



EUROPEAN CENTRAL BANK

EUROSYSTEM

Frequently Asked Questions

T2-T2S Consolidation



Table of Contents

2	Table of Contents
3	Introduction
4-8	Multi-addressee payments and RTGS directory
9-12	BAH
13	Determination of payment instructions channel
14-15	Message compression
16-17	Interbank Settlement date field camt.005-006
18	Can pacs.008 STP be sent via T2 RTGS?
19-24	Camt.053, camt.054
25	Structured address for debtor and creditor
26	Message routing in CRDM: case of camt.004
27-30	Camt.077 in BILL
31	User - Certificate DN links
32-33	Liquidity transfers

Introduction

- Starting from the 15th TARGET Consolidation Contact Group (TCCG) meeting, a recurrent agenda item containing a selection of questions and answers on T2-T2S Consolidation project's functional aspects was presented.
- The following slides contain the questions and answers shared with market participants between 15th and 27th TCCG meetings.
- TARGET Consolidation Contact Group meeting documents are published on the [ECB website](#).

Questions and Answers

Question: Multi-addressee payments

Is it possible in T2 RTGS to prevent one Multi-addressee to send a payment as another Multi-addressee of the same direct participant?

Example:

- MAA1 & MAA2 are two multi-addressees allowed to settle payments that will debit the RTGS DCA of DPA1 (direct participant and DCA holder).
- The DN of MAA1 & MAA2 will both be authorised as PTAs of DPA1 and linked to an A2A user of DPA1 with the proper roles attached; but without inbound DN/BIC routing

What can prevent MAA1 to send payments as MAA2?

Questions and Answers

Answer:

Recap of the scenario

- MAA1 - multi-addressee participant of DPA1 uses the following data:
 - Technical Sender DN = PTA of MAA1 linked to DPA1
 - Signature DN = Certificate DN of MAA1 user
 - In the BAH MAA1 uses the BIC of MAA2, i.e. BAH FROM = MAA2
 - The Business Sending User in the BAH is authorised for DPA1 and the signature DN is linked to the business sending user.
- As outlined in VR00100, an addressee BIC of the account given in the payload of the payment order (Instructing Agent) is to be used.
- Given that the BIC of MAA1 as well as the BIC of MAA2 are valid addressee BICs of the relevant account the payment order will be processed.

Conclusion:

In the above scenario, MAA1 with its authorized PTA as technical sender could indicate also MAA2 instead of MAA1 as FROM BIC in the BAH.

Questions and Answers

Question: Multi addressee - Is the use of the RTGS directory mandatory?

Shall every RTGS account holder be obliged to check the RTGS directory in order to verify if the BAH Addressee BIC is the actual direct account holder and in case of need retrieve the direct account holder from the RTGS directory?

In correspondent banking it is usual to inform the respective correspondent to be used (e.g. based on standing settlement instructions). In case the correspondent is a multi-addressee in RTGS, is there the need to also know the direct account holder in order to make a valid payment in RTGS?

Example: bank A sends an instruction to bank B to credit bank C. (C = multi addressee)

- Bank A could be in Japan and bank B is a T2/RTGS participant.
- Bank A will instruct bank B to credit bank C.
- Bank B will use bank C in the BAH

=> Is there the need to mention also the direct account holder as instructed agent?

Questions and Answers

Answer:

RTGS is not looking up the account BIC for a multi-addressee internally, the BIC of the DCA Account Owner must be used in the payload.

Example:

BAH

- **BAH FROM:** BIC Bank B
- **BAH TO:** BIC Bank C (multi-addressee)

Payload

- **Previous Instructing Agent 1:** BIC Bank A
- **Instructing Agent:** BIC Bank B
- **Instructed Agent:** Account BIC of the relevant RTGS DCA for multi-addressee C, looked up from RTGS directory

Questions and Answers

Question: Request Type

Could you please confirm which request type will be available for the RTGS Directory in push mode?

Answer:

- Request type is the message name for ISO messages, regardless of the usage guideline.
- For A2A DWH reports, Request type is “DWH-Report”
- For RTGS Directory, Request type is reda.xxx.rtgs.dirfull or reda.xxx.rtgs.dirupdate
- For CLM Repository, Request type is reda.xxx.clm.dirfull or reda.xxx.clm.dirupdate

Questions and Answers

Question: Sending of messages to common components

What should be the BAH TO BIC in case a message is to be sent a common component e.g. camt.076 to BILL?

Answer

- Common Components are not relying on the content of the BAH <TO> addressing fields for processing the messages.
- Therefore, users are recommended to put the system BIC in this field but there is no validation performed.

