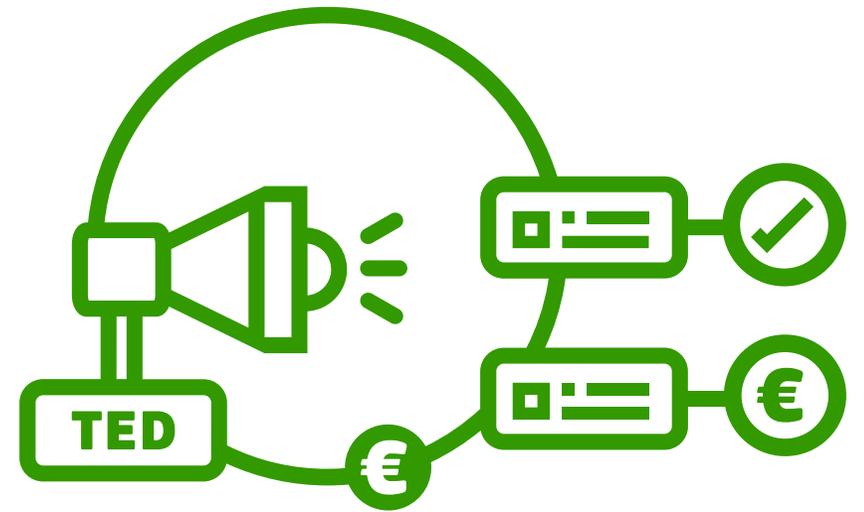




Publications Office
of the European Union

TED SEMANTIC WEB SERVICE

Ioannis Rousochatzakis, Publications Office, 14/06/2023



The Semantic Web

- Allows machines to understand information
- Allows linking of data

Key components

- Resource Description Framework (RDF)
- Ontologies
- Linked data

Key benefits

- Interoperability
- Reasoning



The eProcurement Ontology

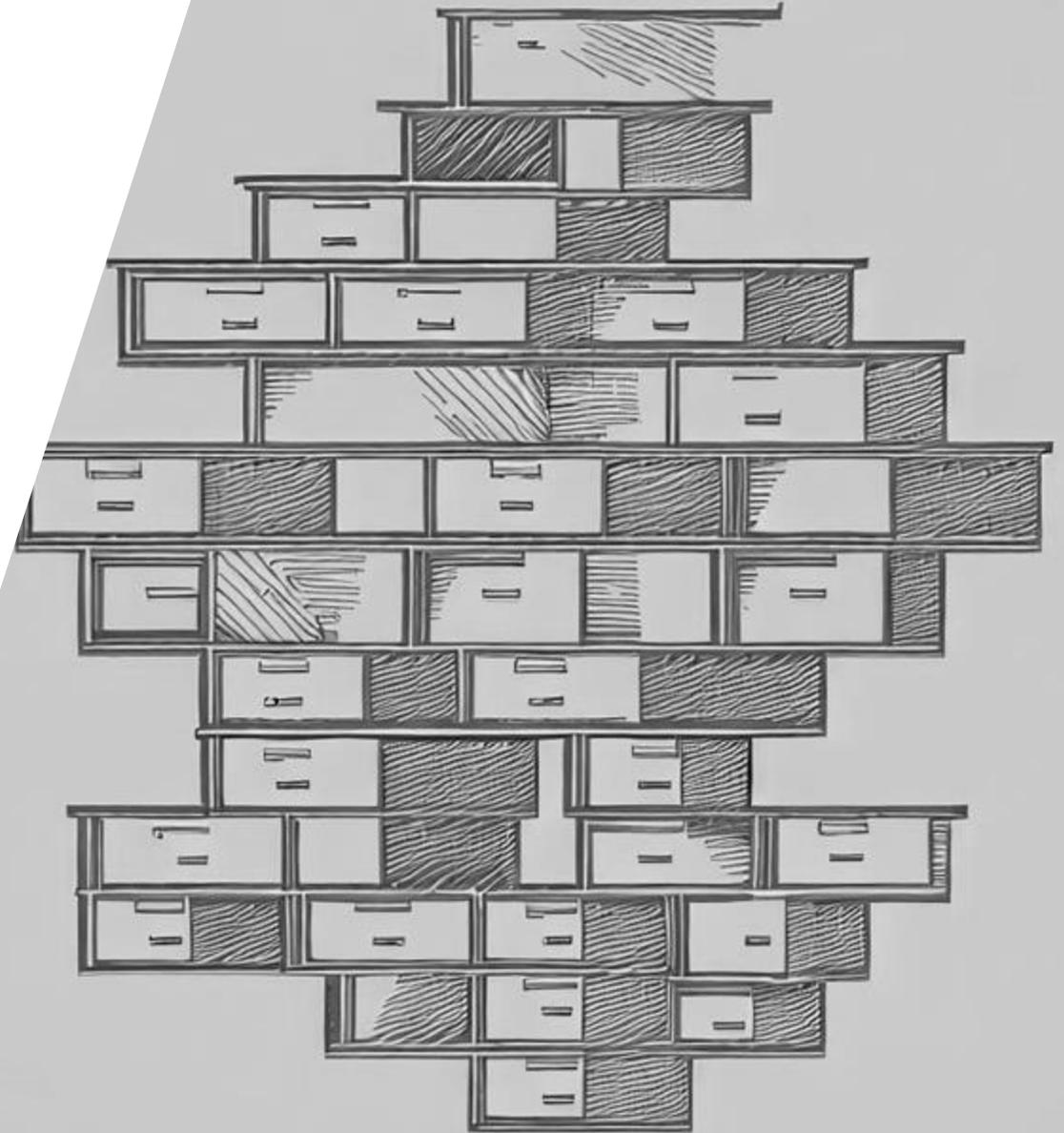
- Semantic foundation for Public Procurement
- Establishes concepts & relationships
- Covers all eProcurement lifecycle
- Community-driven (ePO Working Group)

