



*Common Access to EU
Information based on
semantic technology*

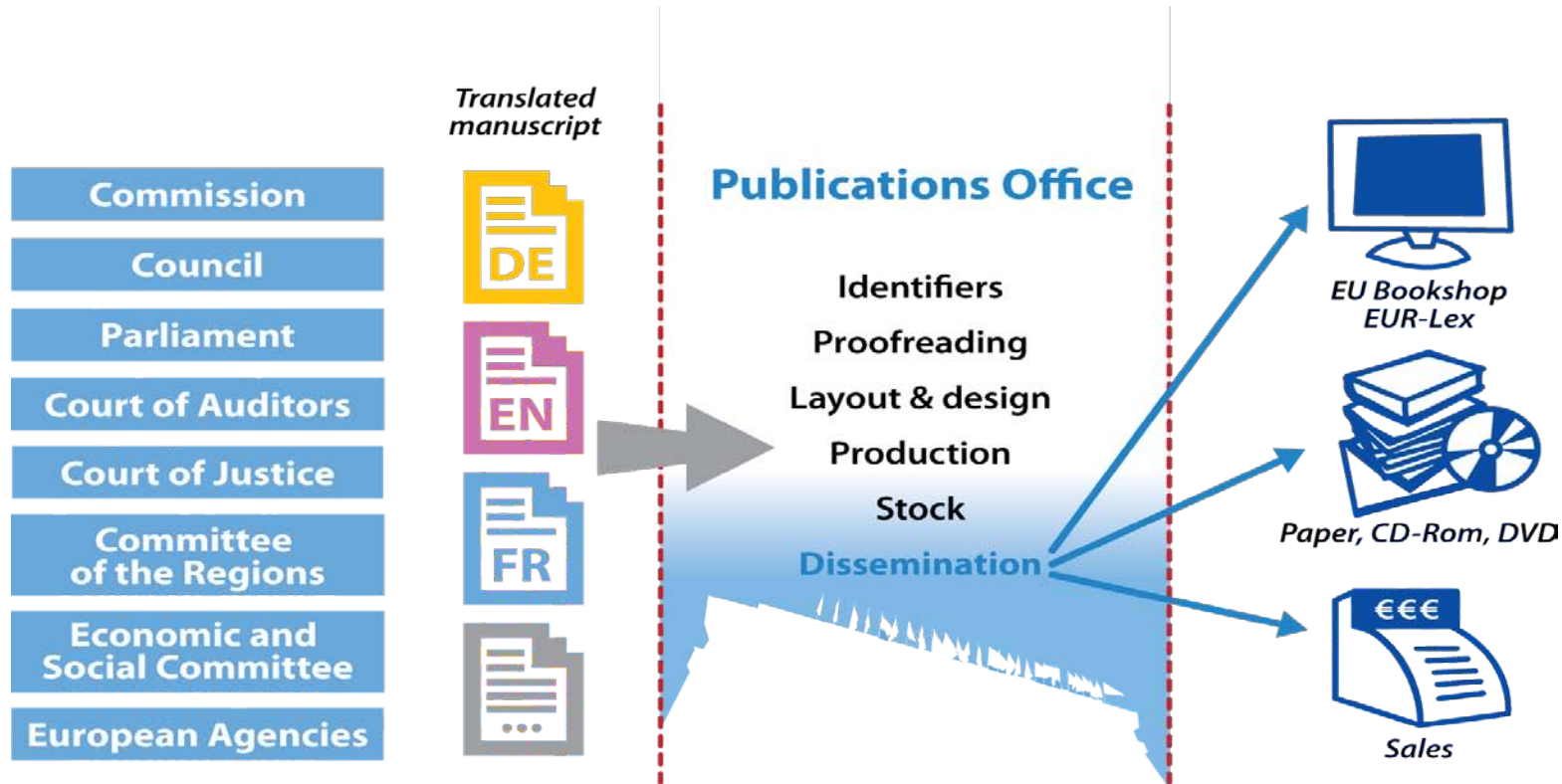
Audience: **W3C Workshop: The Multilingual Web – The Way Ahead**
Presented by: Peter Schmitz
Date: 15/03/2012



- Who is the Publications Office of the EU?
- Common access to EU information based on semantic technology - CELLAR Project
 - Vision and target architecture
 - Use of semantic technology
 - Multilingual aspects
 - Interoperability

