

ISO 20022 – Overview

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Why ISO 20022?

Payments
Treasury & Trade Securities only 1973 1984 Securities only 1999 2000 2004

Proprietary MT ISO 7775 ISO 15022 ISO 20022

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



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



www.iso20022.org



More than 400 messages, covering payments, securities, trade services, FX, cards

MyStandards

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

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





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



camt

Cash Management.

semt

Securities Management

pain

Payment Initiation

tsin

Trade Services Initiation

reda

Reference Data.

fxtr

Foreign Exchange Trade

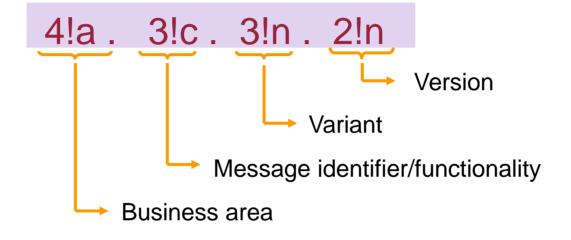
sese

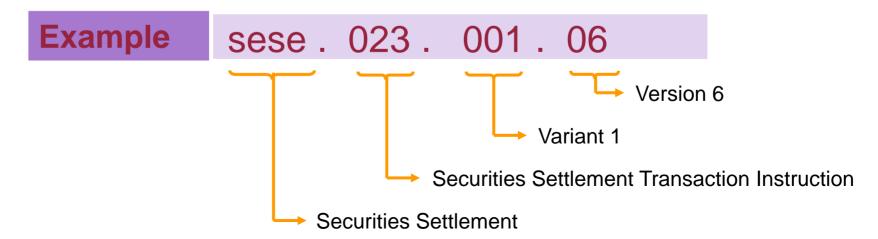
Securities Settlement

seev

Securities Events.

ISO 20022 Message Identifier







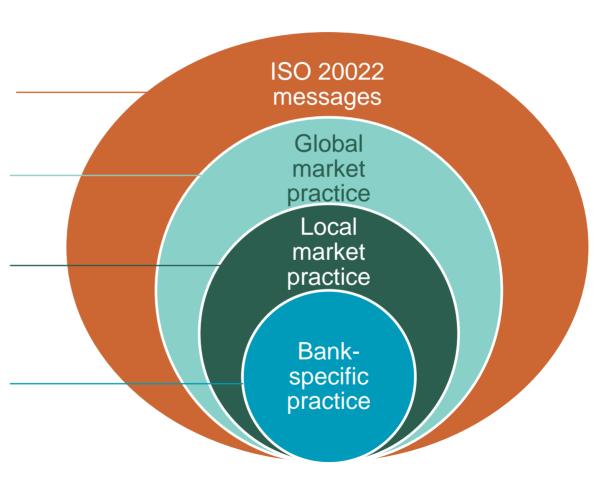
Standards are created globally and used locally: market practice and variants