Key components

- Conceptual model (UML)
- Formal representation (OWL)

Key Benefits

- Common understanding
- Standardisation
- Interoperability



TED Data Access Today

- FTP, API
- Raw XML notices
- Data subset in CSV

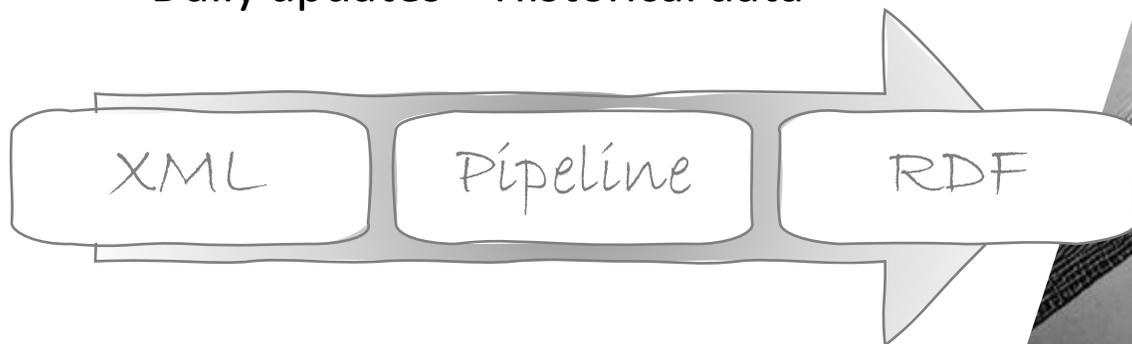
Pain Points

- Several legacy XML Schemas
- New eForms Schema
(complexity, change management)