	Inbound message to CRDM, BDM, BILL	Outbound message from CRDM, BDM, BILL
BAH FROM	Sending party BIC	TRGTXE2SXXX
BAH TO	TRGTXE2SXXX*	Receiving party BIC

*Recommended value, but not checked by CRDM/BDM/BILL. Any valid BIC will actually work

Questions and Answers

Question: XML structure of BAH+payload

Will there be any XML schema that joins the head.001 + message (for example pacs.009)? At MyStandards we only have separate XML schema

Answer:

- For T2 and other TARGET services making use of DEP and BAH, BAH and payload shall be included into the DEP envelope following the indications provided by each NSP

Questions and Answers

Question: During the first few years of the operational phase of T2, can an institution willing to recall a MT payment (i.e. that was settled in TARGET2) use in the pacs.004 in the field “Original Message Identification”, the instruction identification of the original MT payment?

Context: In MyStandard, in the pacs.004 message the field “Original Message Identification” should be filled with the BizMsgIdr used in the BAH of the original payment. However, this reference does not exist for these types of MT payments.

Answer: The answer is YES. The instruction identification of the original MT payment can be used in the pacs.004 in the field “Original Message Identification” instead of BizMsgIdr from the BAH of the original payment.

The reasoning is that even though the field “Original Message Identification” is mandatory in RTGS, but the system will not verify the validity of the value populated on this field.

Questions and Answers

Question: Is it correct that the only Certification Authorities (CA) from which T2 will accept the signature on BAH will be those of the NSPs? Would that be possible to envisage a specific signature solution independent from its NSP?

Answer: Correct. The only Certification Authorities (CA) from which T2 will accept the signature on BAH will be the CA of the NSP(s) selected by NCBs/participants
It will not be possible for NCBs/participants to envisage a specific solution (that is independent from their NSPs) to sign their messages.
They have to use the certificates issued by the NSP that they chose/will choose among the two awarded out of the Concession Contract. This is a provision of the Concession Contract, which is publicly available.

Questions and Answers

Question: Determination of outbound communication channel for payment instructions/files

If Bank A sends a payment order (smaller than 32 KB) via store-n-forward file-based to ESMIG/T2, how is the communication channel for the outgoing payment (payment message to Bank B) determined by ESMIG/T2?

- Will ESMIG/T2 derive it solely based on the size of the message (similar as for query responses; ESMIG UDFS 1.4.3)? [i.e. in the example above store-n-forward message-based would apply outbound]
- Or will the outbound channel by default follow the inbound channel and only in case of oversize deviate from the inbound channel? [i.e. in the example store-n-forward file-based would apply]

Answer:

Inbound and outbound channel communication are independent from one another in RTGS.

When RTGS is ready to forward the message to the Addressee, it first checks the routing information provided in the addressee PTA.

If the forwarded message is bigger than 32KB, it will automatically be flagged as a 'File' when routed to ESMIG and ESMIG will use the SnF File channel to send the message.

Questions and Answers

Question: Compression

Which messages will T2 compress before sending?

Answer:

RTGS, CLM, CRDM, BDM, BILL will not compress messages.

DWH will compress all messages.

Questions and Answers

Question: What is the maximum length of pacs messages?

Answer

The physical size limitations of the message and the file communication channel is given in chapter 1.4.4 of the ESMIG UDFS, i.e. maximum length of 32 KB for message channel and 32 MB for file channel

The size of pacs messages in T2 RTGS is not restricted compared to other messages used by T2 RTGS as:

- 1) this would undermine the benefit of ISO 20022 and;
- 2) if any limitation is introduced with T2 RTGS go live, it would be difficult to be removed afterwards.

Questions and Answers

Question: Interbank Settlement date field in camt.005-006

Could you please confirm the understanding below?

- If in order to search for transactions that will be settled from D+1 onwards, the field **Requested execution date / from date** needs to be used in the camt.005. XML path:
/Document/GetTx/TxQryDef/TxCrit/NewCrit/SchCrit/PmtSch/ReqdExctnDt/DtSch/FrDt
- If in the Return message (camt.006), **the field Interbank settlement** is used to indicate the intended settlement date and which one of the following two paths will be used :
/Document/RtrTx/RptOrErr/BizRpt/TxRpt/PmtId/LngBizId/IntrBkSttlmDt or
/Document/RtrTx/RptOrErr/BizRpt/TxRpt/TxOrErr/Tx/Pmt/IntrBkSttlmDt).

Questions and Answers

Answer:

To query Warehoused Payments, the **Requested execution date / from date**, the xpath `GetTx/TxQryDef/TxCrit/NewCrit/SchCrit/PmtSch/ReqdExctnDt/DtSch/FrDt` can be used.

