Converting Standard Terminology into usable Metadata

Presented by
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Executive Director and Chief Technical Officer
Electronic Commerce Code Management Association (ECCMA)
YOUR POINTING AT IT WON'T HELP - THE COMPUTER RECORDS SHOWS NONE IN STOCK.

**master data**

data held by an organization that describes the entities that are both independent and fundamental for an enterprise, that it needs to reference in order to perform its transactions

*Master data describes individuals, organizations, locations, goods, services, rules and regulations.*

- Customers
- Suppliers
- Materials
- Services
- Assets
- Locations
- Employees
- Shareholders
- ........
An international non-profit membership association of industry and government master data quality managers and their application or service providers

Our Mission

To increase the quality and lower the cost of descriptions through developing and promoting the implementation of International Standards for Master Data Quality
Military/Commercial Bridge

“…commercial practices are not precise enough to support cost-effective military inventory management and military cataloging is far too detailed and costly for commercial purposes …ECCMA offers a way to bridge the gulf” Mr. Alan Williams, Asst Dept Minister, Canadian Department of National Defence.
The eOTD is a foundation for design collaboration and industry standards.

ISO 22745 and the eOTD are the foundational enablers for the breakthrough our industry needs in the next generation of direct, accurate, and effective collaboration across the supply chain at meaningful and granular levels of data exchange never before imagined.

Alton Sanders
Senior Manager,
IDS Engineering Standards Control Function
PW Knowledge and Reuse Management (KARMA)
The steps to quality descriptions
(unambiguous and language independent)

- Quality metadata
- Quality master data
- Quality descriptions (computer generated)
✓ Common Concept Encoding
“metadata”

- Across the supply chains
- In design and engineering applications
  CAD-CAM-CAE
- In ERP applications
  vendor-customer-material-service masters
- In production applications
  PDM
- In product life cycle management
- In asset management applications
- In human resources applications
### Common Concept Encoding

**“master data”**

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<th>Value</th>
<th>Measure ID</th>
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<table>
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<th>Measure term</th>
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<tbody>
<tr>
<td>eOTD CLASS NAME</td>
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<tr>
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<tr>
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<td>WIDTH ACROSS CORNERS</td>
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<td>HEAD HEIGHT</td>
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<tr>
<td>COUNT PER PACK</td>
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<tr>
<td>PACK PRICE</td>
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</table>

Machine Bolt; Product Number: 3225020037; Nominal thread diameter: 1.0 inches; Width across flats: 1.450 inches; Width across corners: 1.653 inches; Head height: 0.591 inches; Count per pack: 10; Pack price: $0.80 (M-Bolt;NTD1.0”;WAF1.45”;CPP10)
Original ERP Short Description

ELECTRIC MOTOR

Original Supplier Catalog Description

P/N 1234EF: 400KW 6 POLE 525VOLT FRAME HGF355E: FT MOUNTED RPM 988 SF1,0 CODE G:IP65:INS F:IL/IN 6.6:DUTY SI: NR.88695 11 00:AMB 40DEGREE C:DELTA T 80DEG: COS 0,86:COOLING IC 411:ALT1000M

Standardized ERP Short Description

MOTOR, ELEC: 400 KW, 525 V, 988 RPM

Standardized ERP PO Description

MOTOR, ELECTRIC: POWER RATING 400 KW, ELECTRICAL RATING 525 V, FRAME HGF355E, FOOT MOUNTING, SPEED 988 RPM, INSULATION CLASS F, 6 POLES, SERVICE FACTOR 1.0 CODE G, ENCLOSURE IP65, MNFR P/N: 1234EF MNFR: WEG, FFT: IL/IN 6.6: DUTY SI: NR.88695 11 00:AMB 40 DEGREE C:DELTA T 80DEG: COS 0,86:COOLING IC 411:ALT 1000M
NCS -- eOTD -- ISO 22745

Master Data
NSN
eOTD-r-xml
ISO 22745-40

is coded using concepts in

conforms to the constraints in

Identification Guide
FIIG
eOTD-i-xml
ISO 22745-30

Dictionary
H6+MRD
eOTD-xml
ISO 22745-10

Identification Scheme
ACodP-1
ISO 22745-13

ISO 22745-10

The ECCMA Open Technical Dictionary (eOTD) is a metadata registry
Terminology mapping

- Public domain concept identifiers
- Free identifier resolution to underlying terminology (web services)
- **Hyperlink to source standards**
- Multilingual
- Multiple terms, definitions and images linked to single concept identifier
The ECCMA Open Technical Dictionary (eOTD)

- A free tool for standards developers
  - Mapping terminology
  - Harmonizing terminology?
  - Standardized terminology??

- A free tool for publishers to promote their standards
  - eOTD concepts linked to terminology
  - Terminology hyperlinked to source standard (publisher controlled)
Be a part of the data supply chain
ISO 8000 Data quality — Part 110: Master data: Exchange of characteristic data: Syntax, semantic encoding, and conformance to data specification

Data requestor

eOTD-i-xml
(data requirements statement) ISO 22745-30

Data provider

eOTD-q-xml
(query) ISO 22745-35

Sub-Tier eOTD-q-xml

Sub-Tier eOTD-r-xml

ISO 22745-35

ISO 22745-40