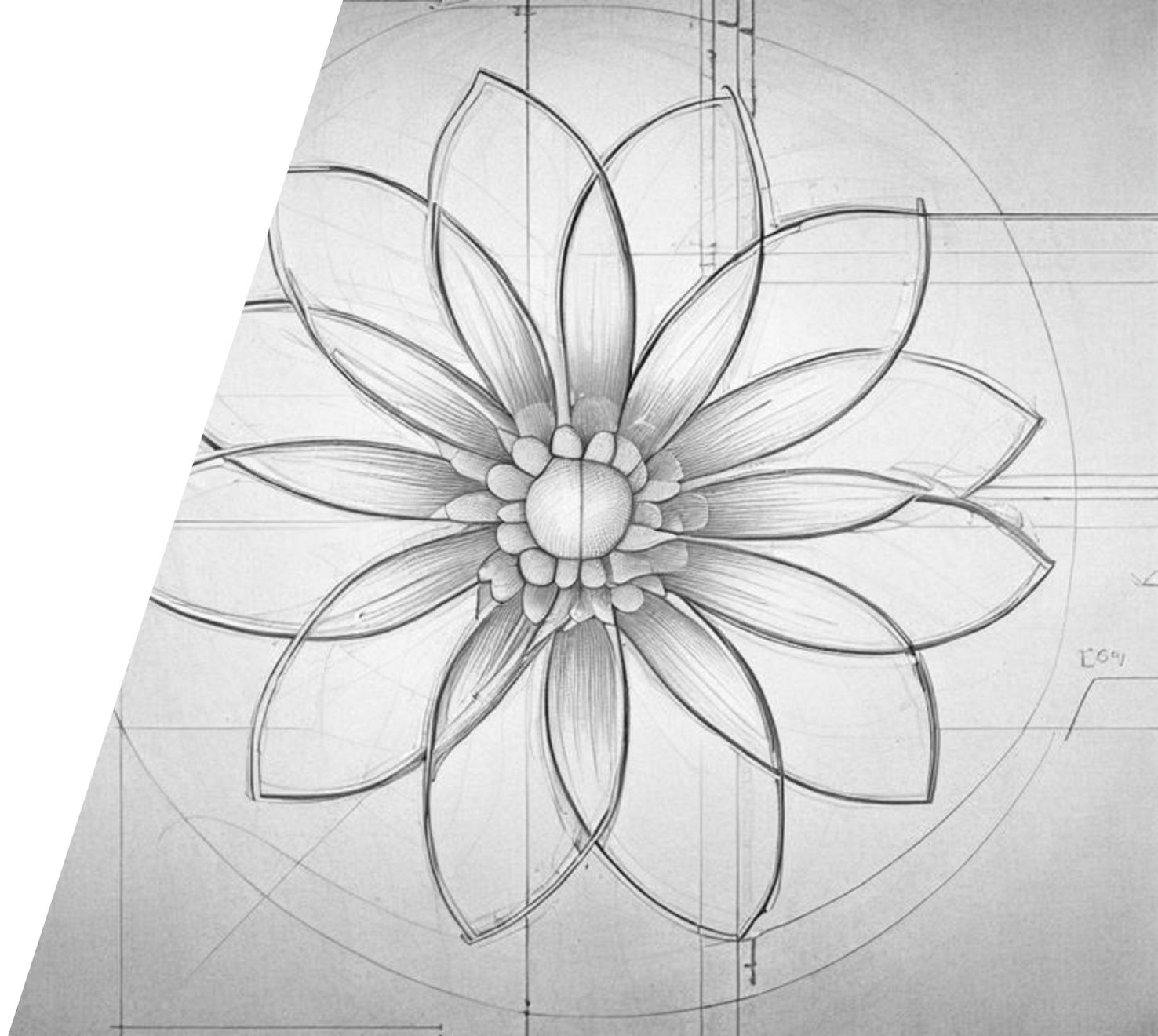
TED Semantic Web Service

- Conversion pipeline
 - From any TED XML schema
 - To RDF
- Access to the service
 - SPARQL endpoint (to query directly)
 - RDF Store (to download data)
 - Open access (no passwords)
- Daily updates + Historical data



Key benefits

- Unified representation
(one format to rule them all)
- Independent of TED XML schemas
- Continuous evolution & improvement
(of data-set completeness and quality)
- Historical data



Adoption / migration

- Understand RDF
(to download and parse the data)
- Learn SPARQL
(to perform direct queries on our server)
- Use SPARQL and Excel/Power-Query
(to explore and understand the data-set)