The related response will be provided in **Requested execution date / date**: xpath `RtrTx/RptOrErr/BizRpt/TxRpt/TxOrErr/Tx/Pmt/ReqdExctnDt/Dt`.

The Interbank Settlement date xpath `RtrTx/RptOrErr/BizRpt/TxRpt/TxOrErr/Tx/Pmt/IntrBkSttlmDt` is provided, if settlement took already place.

The Inter Bank Settlement date xpath `RtrTx/RptOrErr/BizRpt/TxRpt/PmtId/LngBizId/IntrBkSttlmDt` was removed with CR 63 that introduced changes in camt.005 and 006.

Questions and Answers

Question: Can pacs.008 STP be sent via T2 RTGS?

Background: The bank originator of the question uses today a MT103 STP with this specific mention in the field 119 and is wondering whether a similar functionality exists for pacs.008

They could not identify any STP reference in the T2 RTGS message usage guideline for pacs.008. They consider that no pacs.008 STP can be sent to T2 RTGS. However, they have seen that CBPR+ has specific message usage guidelines for pacs.008 STP.

Answer:

- Yes, pacs.008 STP can be sent to T2 RTGS, as the CBPR+ STP usage guideline (UG) is compatible with T2 RTGS UG.
- However, it cannot be flagged as STP using the business service element in the BAH, which is how CBPR+ foresees it.
- Based on discussions with the market, we understand that the pacs.008 STP payment would not need to be explicitly flagged as such in the future, if they are sent via a market infrastructure.
- The market participants will be able to identify if pacs.008 messages are compliant to the CBPR+ STP usage guideline without such explicit flags.

Questions and Answers

Question: What happens if a camt.053 statement exceeds 32 MB?

Answer

- If the size of a camt.053 bank to customer statement exceeds 32 MB, it will be paginated. It will always be sent by T2 RTGS as multiple messages (pages) with business application header, *not* grouped in a file with business file header.
- A business file header is only relevant for inbound communication to T2 RTGS, not outbound communication from T2 RTGS.
- Regarding the technical communication channel, if the individual camt.053 messages (pages) are greater than 32 KB, the communication will switch from the “message-based” communication channel to the “file-based” communication channel.

Questions and Answers

Question: EndToEnd id of Central Bank Operations

Could you please confirm that

- The "EndToEndId" in camt.054 sent by CLM to the NCB after reimbursement of overnight deposits will map the EndToEnd Id of the original camt.050 sent by the participant to instruct the overnight deposit?
- The same EndToEndId will be also contained in camt.054 sent by CLM to the NCB after settlement of interest?

Answer

- The set up(s), reimbursement and interest payments of Overnight Deposit will each carry different EndToEnd Ids.
- Each camt.054 will carry the EndToEnd Id of the underlying cash transfer
- The same answer is also valid in case of set up(s) and reimbursement of Marginal Lending.
- The system generated EndToEnd Id will not follow any pattern which can be used

Questions and Answers

Question: EndToEnd id of Billing Invoice

Could you please confirm what will be the pattern of billing invoice number that will appear in the EndtoEnd field of the camt.054 message?

Answer:

- The pattern of the billing invoice will be the following:
 - First 3 digits: ISO country code (**ISO 3166-1:2020 numeric** – three-digit country codes)
 - Digits 4 and 5: service code : 01 TIPS, 02 T2S, 03 T2, 04 ECMS
 - Remaining digits: sequential number starting from 1
- The invoice number will be contained in the EndToEndID of the pacs.010 direct debit and the related (optional) camt.054.

Questions and Answers

Question: setup of two or more statement of account camt.053 messages for the same cash account

Is it possible to setup two or more statement of account camt.053 messages for the same cash account?

Answer:

It is possible for a co-managed MCA: both the MCA owner and its co-manager can receive the camt.053 account statement (both the account owner and co-manager can be defined as recipients within the report configuration of the camt.053).

Questions and Answers

Question: Availability of sub-account number in camt.054 and camt.053

Question relates to an AS using procedure C: having the possibility to instruct the transfer of liquidity from the RTGS DCA to the sub-account via pain.998. Can you please confirm if:

- The camt.054 that may be sent to the account holder of the RTGS DCA, will not include the number of the sub-account credited?
- The camt.053 of the RTGS DCA at the EoD will provide the number of the sub-account credited (if yes, where will it be provided)?

