

Asset Description Metadata Schema

Towards a common language for describing e-Government metadata

The European need for semantic interoperability

The EU Digital Agenda identifies the lack of semantic interoperability between public administrations as a major obstacle to the Digital Single Market and the provision of cross-border digital public services. In addition to the multilingual challenge, interoperability is compromised by the lack of commonly agreed and widely used data models, divergent interpretations of the same data and the absence of common reference data (e.g. code-lists, identifiers, taxonomies, references to organisations, geospatial references, license collections, etc). Agreeing on and re-using common semantic interoperability assets across Europe is an important step in facilitating semantic interoperability. The European Commission, in the context of the ISA programme, is undertaking a number of initiatives related to Metadata Management to reduce semantic interoperability conflicts in Europe.



What are the barriers to semantic interoperability?

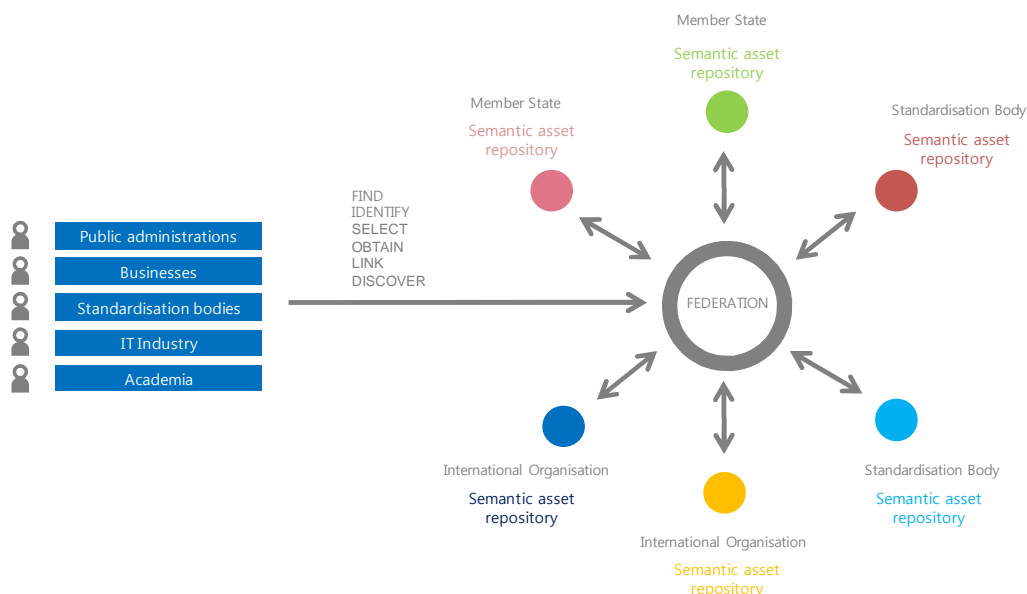
- **Information black holes:** There are many semantic interoperability assets spread out in several project websites, national repositories, standardisation bodies, etc. Overall it is hard to discover the appropriate schema, code-list or data model at the right moment.
- **Information silos:** Despite the progress made in recent years, there are still significant differences in the way Member States describe common entities such as an address, a person, a location, etc. This hinders data exchange across borders and sectors.
- **Lack of collaboration, common agreements and consensus:** The above introduces additional complexity to any e-Government project that involves data exchange between public administrations or businesses in different Member States and sectors.

What is the mission of ADMS?

Public administrations, businesses, standardisation bodies and academia are already producing semantic interoperability assets that, if (re)used, can facilitate semantic interoperability. However, these are not always easy to find. The Asset Description Metadata Schema (ADMS) is a common way to describe semantic interoperability assets making it possible for everyone to search and discover them once shared through the forthcoming federation of asset repositories.

From mid 2012, the Joinup platform, implemented under the ISA programme, will make available a large number of semantic interoperability assets, described using ADMS, through a federation of asset repositories of Member States, standardisation bodies and other relevant stakeholders. Through this federation, semantic interoperability assets will become retrievable and available via a [single point of access](#).

Implementers of ADMS, using it to describe semantic interoperability assets, will be able to share these descriptions on the forthcoming Federation of asset repositories.



A **semantic interoperability asset** is defined as a collection of reference data items that are used for e-Government metadata and the sharing of which among administrations would contribute to increased interoperability across organisational and geographic boundaries

