needs to be corrected as currently it contains some inconsistencies. The impacted chapter must be modified to rectify the inclusion of incorrect DM attributes:

- Removal of DM class Settlement Restriction from several message elements
- Correction of DM attribute used for several message elements

Impacted chapter: 3.3.7.7 SecuritiesTransactionPendingReportV03 (semt.018.001.03)

T2S-Mapping to be corrected removing the class 'Settlement Restriction' from the following elements:

- /SctiesTxPdgRpt/Txs/AcctOwnrTxld
- /SctiesTxPdgRpt/Txs/AcctSvcrTxld
- /SctiesTxPdgRpt/Txs/MktInfrstrctrTxld
- /SctiesTxPdgRpt/Txs/PrcrTxld
- /SctiesTxPdgRpt/Txs/CorpActnEvtld

T2S-Mapping to be corrected to read 'Original Settlement Quantity/Amount minus Settled Settlement Quantity/Amount':

- /SctiesTxPdgRpt/Txs/TxDtls/PstngQty/Qty
- /SctiesTxPdgRpt/Txs/TxDtls/PstngAmt/Amt

23. The three SupplementaryData components must be corrected. For all of them, the PlaceAndName xpath are wrong. Supplementary Data are used to manage Market Specific Attributes for Securities by including different schemas, that is different components, depending on the kind of operation to be performed. For the "update" branch of the messages, the current component used will result in using a wrong Market Specific Attribute schema.

The correction would be:

- Correct the fixed values for the PlaceAndName elements
- Change the data type for element Envelope into the right one

The current design does not allow the update/modification of Market Specific Attributes for securities via A2A.

- impacted UDFS-Chapter:

Chapter 3.3.6.2 reda.007

24. The "T2S-Mapping" and "Use in T2S" within the pdf-& html-documentation of semt.017 needs to be corrected as currently it contains some inconsistencies. The impacted chapter must be modified to rectify the inclusion of incorrect DM attributes:

- Correction of DM attribute used for the "PostingQuantity" and "PostingAmount" elements

Impacted chapter: 3.3.7.6 SecuritiesTransactionPostingReportV03 (semt.017.001.03)

UDFS 1.6.4.2 Report Generation

Within the building block PostingQuantity/Quantity/Unit, it is described that if the Settlement Instruction was partially settled, it contains the unsettled quantity, that is, the difference between 'Original

Statement of Transactions

This report is available in both versions – complete and delta versions. The complete version informs the T2S Actor about those Settlement Instructions that reached "settled" status or "partially settled" status (that means the **quantity and amount that settled (so far)** ~~(still to be) settled quantity and (still to be) settled amount~~ are returned) since the SoD of the current settlement day. It provides information on their latest status and current attribute values at the time of the report generation.

Settlement Quantity' and 'Settled Settlement Quantity' while the right quantity to be posted, in this scenario, should be the 'Settled Settlement Quantity'.

---

**Outcome/Decisions:**

- \* CRG meeting of 15 May 2013: The CRG members suggested some changes to the CR text for clarification purposes. The CRG postponed a decision on the Change Request. The CRG could send comments in a written procedure until 24 May 2013.
- \* CRG Telco of 29 May 2013: The CRG agreed to make some changes to the CR text for clarification purposes and recommended the approval of the Change Request.
- \* Advisory Group's advice on 10 June 2013: Following a written procedure, the AG was in favour of the Change Request.
- \* CSG resolution on 10 June 2013: Following a written procedure, the CSG adopted the resolution to approve the Change Request.