Answer: In both cases (camt.053/camt.054), the credited sub-account number will be included:

- In camt.054 in: /Document/BkToCstmrDbtCdtNtfctn/Ntfctn/Ntry/NtryDtls/TxDtls/RltdPties/CdtrAcct
- In camt.053 in: /Document/BkToCstmrStmnt/Stmnt/Ntry/NtryDtls/TxDtls/RltdPties/CdtrAcct

Questions and Answers

Question: Will it be also possible for the co-manager, in case of subscription, to receive a camt.054 when performing a liquidity transfer (camt.050), for instance debiting the co-managed accounts ? Or the co-manager will only receive camt.054 messages related to debits/credits that are not initiated by the co-manager?

Context: When a co-manager instructs in CLM a liquidity transfer (camt.050), intra or inter service, for instance debiting the account holder, the co-manager will receive as an answer a camt.025.

Answer: The co-manager will not receive a camt.054 debit notification when:

- it sends a camt.050 in A2A debiting the co-managed account
- the co-managee sends a camt.050 in A2A debiting the co-managed account

The co-manager will receive a camt.054 debit notification if :

- It instructs a LT in U2A debiting the co-managed account
- the co-managee instructs a LT in U2A debiting the co-managed account (provided the co-managee is not set up as a U2A party, in which case no camt.054 would be generated)

Questions and Answers

Question: When to use structured address for debtor and creditor?

Answer:

The introduction of structured address information for debtor and creditor in payment messages is a key business benefit of the migration to ISO 20022 and follows a staggered approach due to the need of interoperability during the co-existence phase of ISO 20022 MX and FIN MT messages between November 2022 and November 2025:

- In general, if address must be used, it is recommended to use structured address only
- As of November 2022: Effective with the start of the MX-MT co-existence phase it is expected to use a structured address of the debtor and creditor, if a payment is initiated by the debtor's agent in ISO 20022 which will be the case for T2 participants
- As of November 2023: Also, for payments initiated on FIN or by a market infrastructure not on ISO 20022 yet, the same strong recommendation to use a structured address of the debtor and creditor applies
- As of November 2025: The unstructured "address line" element will be removed in payment messages

Questions and Answers

Question: Message routing in CRDM: case of camt.004

Would that be possible to route various camt.004 messages internally to different applications? For example, the camt.004 sent due to a floor/ceiling breach would have to be sent to a different DN than the camt.004 sent as a response to a camt.003.

Answer:

- A camt.004 notification of floor/ceiling breach will be sent according to the default routing for the party (which defines a default technical address for the party)
- A camt.004 sent as an answer to a camt.003 will be sent to the technical address which sent the camt.003 in the first place.

Questions and Answers

Question: Example for camt.077 as an invoice

Is it possible to have an example of the camt.077 message when it is sent as an invoice by BILL to a participant?

More generally, the question is to know where Common Components message examples can be found.

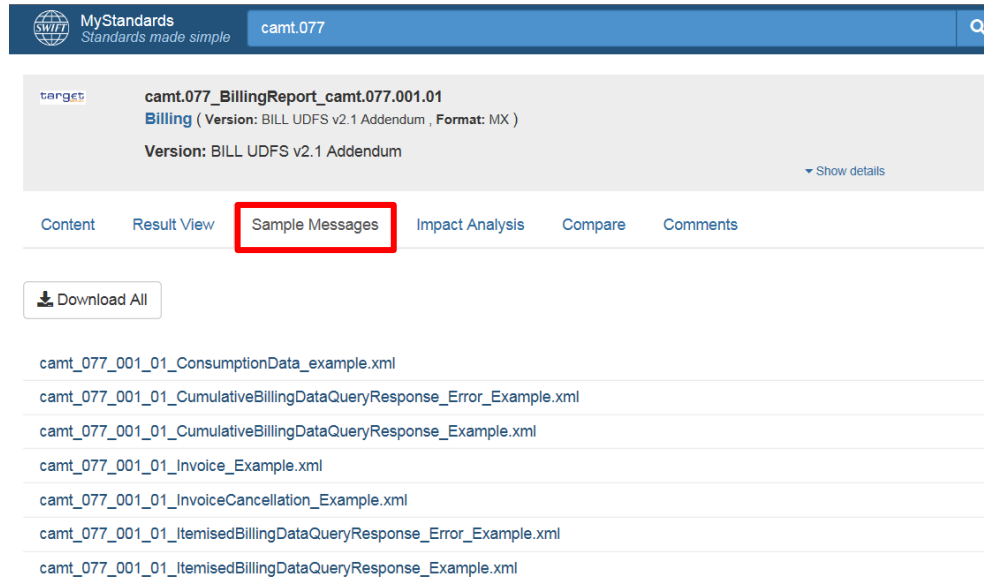
Answer:

- An example of camt.077 as an invoice is available in MyStandards
- All message examples for Common Components or RTGS/CLM are now under "Sample Messages" tab (see next slide)

Questions and Answers

Answer:

Common Component examples are under the “Sample Messages” tab.