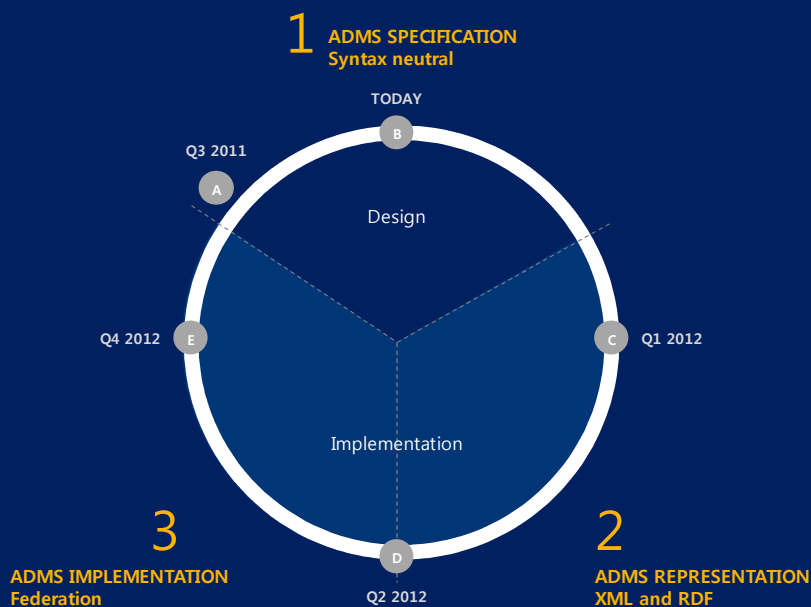
Metadata management refers to the good practice of adopting policies, processes, and using IT systems to plan, perform, evaluate, and improve the use and re-use of semantic assets.

An **entity** is an artifact (e.g. physical object, process, concept, etc) of interest to public administrations in Europe and about which they would want exchange and store information.

The **Asset Description Metadata Schema (ADMS)** is a metadata vocabulary to describe semantic interoperability assets.

ADMS lifecycle

1. **ADMS specification:** Align and agree on a common vocabulary to describe semantic assets through consensus building with Member States and external stakeholders.
2. **ADMS representation/publication:** Represent ADMS as XML and RDF schemas, publish it on Joinup, and make it available for reuse.
3. **Federation of national asset repositories:** Federate asset repositories of Member States, standardisation bodies, etc that have annotated their semantic assets using ADMS and have opted to participate in the federation.



ISA initiatives around ADMS

- A. Encourage Member States to adopt policies, processes, and repositories for metadata management at national, regional or local level
- B. Refine and build consensus on a way to describe semantic assets through ADMS
- C. Represent and publish ADMS as XML and RDF schemas on Joinup
- D. Setup a federation of semantic asset repositories with interested Member States, standardisation bodies, etc that use ADMS to annotate and share their semantic asset descriptions.
- E. Encourage Member States and other stakeholders to endorse, reuse ADMS and join the federation

ADMS will allow public administrations, businesses, standardisation bodies and academia to:

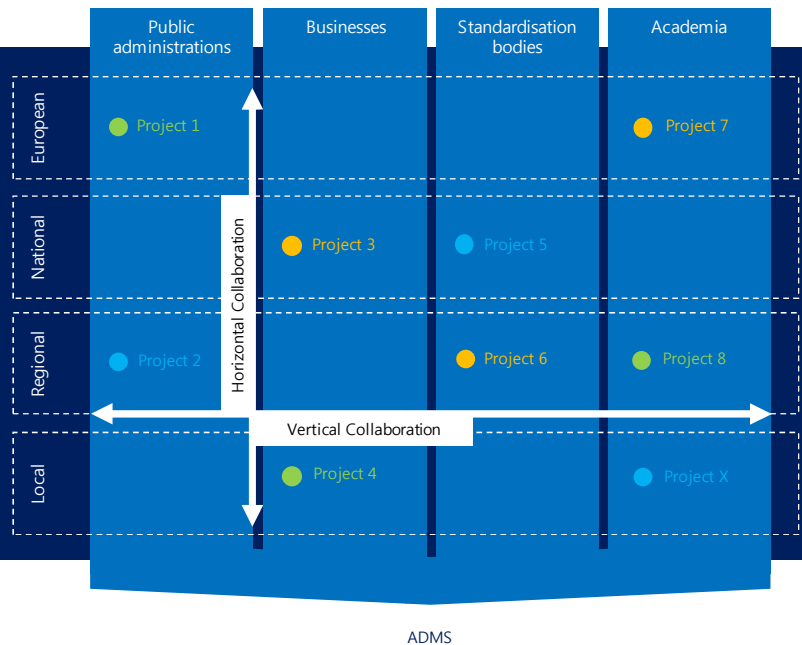
- keep their own system for documenting and storing semantic assets;
- improve indexing and visibility of their own assets;
- describe semantic assets in a common way so that they can be seamlessly cross-queried and discovered by the community through a single access point (Joinup);
- retrieve, compare and potentially link semantic assets to one another in cross-border and cross-sector settings;
- identify assets to be reused avoiding duplication and expensive design work.

Start treating your metadata as an asset

ADMS is part of a more general ISA action to raise awareness of the importance of metadata management and interoperability in the European Union. Semantic interoperability assets, available in machine-readable formats and described via a common specification, are considered a critical success factor and a prerequisite for further promoting the alignment and semantic interoperability in the European Union.

“Our goal is clear: to promote the use of ADMS by the Member States for describing their national semantic interoperability assets. The use of ADMS will make possible the implementation of a European federation of highly reusable assets via the ISA Joinup platform.”

Francisco Garcia Moran
Director General of DG Informatics



To know more

<http://joinup.ec.europa.eu> (New ISA Collaborative Platform)
[ADMS – SEMIC.EU Case Study](http://www.semic.eu) (Available on www.semic.eu)
[Towards Open Government Metadata](http://www.semic.eu) (Available on www.semic.eu)

Get involved

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