ISO20022 message types and flows in the future RTGS services
General Approach

16 March 2017
Ad-hoc Workshop on messages for the Future RTGS Services
Agenda

• Cancellation Requests
• AS Settlement
• Warehoused Payments
• Reserve Management
• Standing Facilities
• Cash Withdrawals
Cancellation Requests – ISO20022 message flows
ISO 20022 message portfolio and future message flow in Future RTGS services

Cancellation request of pending payment - Message flow of camt.056 and camt.029

- Cancellation request sent from a direct participant A to direct participant B

Precondition for this flow is a pending payment instruction pacs.008/009/010 (note: in case of a pacs.010 it would be a credit)

1. The direct participant A sends a camt.056 message to participant B to request the cancellation of a payment message.
2. The RTGS service checks the payment status. If the payment instruction is still in a pending status it will be cancelled.
3. The RTGS service responds with a positive resolution of investigation message camt.029.

Note:
- Currently the MX camt.008 CancelTransaction is used for cancellation of payment instructions.
- The camt.008 will be replaced by ISO 20022 camt.056 CancellationRequest message.
Cancellation request for an instruction already settled payment - Message flow of camt.056 and pacs.004 (when cancellation request approved by B)

- **Cancellation request sent from a direct participant A to direct participant B**

  Precondition for this flow is a previously settled payment instruction pacs.008/009(010)
  1. The direct participant A sends a camt.056 message to B to request the cancellation of a payment message.
  2. The RTGS service checks request regarding payment settlement status.
  3. If payment is settled → forwarding camt.056 to B and no generation of camt.029 by RTGS service.
  4. B checks if a cancellation of the original payment instruction is applicable (possibly a debit authority request with Creditor)
  5. In case of positive check B responds with a return message by sending a pacs.004 message.
  6. The return payment has to pass several validations before it is debited on the DCA of B and credited on the DCA of A.
  7. Participant B receives a notification pacs.002 from the RTGS settlement service (optional).
  8. The pacs.004 message will be forwarded to the credited participant A.

**Notes:**

- **Update to workshop I:**
  - Take out of camt.025
  - Check payment status (no bypass of camt.056)
ISO 20022 message portfolio and future message flow in Future RTGS services

Cancellation request already settled payment - Message flow of camt.056 – no forwarding to B

- Cancellation request sent from a direct participant A to direct participant B

  Precondition for this flow is a previously settled payment instruction pacs.008/009(010)

  1. The direct participant A sends a camt.056 message to B to request the cancellation of a payment message.

  2. The RTGS service checks request regarding payment settlement status. If payment status is booked the RTGS service checks if the cancellation request should be forwarded to B. If not, the RTGS service sends a negative camt.029 to A.

  3. The sender A receives a negative camt.029 with error reason.

Question: What would be the reason for the RTGS system not to forwarded the camt.056 to Participant B if settlement completed?

- Update to workshop I:
  - Amendments:
    - Check payment status (no forwarding of camt.056)
    - Codeword if camt.056 should not be forwarded to B

Ad-hoc Workshop on messages
Cancellation request sent from a direct participant A but rejected by participant B

Precondition for this flow is a previously settled payment instruction pacs.008/009(010)

1. The direct participant A sends a camt.056 message to B to request the cancellation of a payment message.
2. The RTGS service checks request regarding payment settlement status.
3. If payment is already settled cancellation request will be forwarded to B.
4. B checks if a cancellation of the original payment instruction is applicable.
5. If B disagrees (e.g., debit authority not given by Creditor) check fails B responds with a negative camt.029 message.
   (5b) In case camt.029 cannot be forwarded a pacs.002 negative will be sent to B (why would the camt.029 not be sent to A?)
6. The RTGS/HVP service forwards the camt.029 message to participant A (no further booking).

Update: Cancellation request of settled payment - Message flow camt.056 and camt.029

Notes:
- The ISO 20022 messages camt.056 (CancellationRequest) and camt.029 (ResolutionOfInvestigation) represent an enhancement of current T2 message portfolio
- Update to workshop I:
  - Take out of camt.025
  - Check payment status (no bypass of camt.056)
Ancillary Systems Settlement-ISO 20022 migration

Considerations and principles
General approach

- ASI relies mainly on XML proprietary messages. However it also uses currently MTs for liquidity transfers (LT) and booking notifications. Those MT messages will be replaced by ISO messages as follows:

<table>
<thead>
<tr>
<th>MT message</th>
<th>Acceptance</th>
<th>Description</th>
<th>ISO message</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT 202</td>
<td>mandatory</td>
<td>Bank-to-bank payment</td>
<td>pacs.009</td>
</tr>
<tr>
<td>MT 900/910</td>
<td>optional</td>
<td>Confirmation of debit or credit</td>
<td>camt.054</td>
</tr>
</tbody>
</table>

- The todays six generic settlement models based on SWIFTNet XML standards are discussed in the TF on Future RTGS services.
Some first considerations on the future of the different ASI models based on discussion in the 3\textsuperscript{rd} TF meeting on Future RTGS services on 22/23 February 2017 (I)

- **ASI model 1** (ASI Liquidity transfer)
- **ASI model 2** (ASI Real-Time Settlement)

Functions can be covered by standard (future) functions defined for the RTGS service because of single message instructions.

