Standards Overview

SOF, New York

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### ISO and SWIFT Standards

<table>
<thead>
<tr>
<th>Era</th>
<th>Securities</th>
<th>Other markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000s</td>
<td><strong>ISO 20022</strong> (Investment Funds, Cash Reporting, Bulk Payments (SEPA), Trade Services Utility, etc…)</td>
<td></td>
</tr>
<tr>
<td>90s</td>
<td><strong>ISO 15022</strong> (syntax = enhanced FIN, such as MT 502, MT 54x)</td>
<td><strong>Traditional FIN</strong> (eg MT 103, MT 202)</td>
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<tr>
<td>80s</td>
<td><strong>ISO 7775</strong> (syntax = traditional FIN, such as MT 500)</td>
<td><strong>Traditional FIN</strong> (eg MT 100, MT 200, MT 300)</td>
</tr>
<tr>
<td>70s</td>
<td></td>
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</tbody>
</table>
Business process modelling methodology

Business model

Business roles and actors

Business activities

Business information

Stored as Models (UML)

Central repository

Standards Overview
ISO 20022 – The Financial Repository

• Data Dictionary
  – Business Concepts
  – Message Concepts
  – Data Types

• Business Process Catalogue
  – Financial business process models
  – Financial business transactions, including messages
  – XML message schemas

www.iso20022.org
XML – an example

XML Syntax

```xml
<OrderDetails>
  <FinancialInstrumentIdentification>
    <ISIN>GB9999999999</ISIN>
  </FinancialInstrumentIdentification>
  <PriceDetails>
    <Type>DEAL</Type>
    <Value>
      <Unit Ccy = "GBP">16</Unit>
    </Value>
  </PriceDetails>
  <Quantity>
    <UnitsNumber>500</UnitsNumber>
  </Quantity>
  <ExpiryDateTime>
    <Date>2006-08-31</Date>
  </ExpiryDateTime>
  <TradingParties>
    <Buyer>PEFIGB22</Buyer>
  </TradingParties>
</OrderDetails>
```

ISO 15022 Syntax

```
:16R:ORDRDET
:16R:PRIC
:90B: :DEAL://ACTU/GBP16,
:16S:PRIC
:22H: :BUSE//BUYI
:22H: :PAYM//APMT
:98A: :EXPI//20060831
:16R:TRADPRTY
:95A: :BUYR//PEFIUS22
:16S:TRADPRTY
:36B: :ORDR//UNIT/500
:35B:ISIN GB9999999999
:16S:ORDRDET
```

XML syntax is easier to read than FIN syntax
XML – an example

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:95A:BUYR//PEFIUS22
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```

Instead of 35B we have Financial Instrument Identification
XML – an example

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```

XML is

... a meta-language that describes the way data is formatted and communicated

... a syntax

Standards Overview
• The issuer / agent / publisher will highlight and tag all relevant data elements within MS Word as they are writing the press release or prospectus.

• The electronically tagged data elements are stored as fields within the PDF document, and this fielded data is easily extracted when it is ‘read’.

• XBRL tagged documents can provide an electronic message for consumption by the Financial Services Industry.