ISO TC 68
Financial Services
Creation date: 1972

SCOPE
Standardization in the field of banking, securities and other financial services.

Financial Services - The Importance of Interoperability (ISO TC 68)

Presented by Jim Northey, ISO TC 68 Chair
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ISO TC 68 serves its subcommittees and the global financial services industry

Global Financial Services Industry

Financial Services Security
- ISO TC 68/SC 2
- ISO TC 68/SC 8
- ISO TC 68/SC 9

Reference Data
- Legal entity identification
- Financial instrument identification
- Financial instrument classification

Financial Information Exchange
- ISO 20022, ISO 15022, ISO 8583
- Ontologies, models

ISO 20022 RMG
## ISO/TC 68 Financial Services

### Reference Data (ISO TC 68/SC 8)
- Identifiers, Classifiers, and Codes
- Consistency of Data
- Records and Notations
- Interoperability of Concepts and Definitions
- Reference Data Models
- Data Dictionaries and Repositories
- Financial Instruments
- Structure and Processes
- Payment Domain Support
- Identification and classification of payments instruments

### Information Exchange (ISO TC 68/SC 9)
- Modelling
- Financial Messaging
- Formats/Syntax
- Protocols
- Application Program Interfaces (APIs)
- Application of Semantics/Ontologies
- Mobile Information
- Common Definitions and Meanings and re-use Principles
- Assessment of Process Reengineering on Opportunities for New Interchange Standards

### Standing Groups
- Chairman’s Advisory Group (CAG)
- Communications Sub-group (SG 4)
- FinTech Technical Advisory Group (TAG 1)
- Standards Advisory Group (SAG) (AG 2)
- Best Practices Advisory Group (AG 3)
- Sustainable Finance Advisory Group (AG 4)
- Digital Currency Advisory Group (AG 5)
- ISO 20022 Registration Management Group (ISO 20022 RMG) Partner Organization

### Security Sub-committee (ISO TC 68/SC 2)
- PKI
  - Encryption
  - Biometrics
- Cryptography
  - PIN
  - Physical Security
- ATM/POS
  - Firewalls/Internet Safety
  - Consumer Devices
ISO TC 68 acts as a service body to its subcommittees

- ISO TC 68/SC 2 Information Security
- ISO TC 68/SC 8 Reference Data
- ISO TC 68/SC 9 Information Exchange
- ISO TC 68/CAG Strategic Leadership Group
- Fintech Advisory Group ISO TC 68/TAG 01
- Standard Advisory Group ISO TC 68/AG 02
- Best Practices Advisory Group ISO TC 68/AG 03
- Sustainable Finance Advisory Group ISO TC 68/AG 04
- Communication Group ISO TC 68/SG 04
- Digital Currency (CBDC and non-FIAT) Study Group ISO TC 68/AG 05
- ISO 20022 Registration Management Group

ISO TC 68 Financial Services
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ISO 20022

• Key standard for business model and messaging across all of financial services
• https://www.iso20022.org/
ISO 20022

- It describes a common platform for the development of messages using:
  - a modelling methodology to capture in a syntax-independent way financial business areas, business transactions and associated message flows
  - a central dictionary of business items used in financial communications
  - a set of XML and ASN.1 design rules to convert the message models into XML or ASN.1 schemas, whenever the use of the ISO 20022 XML or ASN.1-based syntax is preferred
    - Extended to additional syntax such as JSON
ISO 17442 in ISO 20022

- **BusinessComponent**
  - **BusinessElement** NationalRegistrationNumber: Max35Text
  - **BusinessElement** PartyType: PartyTypeCode
  - **BusinessElement** Declaration: Max350Text
  - **BusinessElement** TypeOfIdentification: TypeOfIdentificationCode
  - **BusinessElement** TaxIdentificationNumber: Max35Text
  - **BusinessElement** LEI: LEIdentifier

**ISO 20022 Definition:** Legal Entity Identifier is a code allocated to a party as described in ISO 17442 "Financial Services – Legal Entity Identifier (LEI)".

- **BusinessComponent**
  - **PersonIdentification**
    - **BusinessElement** DriverLicenseNumber: Max35Text
    - **BusinessElement** IdentityCardNumber: Max35Text
    - **BusinessElement** EmployerIdentificationNumber: Max35Text
    - **BusinessElement** PassportNumber: Max35Text
    - **BusinessElement** AlienRegistrationNumber: Max35Text
    - **BusinessElement** SocialSecurityNumber: Max35Text

- **BusinessComponent**
  - **OrganisationIdentification**
    - **BusinessElement** AnyBIC: AnyBICIdentifier
    - **BusinessElement** BICFI: BICFIIdentifier
    - **BusinessElement** DUNS: DUNSIdentifier
    - **BusinessElement** CHIPSUniversalIdentifier: CHIPSUniversalIdentifier
    - **BusinessElement** BankPartyIdentification: Max35Text
    - **BusinessElement** MIC: MICIdentifier
    - **BusinessElement** BICNonFI: BICNonFIIdentifier
    - **BusinessElement** EANGLN: EANGLNIdentifier

ISO TC 68 Financial Services
A Quest for Semantics – some history

• 2004 ISO TC 68/WG 4 – proposal to use OWL for the ISO 20022 model
• 2015 ISO TC 68/SC 9/WG 1 – Semantics for ISO 20022
  ▪ Still continuing
  ▪ ISO/TR 22126-3:2023
    o Financial services — Semantic technology — Part 3: Semantic enrichment of the ISO 20022 conceptual model
  ▪ ISO/TR 22126-5:2022
    o Financial services — Semantic technology — Part 5: Mapping from FIX Orchestra to the common model
• 2021 ISO TC 68/SC 9/WG 4 – ISO 20022 Revision
Where are we now?

- Difficulty in using W3C based semantics
- Definite need for interoperability
- Will Generative AI provide a path for interoperability?