

**From the eOTD to international
standards for open technical
dictionaries (ISO 22745) and
master data quality (ISO 8000-
100)**

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Cataloging at Source - the last piece of the puzzle



ISO 22745, *Open technical dictionaries and their application to master data*

Part 1: Overview and fundamental principles

Part 2: Vocabulary

Part 10: Dictionary representation

Part 11: Guidelines for the formulation of terminology

Part 13: Identification of concepts and terminology

Part 14: Dictionary query interface

Part 20: Procedures for the maintenance of an open technical dictionary

Part 30: Identification guide representation

Part 35: Query for characteristic data

Part 40: Master data representation

Part 50: Registration of open technical dictionaries*

Part 200: Implementation guide for incorporating master data into ISO 10303 product data*

Part 300: Master data guides*

All parts except those marked with an asterisk have been published or are expected to be published by December, 2009.

ISO 29002, *Exchange of characteristic data*

- Part 2: Vocabulary*
- Part 4: Basic entities and types
- Part 5: Identification scheme
- Part 6: Concept dictionary terminology reference model
- Part 10: Characteristic data exchange format
- Part 20: Concept dictionary resolution services
- Part 31: Query for characteristic data

All parts except those marked with an asterisk have been published or are expected to be published by December, 2009.

ISO 8000, *Data quality*

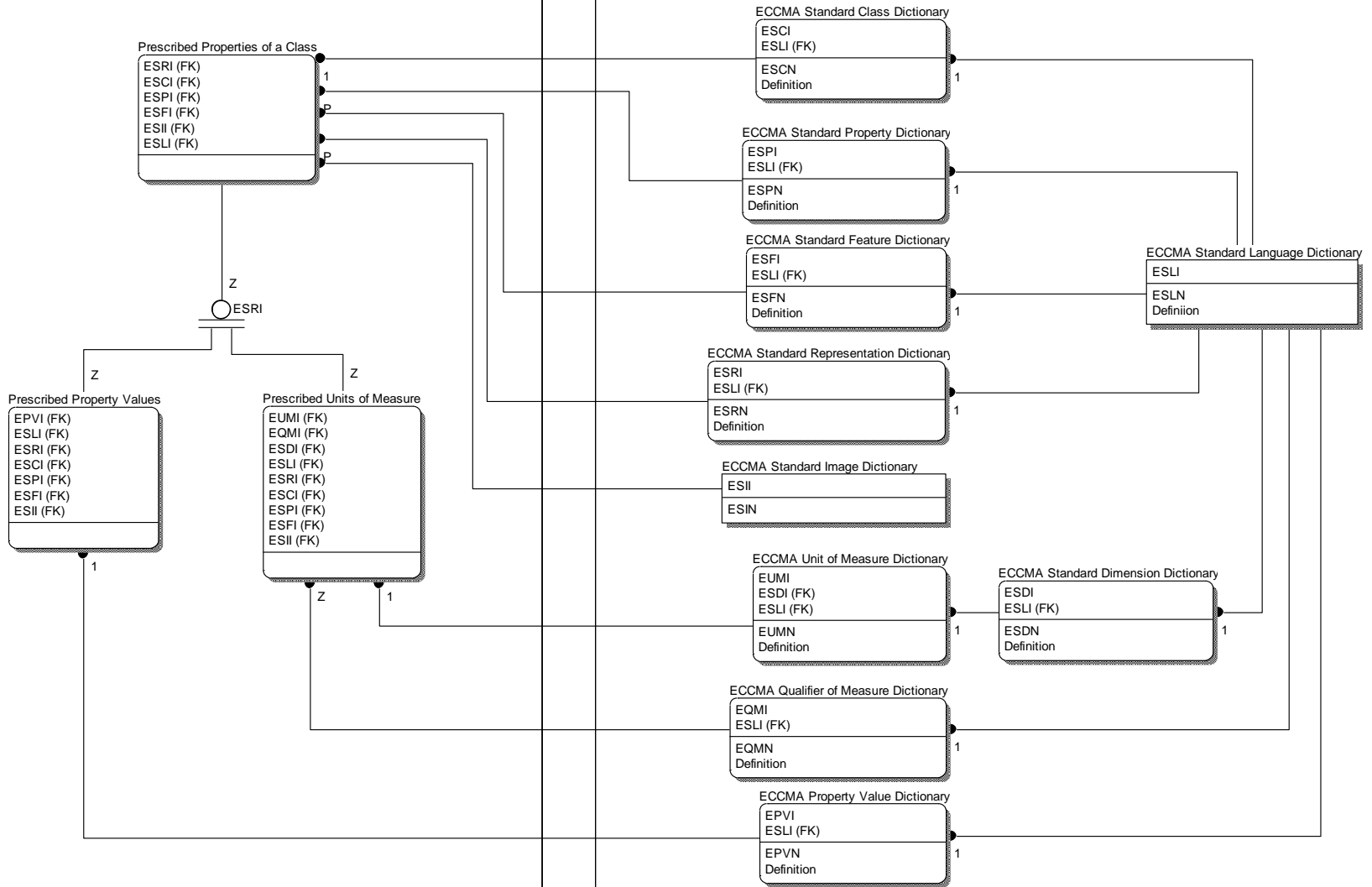
- Part 1: Overview, principles and general requirements*
- Part 2: Vocabulary*
- Part 100: Master data: Exchange of characteristic data: Overview
- Part 102: Master data: Exchange of characteristic data: Terminology
- Part 110: Master data: Exchange of characteristic data: Syntax semantic encoding, and conformance to data specification
- Part 120: Master data: Exchange of characteristic data: Provenance
- Part 130: Master data: Exchange of characteristic data: Accuracy
- Part 140: Master data: Exchange of characteristic data: Completeness
- Part 150: Master data: Quality management framework

