ISO 20022 – Overview

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Why ISO 20022?

- Paper-based
- Proprietary syntax
- Point-to-point
- One size fits all
- SWIFT only

FIN MT:
Computer-processable versions of telexes

- Reference standard
- Electronic
- Open, neutral syntax
- End-to-end transaction
- Market practice
- SWIFT + other organisations
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 **business meaning** of financial concepts, e.g., ‘Credit Transfer’

Logical
- Defines e.g. credit transfer **messages**, to execute the business process

Physical
- Defines physical **syntax**, e.g. XML

Body of content

- **Business models**
- **Data dictionary**
- **Catalogue of messages**
Maintenance process – built on strict business justifications and review process - leading to new ‘versions’ of the messages

More than 20 submitting organisations, besides SWIFT

Over 20 Business Areas - EXAMPLE

‘PAIN’ = Payment initiation
‘PACS’ = Interbank clearing and settlement
‘SESE’ = Securities settlement
‘SEMT’ = Securities management

= used in Corporate-to-bank
= used in HVP and LVP MI
= used in Securities MI
= used in Securities MI

More than 400 messages, covering payments, securities, trade services, FX, cards
Benefits of ISO 20022

- Richness of the data - greater automation and precision
- Scenario-based standards – business-centric approach
- Repository and reusable components – ease of integration
- XML syntax - easy processing and lower integration cost
- Syntax-independent model - future-proof
- Supplementary Data Component - extensibility
- Character sets - supports local languages
- Currencies - multi-currency payments
- Authentication – digital signatures
ISO 20022 - Business Areas

- **acmt** Account management
- **admi** Administration
- **colr** Collateral Management
- **catm** Terminal Management
- **setr** Securities Trade
- **secl** Securities Clearing
- **pacs** Payments Clearing and Settlement
- **tsmt** Trade Services Management
- **pain** Payment Initiation
- **tsin** Trade Services Initiation
- **reda** Reference Data
- **fxtr** Foreign Exchange Trade
- **camt** Cash Management
- **semt** Securities Management
- **sse** Securities Settlement
- **seev** Securities Events
ISO 20022 Message Identifier

Example: `sese . 023 . 001 . 06`

- **Version**: 6
- **Variant**: 1
- **Message identifier/functionality**: Securities Settlement Transaction Instruction
- **Business area**: Securities Settlement
Standards are created globally and used locally: market practice and variants

- ISO 20022 messages
  - Global market practice
  - Local market practice
  - Bank-specific practice

- SMPG Global Market Practice
- MI implementation guidelines
- Participant implementation with its own requirement

- ‘SESE’-sese.023.001.06 Securities Settlement Instruction
ISO 20022
Methodology

Three layered approach

Business modelling
- Business & requirements analysis

Logical modelling
- Define the solution & build the message models

Physical messages
- Generate XML schemas
Components

• Business concepts are defined using re-usable Business Components:

**Business Component**

```
> Identification
> Name
> Status
> Account Servicer
```

• In a particular message, the following Message Component “Account1” is used:

**Message Component**

```
> Identification
> Account Servicer
```
• Document consists of data marked up by tags
• Tags describe meaning and structure of data
• An element is a group of start-tag/end-tag with the data in between
• Format (number of digits, characters allowed, etc.) defined by the DataType
DataTypes

Used for Business and Message Elements

Based on limited number of “Representations”

- Text, Quantity, Rate, Amount
- Indicator, Identifier, Code
- DateTime

Definitions

- Text: A character string that may be used to describe a concept or narrative information.
- Quantity: A number of non-monetary units together with relevant supplementary information.
- Rate: A ratio between two values.
- Amount: A number of monetary units specified in a currency where the unit of currency is explicit or implied.
- Indicator: A boolean that may be used to express an alternative between 2 values.
- Identifier: A character string to identify and distinguish uniquely, one instance of an object in an identification scheme together with relevant supplementary information.
- Code: A character string (letters, figures or symbols) that for brevity and/or language independence may be used to represent or replace a definitive value or text of an attribute together with relevant supplementary information.
- DateTime: A particular point in the progression of time together with relevant supplementary information.
Understanding the message structure
(Altova XML Spy)
<SctiesSttlmTxInstr>
  <TxId>AGK0107</TxId>
</SctiesSttlmTxInstr>

<SttlmTpAndAddtlParams>
  <SctiesMvmntTp>RECE</SctiesMvmntTp>
  <Pmt>APMT</Pmt>
</SttlmTpAndAddtlParams>