- **ASI model 3** (Bilateral settlement)

Might be covered by standard (future) functions defined for the RTGS service, as long as the following additional can be provided:
  - Information period prior to settlement
  - Overview to trace the status of all instructions sent in the same file
Some first considerations on the future of the different ASI models based on discussion in the 3rd TF meeting on Future RTGS services on 22/23 February 2017 (II)

- **ASI model 4** (ASI Standard Multilateral Settlement)
- **ASI model 5** (ASI Simultaneous Multilateral Settlement)

  Rather similar models but have specific legal differences (e.g. guarantee fund mechanism)

- **ASI model 6** (Dedicated liquidity and cross-system settlement and Real-time)

  Liquidity is dedicated on separate accounts
  
  ASI 6 can be used today in day-time and for night-time settlement
  
  ASI 6 real-time will be introduced in November 2017 for the settling of instant payments
Overview all settlement procedures: debit and credit notifications

- Settlement Bank Debtor
  - camt.054 debit
- Ancillary Systems
  - XML instructions / XML notifications
- Settlement Bank Creditor
  - camt.054 credit
- Central Bank
  - Mandated payments pac.009
- XML instructions / XML notifications

AS operations

On behalf AS
Way forward

- After identification of those models and of their functionalities offered in the future AS service the messages and message flows will be defined
- General principle will be
  - Choosing broadly used messages (no proprietary solutions)
  - Whenever possible choosing messages used in T2S
  - If no ISO 20022 message available, update existing T2 XML messages
Warehoused Payments – General approach
ISO20022 flows
Warehoused Payments in TARGET2 (today)

- Possibility to submit MT 103, 103+, 202, 202COV and 204 up to five TARGET working days in advance
- Message will be warehoused until TARGET2 starts the day trade phase of chosen value date
- Possibility to submit warehoused payments with Earliest or Latest Debit Time Indicator on value date
ISO 20022 message flow in Future RTGS services

Warehoused payments

Submitting warehoused payments on future RTGS services

1. The direct participant A generates a payment message/direct debit message towards B for execution in RTGS service with value date up to 5 TARGET working day in future

2. The RTGS service performs format checks on the day of submission. Payment message/direct debit message will be stored until execution date.

3. Participant A may receive a negative notification pacs.002 from the RTGS service.

4. On execution date RTGS service will perform content check (e.g. valid BIC) and process warehoused payments on start of day trade phase.

5. Participant A receives a positive notification pacs.002 from the RTGS service in case of positive content check (optional).

6. RTGS service will forward payment message/direct debit message to receiver Bank B

Note:
- Content check (e.g. valid receiver BIC) will be done on execution date (check if there is need for a change for future service)
- No other checks will be done by SSP between date of submission and date execution
Warehoused Payments in files

- Warehoused payments messages can be grouped in files with a business file header similar to the BAH used for messages
- The NSP will provide a technical acknowledgement message (ACK or NAK) for the file
- Pacs.002 (negative or positive) are always sent via single message with the original message reference
Warehoused Payments in Big-Bang approach

- Warehoused payments have to pass i.a. format checks on the day of submission.
- In case of a change in standards, formats or upgrades warehoused payments with execution date beyond this point in time cannot be stored in the SSP.
- SSP-OT will change respective parameters (only visible for OT ICM view).
- Also to be done in big-bang approach (restriction of available future value dates for warehoused payments day for day).
CB-Services – General Approach
Reserve Management
Standing Facilities
Cash Withdrawals
Relations SF and RM business
ISO 20022 message flow in Future RTGS services
Cash withdrawals

1. The direct participant A generates a payment message towards CB of A for execution in CLM service
2. The CLM service performs validity checks and transfers amount from MCA of Bank A to the MCA of the CB of A
3. Participant A receives a notification pacs.002 from the CLM service (optional).
4. CLM service will forward payment message to CB of A and the mount will be available for cash withdrawal.

Note:
- Cash deposits will be also possible in the opposite way
- Cash operations will be also possible for co-managers