All parts except those marked with an asterisk have been published or are expected to be published by December, 2009.

2005

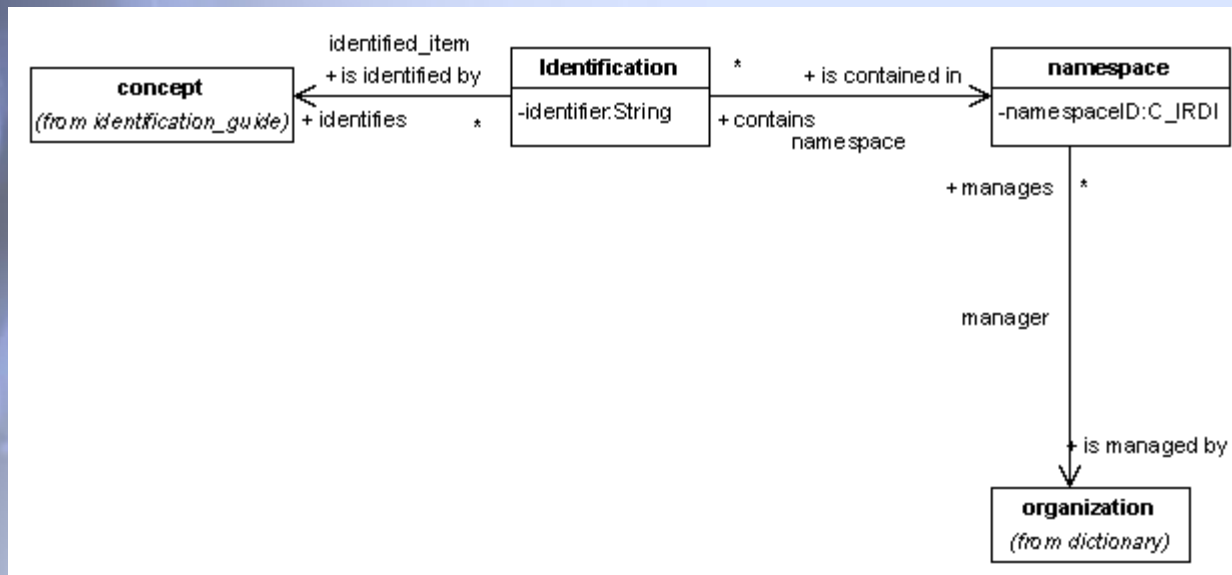
eOTD Implementation Guide

ECCMA Open Technical Dictionary



2009

- Over 35 UML diagrams
- Over 25 XML schemas and DTDs





Cataloging at source

Lower the cost and increase the quality of cataloging items of supply and production by facilitating cataloging at source

- The supplier creates and delivers characteristic data in a standard format along with product technical data
- Elimination of most manual aspects of cataloging
- Elimination of data mapping

Timeline

- 2001-06-14/15: First Workshop on Product/Property Dictionaries, at ISO TC 184/SC 4 meeting, San Francisco, California, USA
- 2002-02-27: Second Workshop on Product/Property Dictionaries, at ISO TC 184/SC 4 meeting, Myrtle Beach, South Carolina, USA