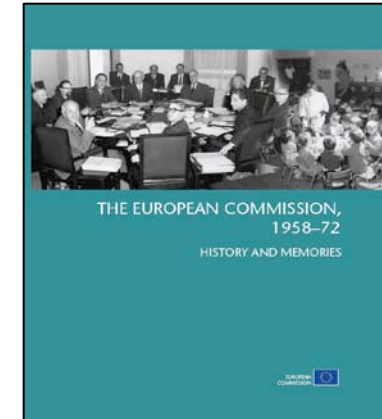
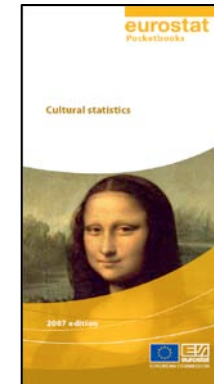
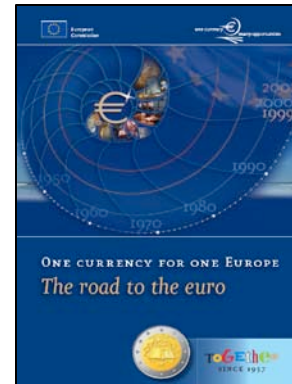
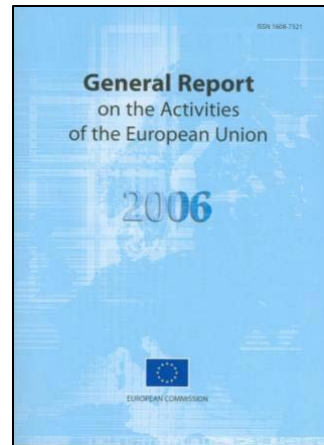
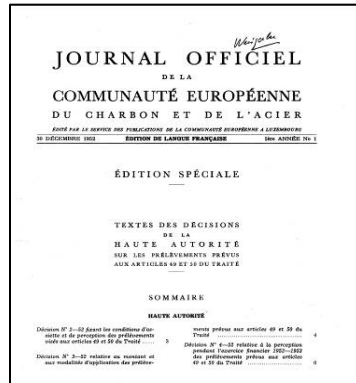


In summary: From the EU to the public



What do we publish?

- “Official” publications



Key production indicators for 2011

- **Official Journal of the European Union**
 - 866 issues, 22/23 languages, five days a week, 1.065.425 pages
 - 411.850 public procurement notices
 - Consolidation of EU Law (52.097 legislative acts)
- **General publications**
 - 5.972 titles, official languages of the EU, but also other languages

