



Update: ISO 20022 Adoption

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What is ISO?

- International Organization for Standardization, located in Geneva, Switzerland, founded in 1947
- Develops international standards through worldwide network of national standards bodies
- Work performed within Technical Committees (TCs), their subcommittees (SCs) and working groups (WGs), for Financial Services specifically, within ISO/TC 68
- 164* National Standards Bodies are represented within the ISO Framework
- ISO develops standards in many areas including technology, product safety, energy management. More than 19,997* published standards in ISO collection.
- The ISO standards development process is carried out through experts participating in committees and working groups.
- Agreement/approval of a standard reflects a double layer of consensus – first within the industry (market players) and then across ISO member countries.

▪ * ISO in figures as of 31st December 2013

ISO Standards for Financial Services

ISO Technical Committee TC 68

Financial Services

SC2
Security

SC4
Securities

SC7
Banking

LEI Standard
ISO 17442

ISO 20022
RMG

WG5
ISO 20022 Technical
Standard

TSG

RA

SEGs

Usage of standards for financial transactions

- In financial services, standards exist to support our business processes, to make business more efficient, predictable, and as ISO states, sustainable.
- Stakeholders in the industry develop and use standards to mitigate business and operational risks, to improve efficiency and drive out cost, since standards reduce transaction errors, failures, and fraud. Standards lessen or eliminate the financial consequences of NOT having secure, complete and clear information needed to complete financial transactions.
- It has become important and evident that to be effective, standards should cover the end-to-end players in the processing chains within the financial services industry. To that end, financial standards groups aim to work together on a regular and coordinated basis.

Security standards to support financial transactions

General areas - PIN, Biometrics, Key management, PKI, Encryption, Cryptography

Published Standards

- ISO 9564 Personal Identification Number (PIN) management and security
- ISO 11568 Key management (retail)
- ISO 13491 Secure cryptographic devices (retail)
- ISO 13492 Key management related data element -- Application and usage of ISO 8583 data elements 53 and 96
- ISO 15782 Certificate management for financial services (PKI)
- ISO 16609 Requirements for message authentication using symmetric techniques
- ISO 20038 Banking and related financial – Key Wrap
- ISO 21188 Public key infrastructure management for financial services - Practices and policy framework

Technical Reports

- ISO 13569 Information security guidelines
- ISO 14742 Recommendations on cryptographic algorithms and their use
- ISO 19092 Biometrics
- ISO 19038 Banking and related financial services -- Triple Data Encryption Algorithm (DEA) modes of operation

Identifiers and classification standards

- There often is a need to standardize on specific data elements, so usage of codes and identifiers, like the ISO 17442 LEI standard developed for legal entity identification, are seen in financial services standards.

For example:

- ISO 6166, International Securities Identification Numbering System (ISIN)
- ISO 10383 Codes for exchanges and market identification (MIC)
- ISO 10962 Classification of Financial Instruments (CFI code)
- ISO 18774 Financial Instrument Short Name (FISN) - in development
- ISO 13616 International bank account number (IBAN)
- ISO 18245 Retail financial services – Merchant category codes
- ISO 9372 Business Identification Code (BIC)
- ISO 4217 Codes for the representation of currencies and funds
- ISO 17442 Financial Services – Legal Entity Identifier (LEI)

Modelling and messaging standards

Another large component of financial services standards is the financial messaging that supports exchanges or transport of data. The clarity of the meaning of the data and elements in these exchanges is important, so agreement on the definitions and meaning of this data or pieces of information is required.

For example:

- ISO 8583 Financial transaction card originated messages
- ISO 9992 Messages between the integrated circuit card and the card accepting device
- ISO 11649 Structured creditor reference to remittance information
- ISO 15022 Data Field Dictionary

- **ISO 20022 Universal financial industry message scheme**
 - ISO 20022 consists of the following parts:**
 - **Part 1: Metamodel**
 - **Part 2: UML profile**
 - **Part 3: Modelling**
 - **Part 4: XML Schema generation**
 - **Part 5: Reverse engineering**
 - **Part 6: Message transport characteristics**
 - **Part 7: Registration**
 - **Part 8: ASN.1 generation**

Highlights: the ISO 20022 Standard

- In May 2013, a revision of ISO 20022 was published
 - 8 parts were published, as listed on the previous slide
 - All parts were published as 'International Standards'
- There are impacts and benefits for different community participants using ISO 20022:
 - Submitters
 - Implementers
 - Tool Providers
 - The Registration Authority
 - ISO 20022 Standards Evaluation Groups (SEGs)
 - ISO 20022 Technical Support Group (TSG)

What's new in the 2013 version of the ISO 20022 standard?

Formalization of business modeling from inception (the BusinessProcess) to end (the MessageDefinition)

Capturing message transport characteristics

Embracing other syntaxes

A wider choice of modeling tools

Additional data types

Improved and consistent way to express business rules

Streamlined ChoiceComponents

- The ISO 20022 Registration Authority (SWIFT) prepared a document providing an overview of the new features in the 2013 edition of ISO 20022 and has updated the ISO 20022 development process based on the new edition on the iso20022.org website.

Highlights: the ISO 20022 Standard, continued

- Work continues on adding features to the ISO 20022 standard
- This proposed new work will concentrate on adding Semantic Models to the ISO 20022 standard.
- New benefits and capabilities from this proposed work:
 - will provide a map above the existing layers of the ISO 20022 Repository
 - will standardize access to the ISO 20022 Repository and the externally visible content of the Repository
 - will support improved navigation (query and interrogation of the ISO 20022 Repository as ISO 20022 adoption expands to cover additional business processes
 - will improve data consistency
 - will enable semantic mapping, as a standard approach, with other financial dictionaries
 - will support adoption of the ISO 20022 Business Model by communities and individual companies

Highlights: ISO 20022 Development and Adoption

- ISO 20022 has been developed and adopted in 5 business domains so far
 - Cards and Related Financial Services
 - Foreign Exchange
 - Payments
 - Securities
 - Trade Finance

Statistics on ISO 20022 Development

- Since 2005, when the first development was submitted for ISO 20022, 51 applications have been approved for ISO 20022 development
- Of these, 31 have completed development
- These developments represent 328 message definitions using ISO 20022

Adoption Reporting

- On the official iso20022.org website, the ISO 20022 Registration Authority maintains information on ISO 20022 adoption. Currently 71 adoption initiatives have been reported.
 - available to iPad users through an ISO 20022 Adoption mApp
 - available to non-iPad users under a combination of introductory slides and detailed PDF report

ISO 20022 Adoption mApp - Payments



Resources for ISO 20022

- www.iso20022.org
including the ISO 20022 mApp and the adoption reporting page
- ISO 20022 For Dummies book

Thank you!