The screenshot shows the MyStandards website interface. At the top, there is a search bar with the text 'camt.077' and a search icon. Below the search bar, the main content area displays the following information:

- target:** camt.077_BillingReport_camt.077.001.01
- Billing** (Version: BILL UDFS v2.1 Addendum , Format: MX)
- Version:** BILL UDFS v2.1 Addendum
- [Show details](#)

Below this information, there is a navigation menu with the following tabs: Content, Result View, **Sample Messages** (highlighted with a red box), Impact Analysis, Compare, and Comments.

Under the 'Sample Messages' tab, there is a 'Download All' button and a list of sample message files:

- camt_077_001_01_ConsumptionData_example.xml
- camt_077_001_01_CumulativeBillingDataQueryResponse_Error_Example.xml
- camt_077_001_01_CumulativeBillingDataQueryResponse_Example.xml
- camt_077_001_01_Invoice_Example.xml
- camt_077_001_01_InvoiceCancellation_Example.xml
- camt_077_001_01_ItemisedBillingDataQueryResponse_Error_Example.xml
- camt_077_001_01_ItemisedBillingDataQueryResponse_Example.xml

Questions and Answers

Answer:

RTGS and CLM examples are under the “attachment” tab. In the future, they will be moved under the “Sample Messages” tab to ensure they are schema validated and to prevent issues with the examples.

The screenshot shows the MyStandards website interface. The search bar contains 'pacs.009'. The search results are displayed under the 'Attachment' tab, which is highlighted with a red box. The results include:

- target:** pacs.009_FIToFIFinancialInstitutionCreditTransfer_pacs.009.001.08
- RTGS_pacs_guidelines** (Version: UDFS v2.1 Addendum April , Format: MX , Status: Final)
- Version: UDFS v2.1 Addendum April Status: Final
- Inbound_pacs.009_AS-D_FICreditTransferOrder_...
- Inbound_pacs.009_RTGS_FICreditTransferOrder_...
- Inbound_pacs.009_RTGS_FICreditTransferOrder_...
- Inbound_pacs.009_RTGS_FICreditTransferOrder_...
- Outbound_pacs.009_RTGS_FICreditTransfer_CO...
- Outbound_pacs.009_RTGS_FICreditTransfer_bs0...

Below the search results, there are tabs for 'Content', 'Result View', 'Sample Messages', 'Impact Analysis', 'Compare', and 'Comments'. A 'Download All' button is visible. At the bottom, a message states: 'There are no samples added for this usage guideline.'

Questions and Answers

Question: Camt.077 itemised billing data and representation of fee bands

Question relates to the specification of the camt.077 in MyStandards according to which, the Unit Price of any Service Item can only be within [0,1].

How is it planned to display the different prices applied for Service Items that are based on fee bands, i.e. one Service Item having different prices for different "sub"-quantities?

Answer: The camt.077, in case of digressive bands with different prices applied at different sub-quantities, the message shows only the total amount calculated and the total quantity, with no unit price.

Questions and Answers

Question: CRDM: User - Certificate DN links

Is it possible to link one DN to multiple system users?

Answer:

Yes, it is possible.

A DN is linked to a unique person. It can be linked to several system users.

Note: It needs to be ensured that a DN is not linked to two system users under the same party.

Questions and Answers

Question: Is it correct that when a ceiling is breached by any kind of LT, the system will not trigger a rule-based LT, nor a floor/ceiling notification.

Answer: This understanding is correct. For instance, a DCA has a ceiling of 100 and a balance of 90. It receives an inter-service LT of 20 from another party. The ceiling is breached, but neither a notification, nor rule-based LT is triggered.

A notification/rule-based LT would be triggered by the first subsequent payment resulting in a balance greater than 100. For example, such a notification/rule-based LT may be triggered by a pacs.009 moving the balance from 110 to 130 or by a pacs.010 moving the balance from 110 to 105. Only the first payment will trigger a notification/rule-based LT.

Questions and Answers

Question: Will automated liquidity transfers from RTGS DCA to CLM MCAs to cover for pending Central Bank operations be available from 19.00 or 19.30?

Answer:

Answer to the question is provided in table 16 in the CLM UDFS and table 16 in the RTGS UDFS: the automated LT can be generated by CLM already from 19h but will not settle in RTGS until 19.30.