'SESE'-sese.023.001.06 Securities Settlement Instruction

SMPG Global Market Practice

MI implementation guidelines

Participant implementation with its own requirement

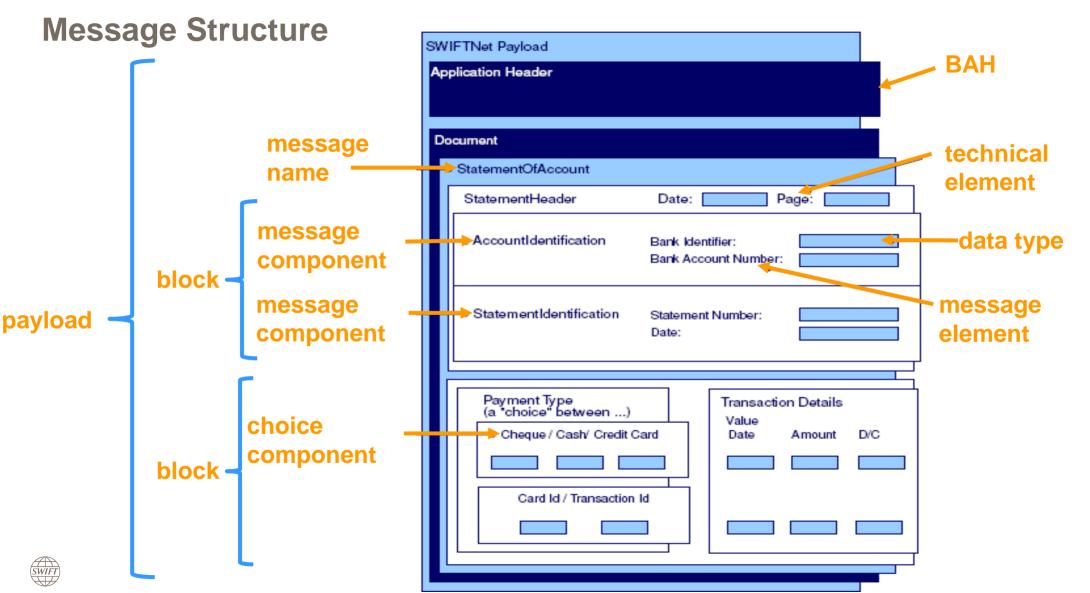




ISO 20022 Methodology

Three layered approach **Business modelling Business & requirements analysis** Define the solution & build the Logical modelling message models Physical messages Generate XML schemas

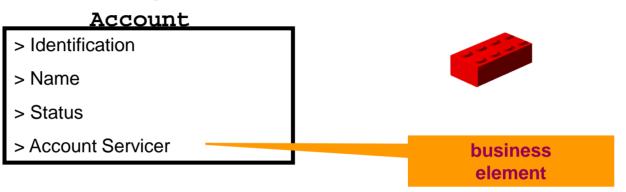




Components

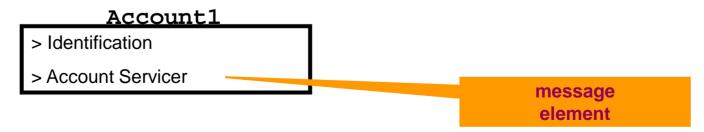
Business concepts are defined using re-usable Business Components:

Business Component



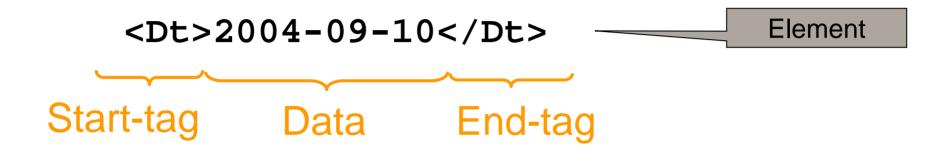
• In a particular message, the following Message Component "Account1" is used:

Message Component





XML Elements



- 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.

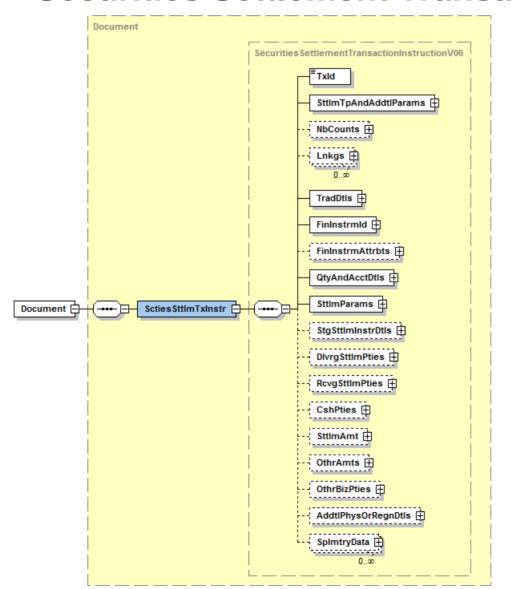


Understanding the message structure

(Altova XML Spy) **Expand / Compress** TechnicalInputChannel type TechnicalInputChannel1Choice TransactionInterest3 TotalInterestAndTaxAmount **Mandatory** type ActiveOrHistoricCurrencyAnd. (box with solid line) InterestRecord1 Amount **Optional** pe ActiveOrHistoricCurrencyAnd. (box with dotted line) CreditDebitIndicator vpe CreditDebitCode Interest type TransactionInterest3 InterestType1Choice Code type InterestType1Code Type type InterestType1Choice **Datatype** Proprietary pe Max35Text Rate Record type Rate3 type InterestRecord1 **DateTimePeriodDetails** FromDateTime ype ISODateTime FromToDate type DateTimePeriodDetails ToDateTime Choice ype ISODateTime Reason type Max35Text Tax TaxCharges2 **Multiplicity** Component Sequence