Dissemination

- Paper copies
- Online services

Long-term Preservation

- Paper archive
- Digital archive



Main public online services



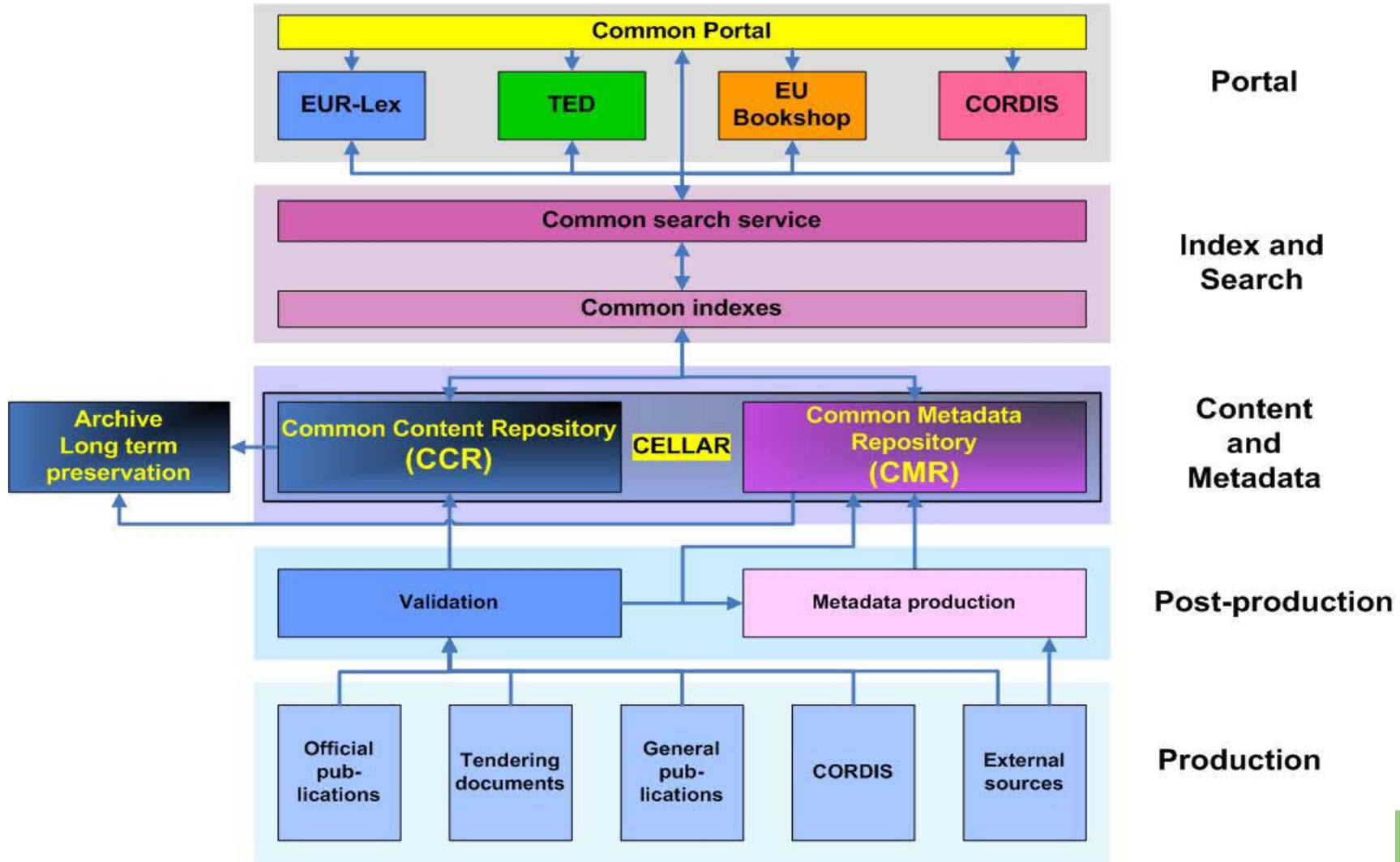
CELLAR Project: Vision

To make available at a **single place** all **metadata** and **digital content** managed by the Publications Office in a harmonised and standardised way in order:

- To guarantee to the citizen a better **access** to law and publications of the European Union;
- To encourage and facilitate **reuse** of content and metadata by professionals and experts;
- To **preserve** content and metadata and access to contents and metadata over time.



CELLAR Project: Target architecture



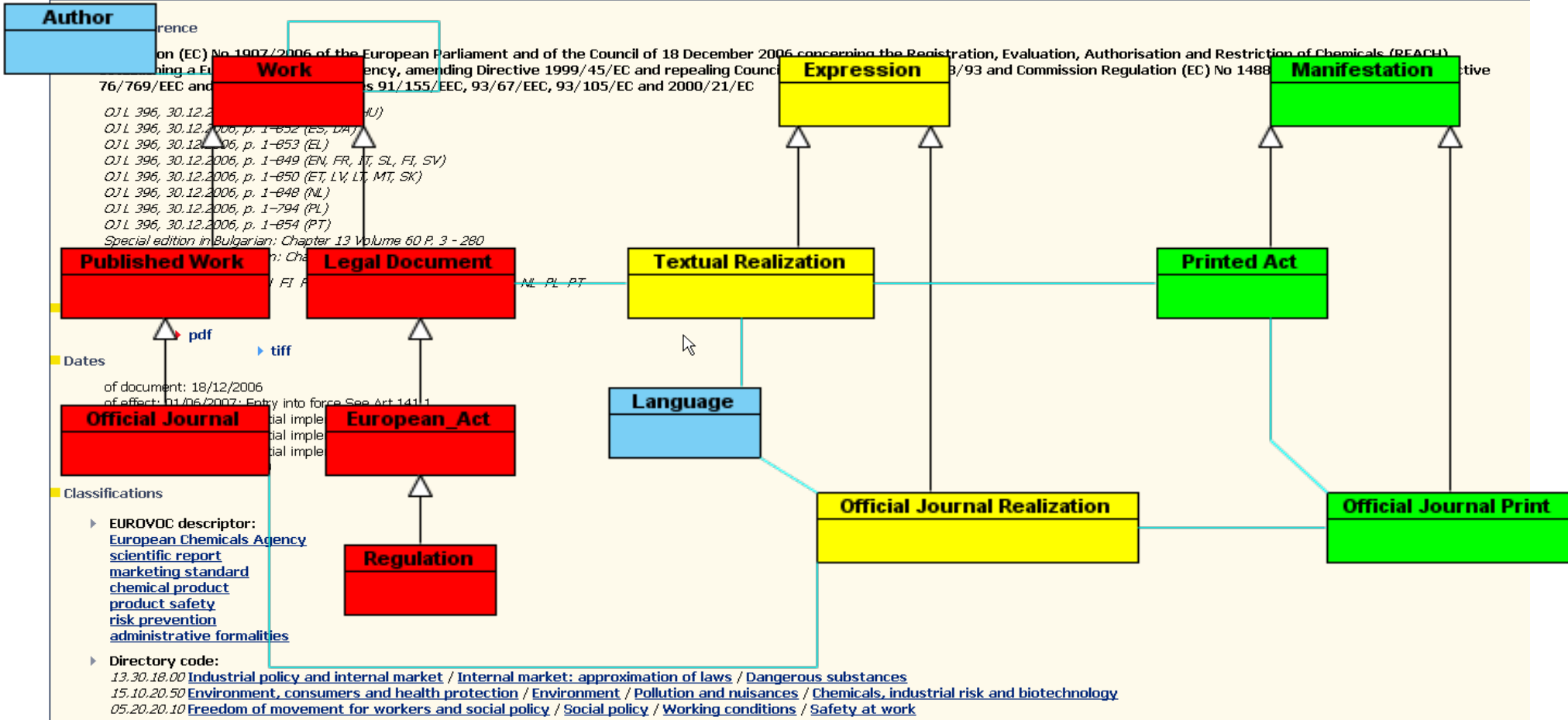
Common data model: Ontology based on FRBR model

