



JOINING UP GOVERNMENTS

EUROPEAN  
COMMISSION



# 20th UN/CEFACT Forum

18 September 2012



# Agenda

1. **ISA Action 1.1 at a glance**
2. **ADMS**
3. **Core Vocs**



# 1 ISA Action 1.1 at a glance



# ISA Programme on Interoperability

## Political context

Cooperating partners with compatible visions, aligned priorities, and focused objectives

### Legal interoperability

- Aligned legislation so that exchanged data is accorded proper legal weight

### Organisational Interoperability

- Coordinated processes in which different organisations achieve a previously agreed and mutually beneficial goal

### Semantic Interoperability

- Precise meaning of exchanged information which is preserved and understood by all parties

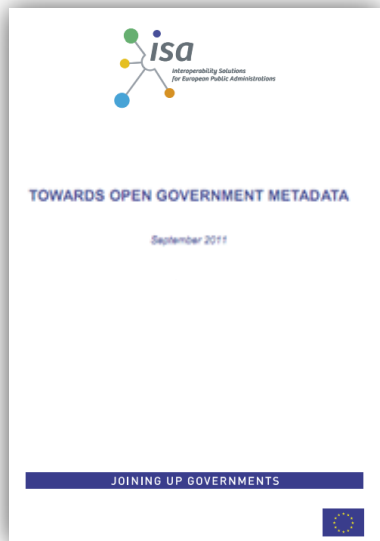
### Technical Interoperability

- Planning of technical issues involved in linking computer systems and services



# ISA Action 1.1

## joinup



### Promotion of Open Government Metadata / Standards/ Semantic Assets:

- Reference data (Code lists, taxonomies, etc)
- Data models (XML Schemas, RDF, etc)

<https://joinup.ec.europa.eu/eilibrary/document/towards-open-government-metadata>

### Micro vocabularies describing core entities

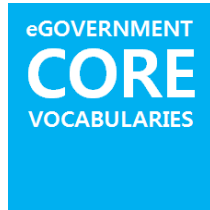
<http://goo.gl/sLHIU>



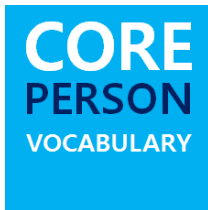
<http://goo.gl/3VCZU>



<http://goo.gl/tY9ty>



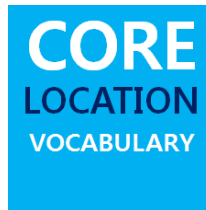
<http://goo.gl/q2RQx>



<http://goo.gl/VODFF>



<http://goo.gl/dqOnm>



<http://goo.gl/03xkP>



Sharing of standards and other assets online

Sharing of software online



# ISA Action 1.1

## joinup

1



### Promotion of Open Government Metadata / Standards/ Semantic Assets:

- Reference data (Code lists, taxonomies, etc)
- Data models (XML Schemas, RDF, etc)

<https://joinup.ec.europa.eu/eilibrary/document/towards-open-government-metadata>

2

### Micro vocabularies describing core entities

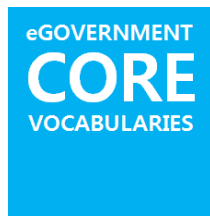
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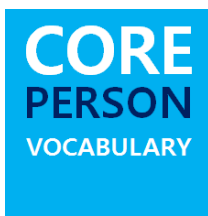
<http://goo.gl/3VCZU>



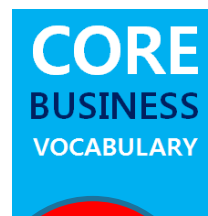
<http://goo.gl/tY9ty>



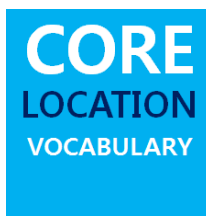
<http://goo.gl/q2RQx>



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<http://goo.gl/dqOnm>



<http://goo.gl/03xkP>



Sharing of standards and other assets online

3

Sharing of software online



# Promotion of Open Government



Data	Stars	Metadata
Available on the web with an open licence	★	Metadata Ignorance
Available as machine-readable and structured	★★	Scattered and/or Closed Metadata
plus non-proprietary format	★★★	Open Metadata for Humans
plus RDF and SPARQL	★★★★	Open Reusable Metadata
Linked data	★★★★★	Linked Open Metadata
Tim Berners-Lee		Vassilios Peristeras





