

# What means SOA for the EHRS-FM?

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- What is driving us?
  - HL7 Strategic Initiative
  - Customer expectations

# SDOs Specialized for Spec Types

<b>Specification Type</b>	<b>SDOs (Selection)</b>
Domain crossing technical/technological standards	ISO/IEC, ETSI, NIST
Domain specific specifications	HL7, ISO TC 215, CEN TC 251, ASTM, IHTSDO, WHO
Domain crossing architecture related specifications	OMG, TOG
Domain crossing process related specifications	OASIS
Internet related specifications	W3C, IETF
Business/trading specifications and instances	UN, CENELEC, GS1

# Reliability of Standards

- Norms (CEN, ETSI, CEN-ELEC, NEN, BSI, DIN)
- Standards
  - de jure standards (ISO, HL7, OASIS, IHTSDO, UN-CEFACT)
  - Industry standards (DICOM, OMG, Continua, Liberty Alliance,
  - de facto standards (Windows)

# Types of Standards

- Technical Reports
- Technical Specifications
- International Standards
  
- Narrative specifications
- Semiformal specifications
- Formal specifications
- Platform-independent specifications
- Platform-specific specifications

# Standards and Publicly Available Specifications (PAS)

- Domain-Independent Specifications
- Domain-Specific Specifications
- General Specifications
- Application-Related Specifications
- Infrastructural Specifications
- Architecture Standards
- Modelling and Methodology Standards
- Requirements Standards
- Communication Standards
- Infrastructure Standards
- Privacy Standards
- Safety Standards
- Token Standards
- Quality Standards
- Policy Standards
- Terminology and Ontology Standards
- ID Management Standards

# Standards Classification Health Informatics (1/2)

- Architecture standards
  - TOGAF, ISO/IEC 10746, CORBA, MDA, HISA, OASIS Reference Model for SOA, OASIS Ref. Architecture for SOA Foundation, ...
- Modeling standards
  - UML, ISO/IEC 19793 UseUML4ODPSpec, ISO/IEC 15414 (ODP-RM Enterprise Language), ISO 25720 Genomic sequence variation markup language
- Process standards
  - RUP, The Open Group Service Integration Maturity Model, SOA Governance Framework
- Communication standards
  - HL7 v2.x/3, ISO 17113 Health informatics – Exchange of information between healthcare information systems – Development of messages, ISO/IEEE 11073 Health informatics -- Point-of-care medical device communication, UN CEFACT, ebXML
- Terminology and ontology standards
  - UMLS, LOINC, SNOMED, SOA Ontology Infrastructure standards

# Standards Classification Health Informatics (2/2)

- Requirements Standards
  - EHRS FM, SFM, DAMs
- Infrastructure standards
  - LOINC, ASTM E1714-00: “Standard guide for properties of a Universal Healthcare Identifier”
  - ISO 17090: “Public key infrastructure”, ETSI TS 101733: “Electronic Signature Formats”
- Privacy standards
  - ASTM E1987-98: “Standard guide for individual rights regarding health information”, CEN 13729: “Secure user identification - Strong authentication using microprocessor cards”; ISO/IEC PDTS Pseudonymisation Practices for the Protection of Personal Health Information and Health Related Services
- Safety standards
  - CEN 13694: “CEN Report: Safety and security related software quality standards for healthcare”; ISO/DTS 25238 Classification of Safety Risks

## Basic Question

- Is the EHRS-FM limited to the „What“, or does it include the technology-independent „How“?

- A system's architecture implies most other considerations.

Composite  
Security &  
Privacy SAM

ISO 22600  
PMAC