FRBR = Functional requirements for bibliographical records

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Metadata represented in RDF

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<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE rdf:RDF [
  <ENTITY % cellarEntities PUBLIC "-//PO-RESOURCE/ENTITIES CELLAR cdm model 1.0/EN" "applications/metaconv/users/metaconv/data/entities/cellar_uris.ent">
  <ENTITY xsd "http://www.w3.org/2001/XMLSchema#">
  <ENTITY cdm "http://publications.europa.eu/ontology/cdm#">
  <ENTITY tdm "http://publications.europa.eu/ontology/tdm#">
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  %cellarEntities;
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Taxonomies represented in SKOS

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    <skos:inScheme rdf:resource="http://publications.europa.eu/resource/authority/corporate-body">
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Example: Multilingualism enabled by co

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Title and reference

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Re-establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

OJ L 396, 30.12.2006, p. 1-851 (CS, DE, HU)
OJ L 396, 30.12.2006, p. 1-852 (ES, DA)
OJ L 396, 30.12.2006, p. 1-853 (EL)
OJ L 396, 30.12.2006, p. 1-849 (EN, FR, IT, SL, FI, SV)
OJ L 396, 30.12.2006, p. 1-850 (ET, LV, LT, MT, SK)
OJ L 396, 30.12.2006, p. 1-848 (NL)
OJ L 396, 30.12.2006, p. 1-794 (PL)
OJ L 396, 30.12.2006, p. 1-854 (PT)
Special edition in Bulgarian: Chapter 13 Volume 60 P. 3 - 280
Special edition in Romanian: Chapter 13 Volume 60 P. 3 - 280

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Text

pdf tiff

Dates

of document: 18/12/2006
of effect: 01/06/2007; Entry into force See Art 141.1
of effect: 01/06/2008; Partial implementation See Art 141.2
of effect: 01/08/2008; Partial implementation See Art 141.3
of effect: 01/06/2009; Partial implementation See Art 141.4
end of validity: 99/99/9999

Classifications

- ▶ EUROVOC descriptor:
[European Chemicals Agency](#)
[scientific report](#)
[marketing standard](#)
[chemical product](#)
[product safety](#)
[risk prevention](#)
[administrative formalities](#)
- ▶ Directory code:
13.30.18.00 [Industrial policy and internal market](#) / [Internal market: approximation of laws](#) / [Dangerous substances](#)
15.10.20.50 [Environment, consumers and health protection](#) / [Environment](#) / [Pollution and nuisances](#) / [Chemicals, industrial risk and biotechnology](#)
05.20.20.10 [Freedom of movement for workers and social policy](#) / [Social policy](#) / [Working conditions](#) / [Safety at work](#)

▶ Descripteur EUROVOC:
[Agence européenne des produits chimiques](#)
[expertise scientifique](#)
[norme de commercialisation](#)
[produit chimique](#)
[sécurité du produit](#)
[prévention des risques](#)
[formalité administrative](#)

EUROVOC

007984

007130

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005070

▶ EUROVOCi deskriptor:
[Euroopa Kemikaalide Amet](#)
[teadusaruanne](#)
[turustusnorm](#)
[keemiatoode](#)
[tooteohutus](#)
[riskiennetus](#)
[haldusformaalsused](#)





Adoption of standards

- METS (Metadata encoding and transmission standard) -> ingestion protocol
- Dublin Core -> core metadata definition
- FRBR compliant -> data model/ontology
- Linked Open Data (LOD) -> access/reuse
 - Web-friendly ("RESTful") Interface
 - RDF / OWL
- Standard Query Language (SPARQL) -> access/reuse





Definition of standards

- Core metadata (Restricted shared set of metadata for each resource based on Dublin Core) -> **enable global search**
- Common authority tables -> **harmonize metadata**
- Exchange protocol for EU legislative procedures -> **interoperability**

Under preparation:

- European Legislative Identifier (ELI) (initiative of EU member countries, supported by the Publications Office) -> **interoperability**



Thank you for your attention!