sese.023 - Securities Settlement Transaction Instruction



Extract Example



XML Message Sample – sese.023 (1/2)

```
<SctiesSttlmTxInstr>
<TxId>AGK0107</TxId>
<SttlmTpAndAddtlParams>
 <SctiesMvmntTp>RECE</SctiesMvmntTp>
 <Pmt.>APMT</Pmt.>
</SttlmTpAndAddtlParams>
  <TradDtls>
 <TradDt.>
  <Dt.>
    <Dt>2016-01-12</Dt>
  </Dt>
 </TradDt>
  <St.t.lmDt.>
  <Dt.>
    <Dt>2016-01-14</Dt>
  </Dt>
  </SttlmDt>
  <DealPric>
  <qT>
    <ValTp>PARV</ValTp>
  </Tp>
  <Val>
   <Rate>101.21</Rate>
  </Val>
  </DealPric>
</TradDtls>
```

```
<FinInstrmId>
 <ISIN>GB0987654321</ISIN>
</FinInstrmId>
<QtyAndAcctDtls>
 <SttlmOty>
  <Oty>
   <FaceAmt>400000</FaceAmt>
  </0ty>
 </SttlmOty>
 <SfkpqAcct>
  <Td>2222S</Td>
 </SfkpqAcct>
</QtyAndAcctDtls>
<SttlmParams>
 <SctiesTxTp>
  <Cd>TRAD</Cd>
 </SctiesTxTp>
</SttlmParams>
```



XML Message Sample – sese.023 (2/2)

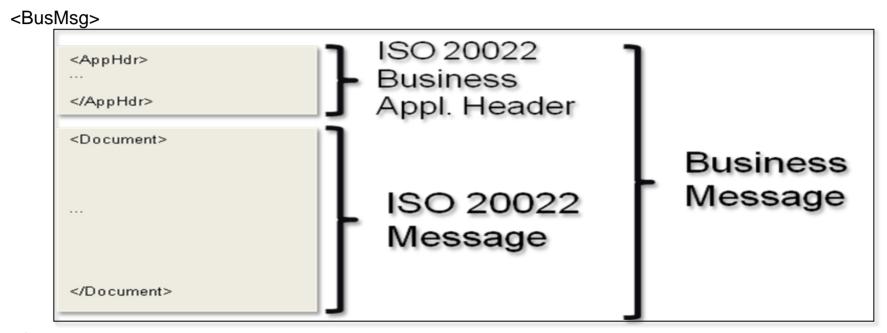
```
<DlvrgSttlmPties>
<Dpstry>
 <Td>
   <AnyBIC>CRSTGB22</AnyBIC>
 </Id>
</Dpstry>
<Pty1>
 <DT>
   <PrtryId>
   <Id>45678</Id>
     <Issr>CRST</Issr>
   </PrtryId>
 </Id>
</Pty1>
<Pty2>
 <Id>
   <AnyBIC>COBADEFF</AnyBIC>
 </Id>
</Pty2>
</DlvrgSttlmPties>
```