Support

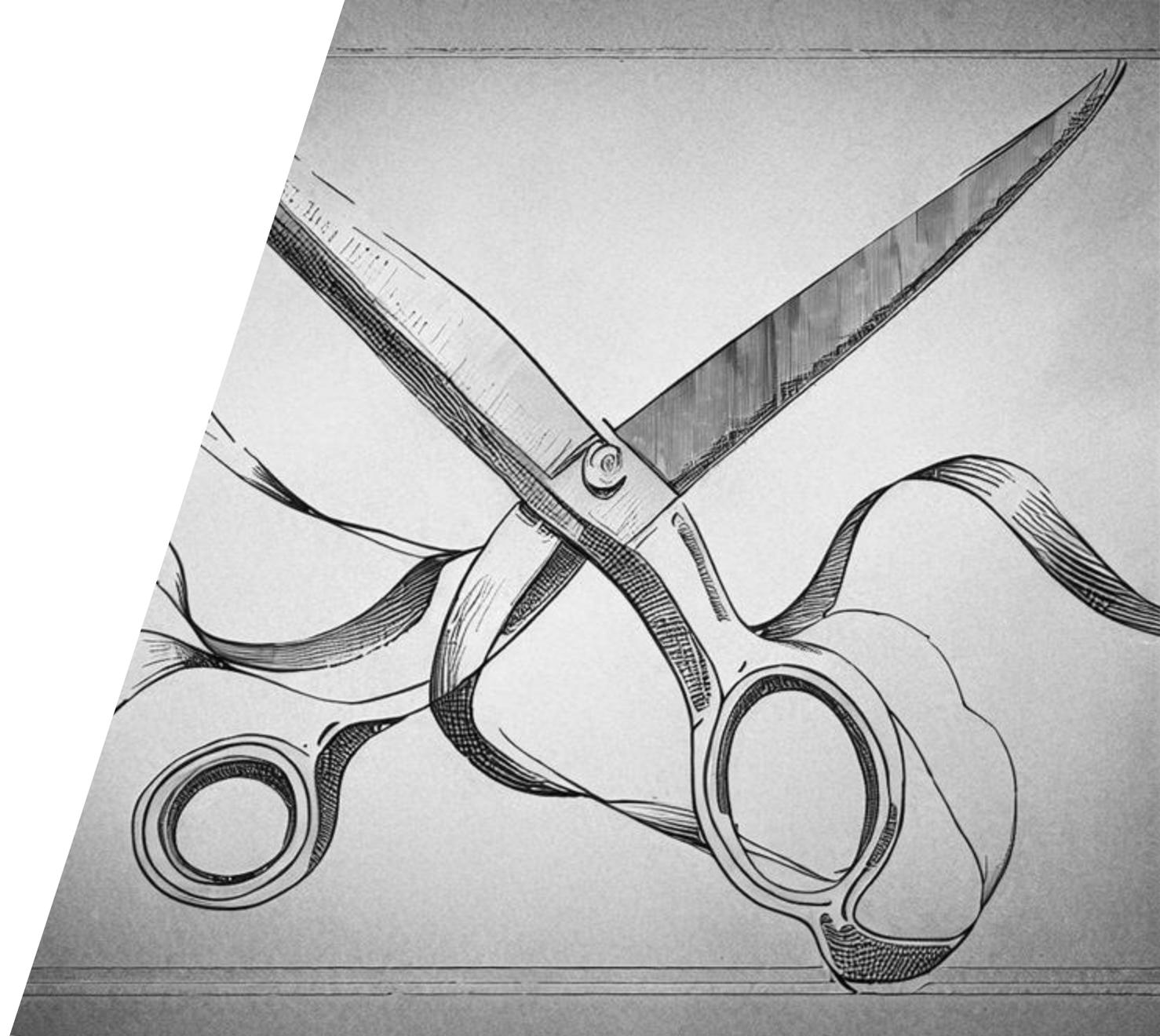
- eProcurement Ontology Documentation
docs.ted.eurpa.eu
- Quick Start guide
- Sample applications
(Python, R, Excel)



Availability

Summer 2023

- SPARQL endpoint + RDF Store
- Documentation
- Sample applications (Python, R, Excel)



What to expect

- Gradual roll-out
- Gradual enrichment of data-set
- Starting this summer



Roadmap

- TED XML mapping to RDF
(continues through 2023)
- eForms XML mapping to RDF
(continues through 2023)
- Master data registry
(no ETA yet)



THANK YOU

