Standards for the data value chain

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Standards for the **multilingual** data value chain

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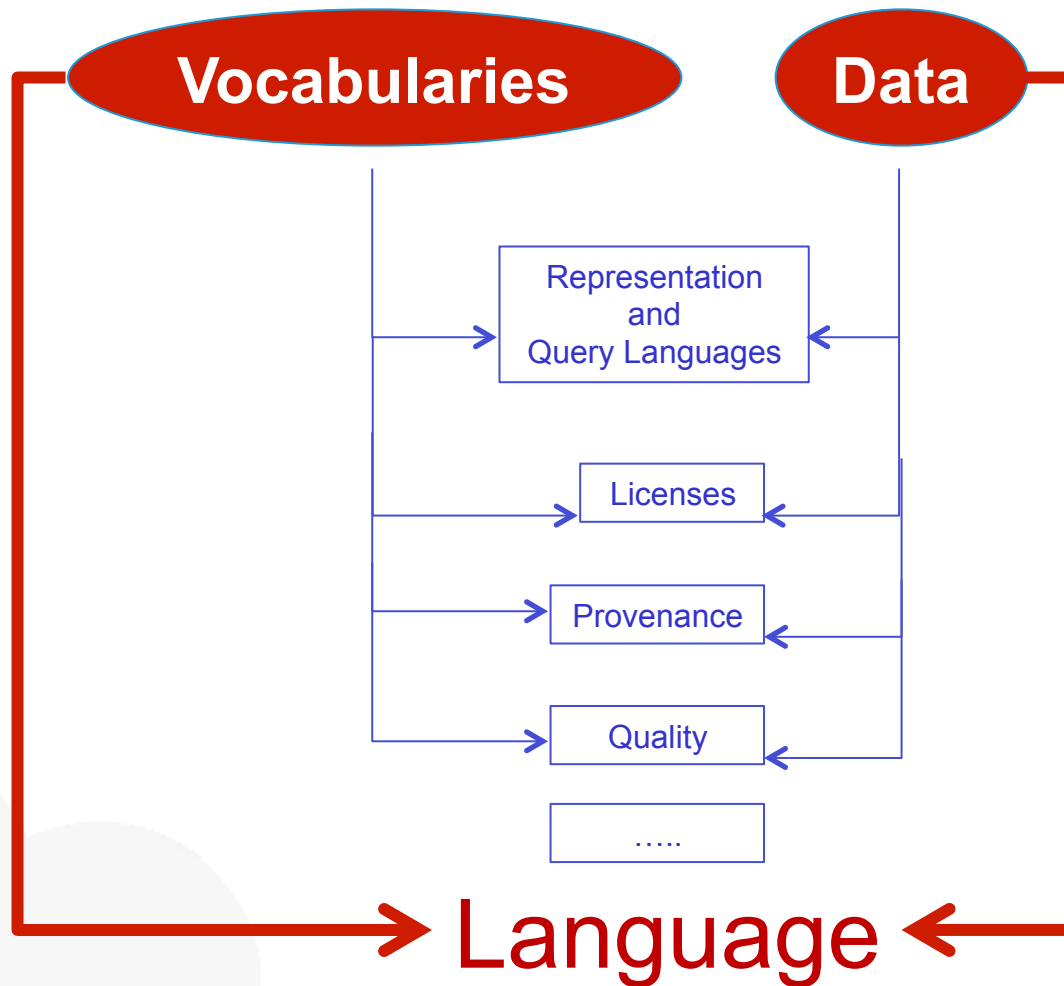# Standards for the **multilingual** data value chain: experiences from the Ontology Engineering Group

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Our own experience in standardization activities

W3C- World Wide Web Consortium

1. **Multilingual**
   1. Ontolex: Ontology Lexica Community Group
   2. BPMLOD: Best Practices for Multilingual Linked Open Data Community Group
   3. LD4LT: Linked Data for Language Technologies Community Group
2. **Data Management and transformation**
   1. SPARQL Working Group
   2. LDP: Linked Data Platform Working Group
   3. RDB2RDF Working Group
   4. RDF Stream Processing Community Group
   5. CSV on the Web Working Group
3. **License**
   1. ODRL Community Group
4. **Quality**
   1. Data on the Web Best Practices Working Group
5. **Provenance**
   1. prov: Provenance Working Group
   2. prov-xg: Provenance Incubator Group
6. **Open Data**
   1. eGovernment Interest Group
7. **Domain Specific**
   1. Semantic Sensor Networks Community Group
   2. SDW: Spatial Data on the Web Working Group
   3. Library Linked Data Incubator Group
   4. Open Linked Education Community Group
   5. Research Object for Scholarly Communication Community Group
   6. Media Annotations Working Group

Open Knowledge Foundation

1. Working Group on Open Data in Linguistics

ISO -International Organization for Standardization

1. ISO/TC 19150 - Geographic Information – Ontology
2. Ad-hoc Group Linked Data – ISO/TC211ISO/TC 37/SC 1 Principles and methods
3. ISO/TC 37/SC 3 Systems to manage terminology, knowledge and content
4. ISO/TC 37/SC 4 Language resource management

AENOR

1. Comité Técnico de Normalización CTN178 Ciudades Inteligentes. Norma UNE 178301 (Smart Cities vocabularies)

Dublin Core Metadata Initiative (CMI)

1. DCMI Metadata Provenance Task Group
2. DCMI Vocabulary Management Community
3. DCMI Bibliographic Metadata Task Group

International Federation of Library Associations (IFLA)

1. Semantic Web Special Interest Group

Europeana Network

1. Technology Developer and Knowledge Partner / Expert

OASIS

1. OSLC: Open Services for Lifecycle Collaboration

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- **What is the best approach to engage with, and grow the standardisation community?**
  - Bottom-up
  - Avoid fragmentation among standardization committees
  - Business Model
    - Open Access & Contribution by paying members (W3C, OASIS, …)
    - Pay per use (ISO, AENOR, …)

- **What de jure and de facto standardisation bodies are relevant for achieving global adoption of Big Data technologies in international standards?**
  - Cross-domain standardization bodies (Web, IoT, Transport, Energy, ….)

- **What are examples for successful standardisation, or failure in certain technical areas relevant for the data value chain?**
  - Promoted by standardization bodies (e.g., RDF, OWL, SPARQL, Ontolex….@W3C)
  - De facto standards (e.g., goodrelations, schema.org, …)

- **In which concrete areas of standardisation do you want BDVA to engage? This may include both aspects of technical interoperability as well as e.g. legal interoperability.**
  - Vocabulary standardization → Lightweight ontologies
  - Multilingualism and Language
  - Conditional access to and processing of data: License, data privacy, …
  - Certification and compliance with regards to data privacy constraints

Contributions from A. Gomez-Pérez (UPM) P. Cimiano (Univ. Bielefeld), G. Aguado (UPM) and E. Montiel (UPM)

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