General messaging related aspects

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

- Business Application Header
- Signing of messages
- Change Priority and Change Settlement Time
- Interoperability with international transactions
- Timeout management
- Oversized data management
ISO 20022 Business Application Header - Terminology

Technical Transport Header

ISO 20022 Business Appl. Header

ISO 20022 Business Message

Ad-hoc Workshop on messages
ISO 20022 Business Application Header –Addressing

- Two alternate scenarios can be used
  - BAH message components From and To are mapped as Sender and Receiver in MT Y-Copy messages
    
    BAH From = Bank A
    BAH To = Bank B
  
  - New BIC for the consolidated platform is introduced
    
    BAH From Message A = Bank A
    BAH To Message A = Platform BIC
    BAH From Message B = Platform BIC
    BAH To Message B = Bank B
ISO 20022 Business Application Header (I)
Alternative 1

Bank A MI Bank B

**BAH**

- **From:** Bank A
- **To:** Bank B

- **Business Msg Id:** copy from Message ID in pacs.008
- **Message Def Id:** pacs.008.001.07
- **Business service:** MI specific service [max 35text, use with specific MI codes]
- **Creation Date:** date/time when BAH was created by Bank A
- **Copy Duplicate:** eg used to indicate that message is copy (eg in reply to retrieval request)
- **Possible Duplicate:** recommended not to be used if network protocol offers duplicate alert features
- **Priority:** should not be used if present in pacs.008
- **Signature:** recommended not to be used if network protocol offers signing features
- **Related BAH:** only to be used in case of Retrieval

**PACS.008**

- **Message ID:** should be copied in BAH [eg IMAD]
- **Creation Date:** date/time when pacs.008 was created
- **Instructing Agent:** [not used]
- **Instructed Agent:** [not used]

---

**BAH**

- **From:** Bank A
- **To:** Bank B

- **Business Msg Id:** new ID by MI, eg Clearing System Ref., booking time
- **Message Def Id:** pacs.008.001.07
- **Business service:** MI specific service [max 35text, use with specific MI codes]
- **Creation Date:** new date/time when BAH was created by MI
- **Copy Duplicate:** eg used to indicate that message is copy (eg in reply to retrieval request)
- **Possible Duplicate:** recommended not to be used if network protocol offers duplicate alert features
- **Priority:** should not be used if present in pacs.008
- **Signature:** recommended not to be used if network protocol offers signing features
- **Related BAH:** only to be used in case of Retrieval

**PACS.008**

- **Message ID:** can be same message ID assigned by bank A
- **Creation Date:** can be same date/time when initial pacs.008 was created
- **Instructing Agent:** [not used]
- **Instructed Agent:** [not used]
ISO 20022 Business Application Header (II)
Alternative 2

Bank A

From: Bank A
To: MI
Business Msg Id: copy from Message ID in pacs.008
Message Def Id: pacs.008.001.07
Business service: MI specific service [max 35text, use with specific MI codes]
Creation Date: date/time when BAH was created by Bank A
Copy Duplicate: eg used to indicate that message is copy (eg in reply to retrieval request)
Possible Duplicate: recommended not to be used if network protocol offers duplicate alert features
Priority: should not be used if present in pacs.008
Signature: recommended not to be used if network protocol offers signing features
Related BAH: only to be used in case of Retrieval

MI

From: MI
To: Bank B
Business Msg Id: new ID by MI, eg Clearing System Ref., booking time
Message Def Id: pacs.008.001.07
Business service: MI specific service [max 35text, use with specific MI codes]
Creation Date: new date/time when BAH was created by MI
Copy Duplicate: eg used to indicate that message is copy (eg in reply to retrieval request)
Possible Duplicate: recommended not to be used if network protocol offers duplicate alert features
Priority: should not be used if present in pacs.008
Signature: recommended not to be used if network protocol offers signing features
Related BAH: only to be used in case of Retrieval

Bank B

PACS.008
Message ID: should be copied in BAH [eg IMAD]
Creation Date: date/time when pacs.008 was created
Instructing Agent: Bank A
Instructed Agent: Bank B

PACS.008
Message ID: can be same message ID assigned by bank A
Creation Date: can be same date/time when initial pacs.008 was created
Instructing Agent: Bank A
Instructed Agent: Bank B

Ad-hoc Workshop on messages
ISO 20022 Business Application Header (III)

- Allows to leave the ‘document’ pacs.008 untouched by MI (between bank A and bank B), and yet to include e.g. clearing system references added by MI in BAH.
- Business Message ID included in BAH sent by MI can be used as ‘clearing system reference’; and include concatenation of info (e.g. settlement time; reference, etc.)
- A FAH with similar structure will be used for the files.

Note:
SWIFT will provide further information on use of BAH (incl. relationship with SWIFTNet Request Header, the use of signatures, recommendation of HVPS+, comparison with Y-Copy environment, etc.)
Signature

- Identification and authentication the sending user
- Only to be used for requests with “writing access”, i.e. mandatory when impacting the transaction processing
- If not applied the request will be rejected
- The **sender** of the message/file will use the certificate provided to him by the NSP to digitally sign the message/file
- The **receiver** shall be able to check the validity of the signature by using the associated certificate (public key) of the sender
Handling Change Priority and Change Settlement Time

- Pacs.004/008/009/010
- In context with queue management the following items can be changed:
  - Settlement Priorities **NORMAL** and **URGENT**
  - Debit times – **CLS** time, **REJECT** time, **TILL** time, **FROM** time
- In V-shape the original message is processed by the system, i.e. after booking the items settlement priority and debit time could be adapted by the system.

- Question:
  - Should the future system…
    - Leave these information untouched, i.e. no changes in the payload
    - or
    - Change it
Timeout Management

1. Get message
   - real-time mode

2. Get message

3. timer

4. Receipt message
   - real-time mode

5. Response

6. Response
   - store & forward mode

Participant

CLM
RTGS
T2S

Ad-hoc Workshop on messages
Oversized Data Management – General flow

1. Get message (real-time mode)
2. Get message
3. Response
4. Check size
5. Receipt message (real-time mode)
6. Response (store & forward mode*)

*In case a message exceeds also maximum size for files message pagination will be applied if specified, otherwise an error message will be sent.
Interoperability with international transactions

1. Domestic transactions:
2. Domestic transactions
   [triggered by incoming x-border transactions generated by participants abroad/not connected to domestic MI of target currency – can be enriched to meet domestic needs]
3. International transactions initiated through domestic MI
   [triggered by need to send outgoing x-border transaction in ‘domestic’ currency]

Proposal:
1. Identify E2E elements in HVP and HVPS+
2. Agree on approach to handle

No co-existence of ISO 20022 and MT in the future RTGS universe

‘X-border’

MT 103

Ad-hoc Workshop on messages

12