ISO 20022 – FX Market Perspective

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3 November 2015
– ISO 20022 background
– FX market current status and initiatives
Some key ISO standards managed by TC68 and its subcommittees SC4 & SC7

<table>
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<th>TC/SC</th>
<th>Standard</th>
<th>Description</th>
<th>RA</th>
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<tbody>
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<td>SC4</td>
<td>ISO 15022</td>
<td>Securities Messages</td>
<td>SWIFT</td>
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<tr>
<td>TC68</td>
<td>ISO 20022</td>
<td><strong>Universal Financial Messages</strong></td>
<td>SWIFT</td>
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<tr>
<td>TC68</td>
<td>ISO 17442</td>
<td>Legal Entity Identifier (LEI)</td>
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<tr>
<td>SC4</td>
<td>ISO 6166</td>
<td>International Securities Identification Number (ISIN)</td>
<td>ANNA</td>
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<td>SC7</td>
<td>ISO 9362</td>
<td>Business Identifier Code (BIC)</td>
<td>SWIFT</td>
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<td>SC7</td>
<td>ISO 13616</td>
<td>International Bank Account Number (IBAN)</td>
<td>SWIFT</td>
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<tr>
<td>SC4</td>
<td>ISO 10383</td>
<td>Market Identifier Code (MIC)</td>
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<tr>
<td>SC7</td>
<td>ISO 8583</td>
<td>Financial cards</td>
<td>-</td>
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</table>
SWIFT & ISO Messaging Standards Timeline

- **Proprietary MT**
  - 1973 - 1983
  - Payments, Cash, Treasury & Trade

- **ISO 7775**
  - 1984 – 1997
  - Securities only

- **ISO 15022**
  - 1999 - 2004
  - Securities only

- **ISO 20022**
  - 2004 -
  - All markets

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What is ISO 20022?

Single standardisation approach (methodology, process, repository) to be used by all financial standards initiatives

Recipe to create financial standards

Business / Conceptual
- Defines \textit{business meaning} of financial concepts, e.g., ‘Credit Transfer’

Logical
- Defines e.g. credit transfer \textit{messages}, to execute the business process

Physical
- Defines physical \textit{syntax}, e.g. XML

Body of content

Business models
Data dictionary
Catalogue of messages

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Methodology - Business / Conceptual Layer
Methodology - Logical Layer

Elements in the Logical Layer refer to the Business / Conceptual layer for their definitions.
Methodology - Physical Layer

XML

- The commonest syntax for ISO 20022 but not the only one
- Defined by an XML Schema (XSD)
- Easy to integrate in modern IT environments
ISO 20022
The registration process

- Financial industry group or standards body
- Business justification
- Project approval & allocation to a SEG
- Development & provisional registration
- Business validation
- Official registration and publication
- Optional pilot testing or first implementers
Advantages of ISO 20022

- **Open standard**: Open to everyone, not controlled by a single interest.
- **End-to-end automation**: A single standard that covers all business domains and end-to-end business processes.
- **Modern technology**: Uses modern, mainstream, well-supported technology (XML) that facilitates efficient integration.
- **Future-proof**: Can adapt to new technologies as they emerge.
- **Global standard to meet local needs**: Rich, structured standard that allows definition of formal market practice.

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An FI’s ISO 20022 landscape..
The ISO 20022 harmonisation Charter is based on four principles:

1. Share information between FMIs about ISO 20022 usage;
2. Adhere to global market practice where it exists and contribute to new global market practice initiatives;
3. Introduce stricter message version control and release management process and timing;
4. Publish up-to-date information about standards on a common platform, including market practice compliance, messages and versions used and message release timeline.

SEPA
All EU banks using ISO20022 for SEPA

TARGET 2 Securities
ISO20022 used between T2S and participants. First wave live.

TARGET 2
ISO20022 part of design. Migration dates TBC

MiFID II / MiFIR technical standards…
“Transaction reports shall be provided in an electronic and machine-readable form and common XML template in accordance with the ISO 20022 methodology”

MMSR – Reporting Instructions

- The reporting instructions are:
  - aligned with ISO 20022 standards, or standards will expand where appropriate, to help implementing by the banking industry
  - showing the taxonomy of the variables across the different market segments as unique reference for credit institutions (and NCBs/ECB)
  - complemented with illustrations/examples to further specify data to be sent
  - binding to ensure full automation of the process – and put on ECB web site
<table>
<thead>
<tr>
<th>Domain</th>
<th>Standards</th>
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<tr>
<td>Trading</td>
<td>FIX</td>
</tr>
<tr>
<td>Confirmation</td>
<td>Bilateral – FIN MT 3xx</td>
</tr>
<tr>
<td></td>
<td>CLS – Proprietary and MT3xx moving to ISO 20022 and MT 300</td>
</tr>
<tr>
<td>Settlement</td>
<td>CCP – FpML proprietary and MT 300</td>
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<tr>
<td>Reporting</td>
<td>FpML and proprietary</td>
</tr>
</tbody>
</table>
Market Infrastructure (MI) versus bilateral topologies

All communication is between member an MI and is controlled by MI

Many bilateral communication paths with no central control
FX Market Infrastructures moving to ISO 20022

• CLS
  • Migration from proprietary standards to ISO 20022 under way since H2 2015.

<table>
<thead>
<tr>
<th>Message Name</th>
<th>Msg ID (XML Schema)</th>
<th>Submitting Organisation</th>
<th>XML Instances</th>
<th>Msg Def Report</th>
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</tbody>
</table>

• China Foreign Exchange Trading System (CFETS)
  • Approved ISO 20022 Business Justifications for Trade Capture and Trade Confirmation
  • SEG review of messages to start imminently
Bilateral exchange – MT 300 example

- **~ 7,000 direct users of MT 300**
  - Hundreds of thousands of bilateral paths
  - Each path would need to migrate individually from MT to ISO 20022!

- **Big-bang migration not practical**
  - Assuming no business case for central translation software and database management

- **No SWIFT or industry policy for general migration of bilateral message flows from FIN to ISO 20022**
About ISO

- **163 Countries**
- **224 Technical Committees**
- **513 Subcommittees**
- **2,516 Working Groups**

**National Standards Bodies** (BSI, ANSI, AFNOR, DIN, UNI, etc…)

- General Assembly
- Central Secretariat
- Council
- Technical Management Board (TMB)

**TC 68 Financial Services**

- SC 2 Security
  - WG
  - WG
  - WG
- SC 4 Securities
  - WG
  - WG
  - WG
- SC 7 Banking
  - WG
  - WG
  - WG
- WG 4 & 5 ISO 20022
- WG 6 LEI

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Content – [www.ISO 20022.org](http://www.ISO 20022.org)

![Diagram showing the relationship between business process catalogue and data dictionary](image)

- **Business process catalogue**
  - Business areas
  - Business transactions
  - Support execution of

- **Data dictionary**
  - Business concepts
  - Message concepts
  - Data types
  - Uses
  - Are described with
  - Are composed of
  - Are base on
ISO 20022 Governance

Technical Committee 68 (TC68) [Conv.: K. McKenna]

– Registration Management Group (RMG) [Conv.: J. Whittle]
  o Submitters of new messages and maintenance requests
  o Registration Authority (RA)
  o Technical Support Group (TSG)
  o Standards Evaluation Groups (SEGs)
    – Payments
    – Securities
    – Cards
    – FX
    – Trade Services