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



ISO 20022

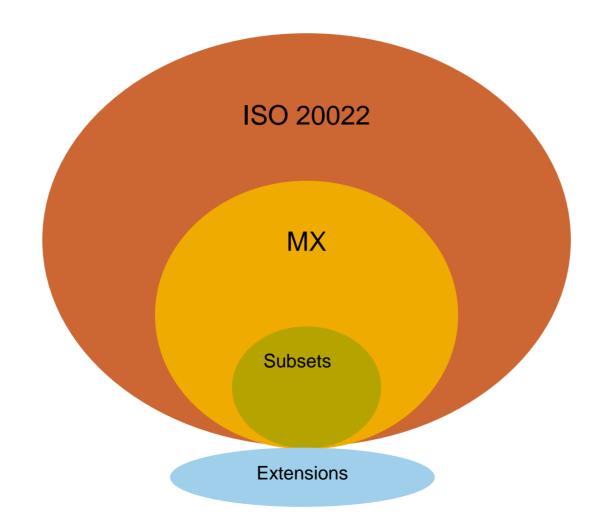
Business Message



</BusMsg>

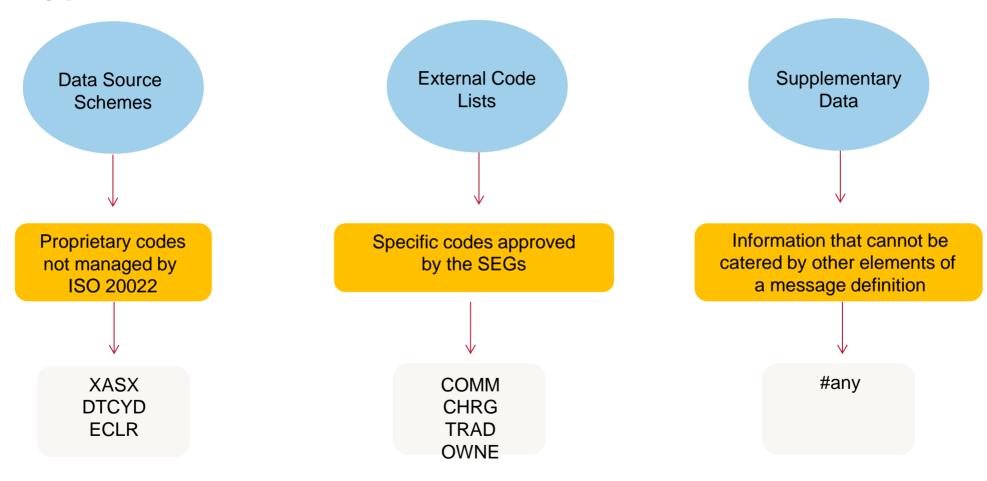


ISO 20022: Using Extensions





ISO 20022: Using Extensions 3 types



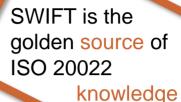


ISO 20022 and SWIFT standards

Complete portfolio of ISO 20022 standards

All relevant business domains

Registration authority



Contributor to content

In-depth knowledge of models, data dictionary and messages

SWIFT has unparalleled expertise in ISO 20022 adoption

Supports communities with adoption

Contributes to market practice groups

Insights into global adoption



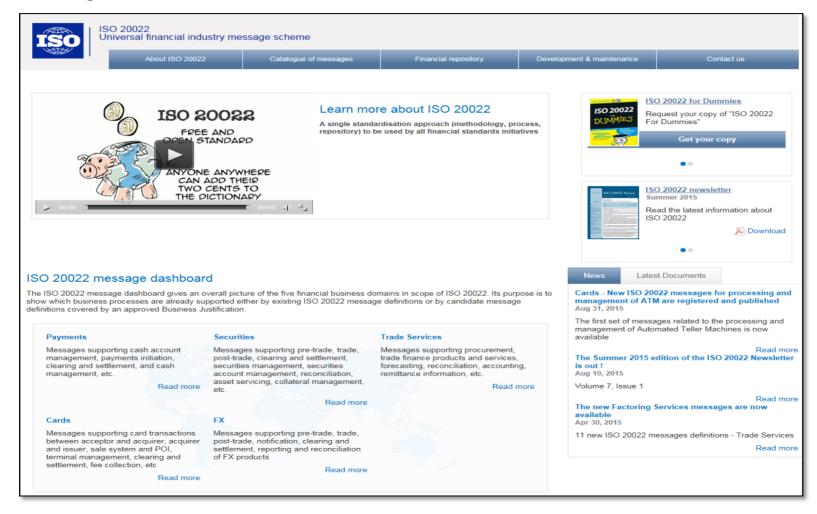


MyStandards & Readiness Portal



ISO 20022

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