mojaloop

ISO 20022 and Mojaloop: A different way forward

mojaloop

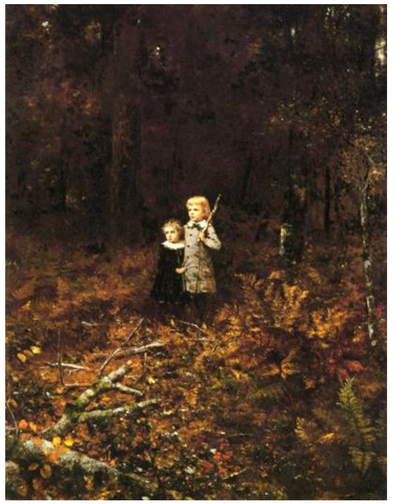
Our objective

- To extend the existing ISO 20022 standard to meet the requirements of inclusive instant payment systems (IIPS) in emerging economies…
- … to allow Mojaloop schemes to:
  - Align with the global direction of payment definition
  - Align with the BIS Nexus initiative for a cross-border standard
  - Participate directly in a world-wide network of payments

Where are we now?

Did we go too far too fast?

- We started from the functional requirements of the Mojaloop system.
- … and mapped them on to the semantic field of the ISO 20022 message space.
- We were asking the ISO organisation to absorb *a lot*.
- So it’s not surprising that:
  - People are worried about the overall risk of change.
  - People might make the wrong decisions about individual items because:
    - There are so many of them.
    - The interdependencies between them are hard to understand.



A lower-impact approach

- Mojaloop uses existing ISO 20022 messages where possible
- The structure of ISO messages is inclusive
  - New requirements appear as optional additions to the specification
  - They are made mandatory in the Mojaloop world via a Market Practice Document
- The ISO 20022 approval process is less onerous for changes than it is for new messages…
- … and individual changes can be submitted and actioned separately from each other

What Mojaloop needs a payment to look like

- We have to take our customers where we find them
  - There are often overriding reasons why they use a particular account-holding institution…
  - … that institution may not look very much like the traditional idea of a bank…
  - … but that doesn’t mean that, with the proper support, it can’t play a productive part in a financial ecosystem.

The payment support that Mojaloop needs to provide

- Reducing the risk and cost of reconciliation and remediation to zero by ensuring that:
  - Both parties agree to the terms of a transfer.
  - Transfers can only be executed on the agreed terms.
  - Debtors have liquidity cover for the transfers they execute.
- Shouldering the burden of efficient, low-risk and low-cost participation in funds transfers.
  - Acting as a constant standard for best practice in all areas of an IIPS.
  - Providing simple and effective ways for participants to display that practice.

How might this work out in practice?

Discovery

Mojaloop:

- I need to be able to:
  - Associate an identifier with the FI that can execute a credit for the person identified
  - Identify the FI which acts for an identifier.
  - Return information about the entity, including KYC

ISO 20022:

- We have a message that associates an identifier with an FI
- We have a message that could be used. Nexus does.
- We have a message that could be used. Again, Nexus does

Agreement of terms

Mojaloop:

- I need to be able to:
  - Propose the terms of a transfer
  - Confirm the terms and add a cryptographic lock to them

ISO 20022:

- A payment is a payment. Everyone understands that message.
- But you could:
  - Add a state to the payment
  - Add a unique identifier to that state
  - Include a history of states
- You could add the lock as an element of the payment’s state

Execution

Mojaloop:

- I need to be able to:
  - Execute a payment on the terms agreed
  - Return information about the outcome of the payment.

ISO 20022:

- You would have all the information you need in the history of states.
- Deciding how to act on that information is a matter for Mojaloop
- We have a message that returns the status of a payment.
  - We could add the cryptographic key(s) to it

Request to pay

Mojaloop:

- I need to be able to:
  - Ask an FI to initiate a payment

ISO 20022:

- We have a message that does that.
- Alternatively, you could define it as a state of a payment prior to the agreement of terms

Authorisation

Mojaloop:

- I need to be able to:
  - Ask an FI to obtain an authorisation I can trust from my customer

ISO 20022:

- We don’t have a message that does that.
- But it *might* be possible to include it as a state of the payment…

Bulk transfers

Mojaloop:

- I need to be able to:
  - Make single-debit, multiple-credit transfers using my standard transfer pattern

ISO 20022:

- Our payment message supports multiple payments out of the box.
- How you restrict them is a matter for the Mojaloop scheme

Currency conversion

Mojaloop:

- I need to be able to:
  - Request a PvP currency conversion in respect of a transfer
  - Only execute the conversion if the transfer succeeds

ISO 20022:

- We don’t have a message that does that.
- But it *might* be possible to include it as a state of the payment.
- Conditional completion of the conversion is a matter for the Mojaloop scheme

3PPI Association

Mojaloop:

- I need to be able to:
  - Allow a 3PPI to ask an FI to give permission for the 3PPI to make debit requests against a specific account
  - Allow the FI to satisfy itself that the customer is happy with this
  - Set up an agreement between the two which they can reference when a 3PPI RTP is received.

ISO 20022:

- Er, we don’t have messages that do any of that.

Ancillary stuff

Mojaloop:

- Oh, and I’ve got a few requests about message content.

ISO 20022:

- Our messages are inclusive. Let’s talk

What would we need to do?

- Game the proposed solution to make sure it meets Mojaloop's requirements.
- Convert the agreed result into individual change requests
- … and Business Justifications, if new messages are required
- Start submitting the individual requests to the Payments SEG
- Manage the co-ordination of the requests with each other

Discussion