ISO TC 184/SC 4, Industrial data

- Participating members

- Austria (ASI)
- Brazil (ABNT)
- Bulgaria (BDS)
- China (SAC)
- Czech Republic (UNMZ)
- France (AFNOR)
- Germany (DIN)
- Italy (UNI)
- Japan (JISC)
- Korea, Republic of (KATS)
- Netherlands (NEN)
- Norway (SN)
- Portugal (IPQ)
- Russian Federation (GOST R)
- South Africa (SABS)
- Spain (AENOR)
- Sweden (SIS)
- Switzerland (SNV)
- United Kingdom (BSI)

- Observing members

- Australia (SA)
- Belarus (BELST)
- Canada (SCC)
- Denmark (DS)
- Finland (SFS)
- Hong Kong, China (ITCHKSAR)
(Correspondent member)
- Hungary (MSZT)
- Lithuania (LST)
- Malaysia (DSM)
- Mexico (DGN)
- Mongolia (MASM)
- Romania (ASRO)
- Serbia (ISS)

Standards development

- Project “Making the NATO Codification System an International Standard”
 - Funded by Defense Logistics Agency
 - 2003 to 2009
 - Prime contractor: CTC
 - Subcontractors: ECCMA, Lehigh University
- Many others from around the world contributed

Timeline

- 2004-07-28: Begin new work item (NWI) ballot for “Open technical dictionary”
- 2004-11-11: ISO 22745 approved as a ISO project
- 2005-07-11: Begin NWI ballot for ISO 8000, “Catalogue management systems — Requirements”
- 2005-11-22: ISO 8000 approved a ISO project
- 2006-03-10: SC 4 adoption of ISO 8000 as umbrella for all SC 4 data quality standardization

Dictionaries Managed by ECCMA



ECCMA Global Attribute Schema

This a schema that classifies and identifies attributes. The EGAS is used to build standardized catalogs and product specifications. (NATO Master Requirements Code – MRC)

ENQS
ENQI ENQC

ECCMA Noun Qualifier Schema

This a schema that classifies and identifies noun qualifiers. The ENQS is used to build standardized catalogs and product specifications. (NATO Approved Item Name – AIN)



Universal Standard Products and Services Classification

This is a schema that classifies and identifies commodities. The UNSPSC is a standardized account code in analyzing expenditure (Spend Analysis). The UNSPSC is synchronized with the United Nations Standard Product and Services Code (UN/SPSC).

Standardized Sell Side Catalog

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[Peter Benson, Second
Workshop on
Product/Property Dictionaries,
2002-02-27]

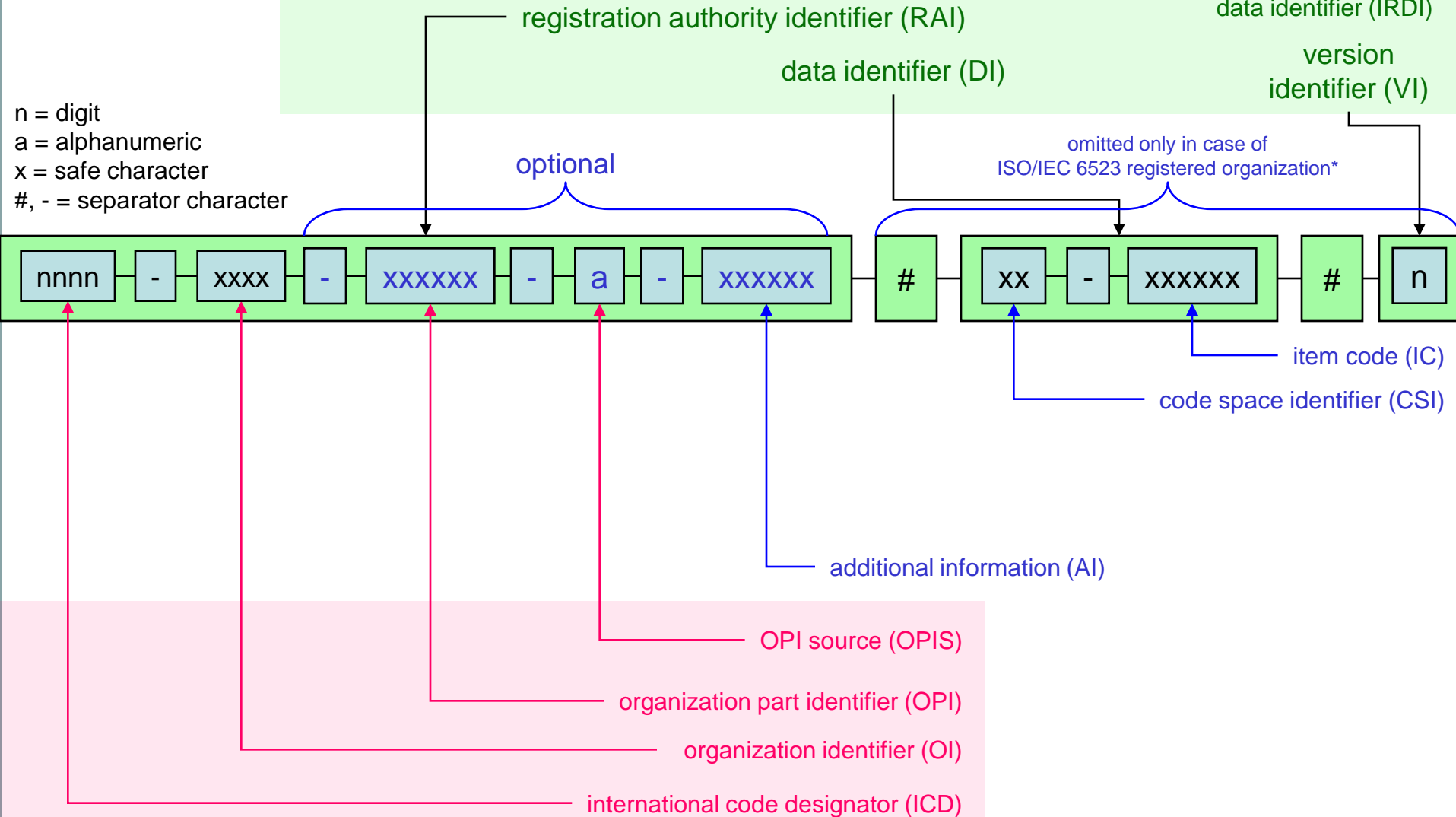
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ISO/IEC 11179-6