<TradDtls>
  <TradDt>
    <Dt>2016-01-12</Dt>
  </TradDt>
  <SttlmDt>
    <Dt>2016-01-14</Dt>
  </SttlmDt>
  <DealPric>
    <Tp>
      <ValTp>PARV</ValTp>
    </Tp>
    <Val>
      <Rate>101.21</Rate>
    </Val>
  </DealPric>
</TradDtls>

<FinInstrmId>
  <ISIN>GB0987654321</ISIN>
</FinInstrmId>

<QtyAndAcctDtls>
  <SttlmQty>
    <FaceAmt>400000</FaceAmt>
  </SttlmQty>
  <SfkpgAcct>
    <Id>222S</Id>
  </SfkpgAcct>
</QtyAndAcctDtls>

<SttlmParams>
  <SctiesTxTp>
    <Cd>TRAD</Cd>
  </SctiesTxTp>
</SttlmParams>
<DlvrgSttlmPties>
  <Dpstry>
    <Id>
      <AnyBIC>CRSTGB22</AnyBIC>
    </Id>
  </Dpstry>
  <Pty1>
    <Id>
      <PrtryId>
        <Id>45678</Id>
        <Issr>CRST</Issr>
      </PrtryId>
    </Id>
  </Pty1>
  <Pty2>
    <Id>
      <AnyBIC>COBADEFF</AnyBIC>
    </Id>
  </Pty2>
</DlvrgSttlmPties>

<SttlmAmt>
  <AcrdIntrstInd>true</AcrdIntrstInd>
  <Amt Ccy="GBP">404751.3</Amt>
  <CdtDbtInd>DBIT</CdtDbtInd>
</SttlmAmt>

</SctiesSttlmTxInstr>
ISO 20022
Business Message

<BusMsg>

<AppHdr>
...
</AppHdr>

<Document>
...
</Document>

ISO 20022 Business Message

ISO 20022 Appl. Header

Business Message

</BusMsg>
ISO 20022: Using Extensions
ISO 20022: Using Extensions
3 types

Data Source Schemes
- Proprietary codes not managed by ISO 20022
  - XASX
  - DTCYD
  - ECLR

External Code Lists
- Specific codes approved by the SEGs
  - COMM
  - CHRG
  - TRAD
  - OWNE

Supplementary Data
- Information that cannot be catered by other elements of a message definition
  - #any
ISO 20022 and SWIFT standards

Complete portfolio of ISO 20022 standards

All relevant business domains

SWIFT is the golden source of ISO 20022 knowledge

Registration authority

Contributor to content

In-depth knowledge of models, data dictionary and messages

SWIFT has unparalleled expertise in ISO 20022 adoption

SWIFT has tools and services for standards & market practice management

Supports communities with adoption

Contributes to market practice groups

Insights into global adoption

MyStandards & Readiness Portal
ISO 20022
www.iso20022.org

ISO 20022 Universal financial industry message scheme

Learn more about ISO 20022
A single standardisation approach (methodology, process, repository) to be used by all financial standards initiatives.

ISO 20022 message dashboard
The ISO 20022 message dashboard gives an overall picture of the five financial business domains in scope of ISO 20022. Its purpose is to show which business processes are already supported either by existing ISO 20022 message definitions or by candidate message definitions covered by an approved Business Justification.

Payments
Messages supporting cash account management, payments initiation, clearing and settlement, and cash management, etc.

Securities
Messages supporting pre-trade, trade, post-trade, clearing and settlement, securities management, securities account management, reconciliation, asset servicing, collateral management, etc.

Trade Services
Messages supporting procurement, trade finance products and services, forecasting, reconciliation, accounting, remittance information, etc.

Cards
Messages supporting card transactions between acquirer and issuer, sale system and POI, terminal management, clearing and settlement, fee collection, etc.

FX
Messages supporting pre-trade, trade, post-trade, notification, clearing and settlement, reporting and reconciliation of FX products.

News
Latest Documents

Cards - New ISO 20022 messages for processing and management of ATM are registered and published
Aug 11, 2015
The first set of messages related to the processing and management of Automated Teller Machines is now available.
Read more

The Summer 2015 edition of the ISO 20022 Newsletter is out!
Aug 10, 2015
Volume 7, Issue 1
Read more

The new Factoring Services messages are now available
Apr 30, 2015
11 new ISO 20022 messages definitions - Trade Services
Read more