Annex A defines the international registration data identifier (IRDI)

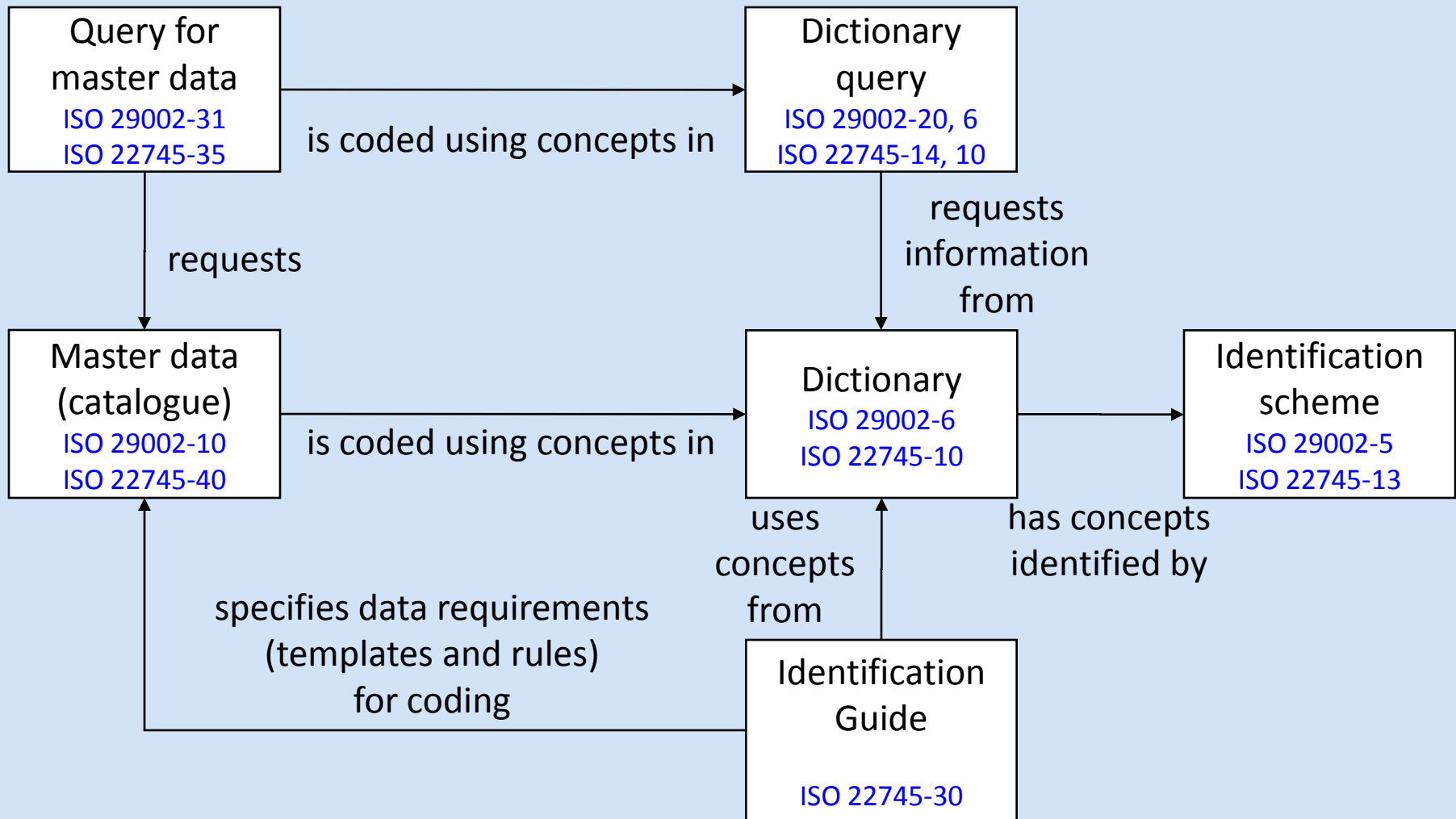


ISO/IEC 6523

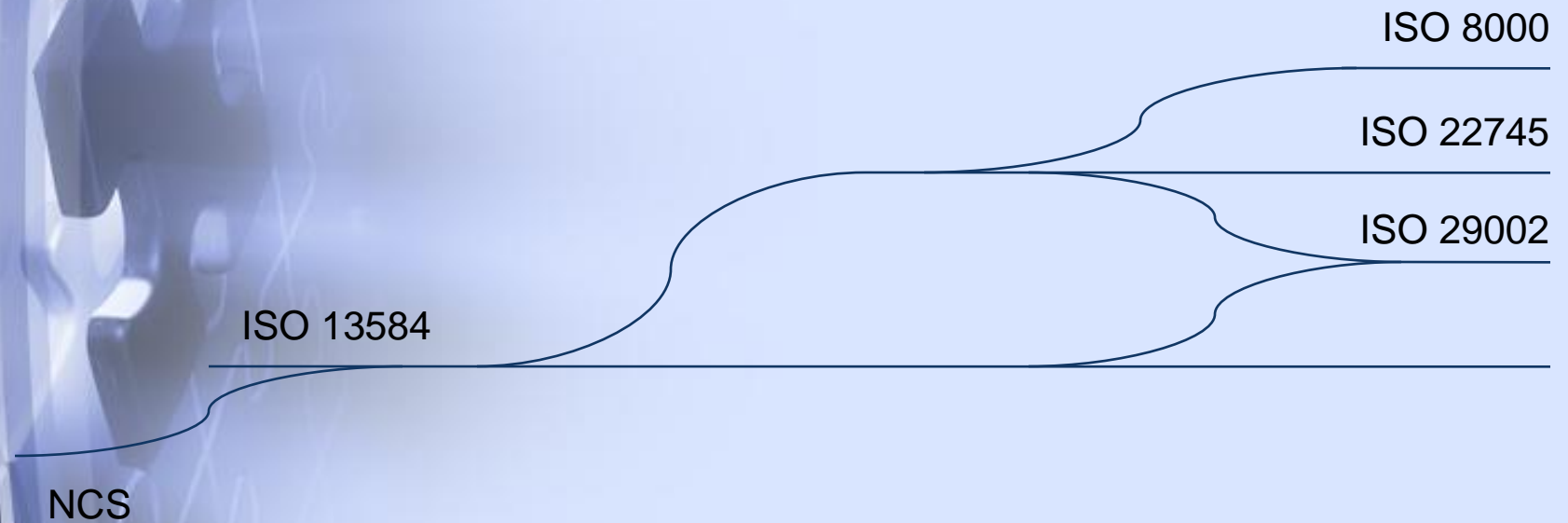
defines requirements for identification of organization identification schemes

ISO 29002-5

defines syntax and requirements for concept identifiers



Evolution



Future

- Raise existing ISO 8000, 22745, and 29002 parts from Technical Specification to International Standard status
- Complete the “General data quality” series of parts of ISO 8000
- Develop the “Transaction data quality” series of parts of ISO 8000
- ...
- **IMPLEMENT!**