# Promotion of Open Government



**Joao Manuel Frade**

@fradester

Most respondents of the Metadata Manag. Survey of the ISA programme say that they have scattered/closed Metadata.

[goo.gl/DRTNK](http://goo.gl/DRTNK) #eGov

← Reply 🗑 Delete ★ Favorite 📌 Pocket

8:18 AM - 15 Jan 12 · Embed this Tweet

Submitted by [Joinup SEMIC EDITOR](#) on January 05, 2012  
Rating: 5/5 (based on 1 votes) | 1149 reads

## ISA Deliverable: Metadata Management Survey Results - Highlights

In November 2011, the European Commission conducted a survey in the context of [Action 1.1](#) of the [Interoperability Solutions for European Public Administrations](#) (ISA) Programme. This Action focuses on the development, promotion and support of semantic assets as key enablers in achieving semantic interoperability.

The objective of the survey was to better understand how Member States are handling and managing metadata and, in particular, what differences exist between different semantic asset management systems. Member States were asked to position themselves within the 5 maturity levels of metadata management, introduced by the ISA Programme paper '[Towards Open Government Metadata](#)'.

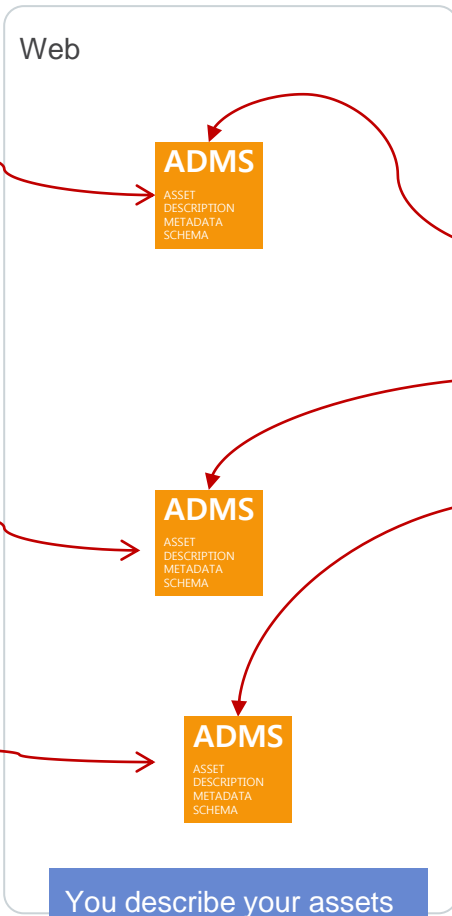
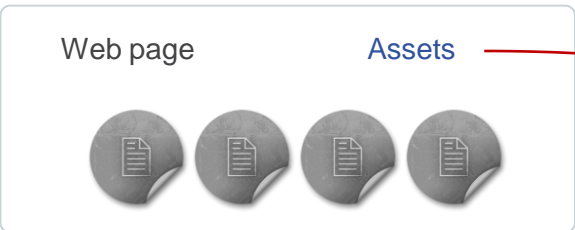
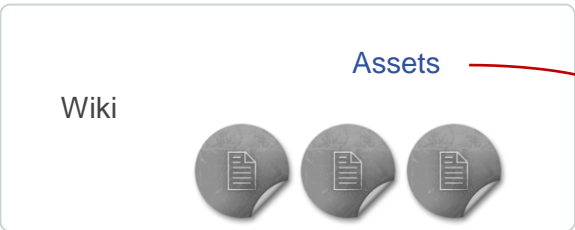
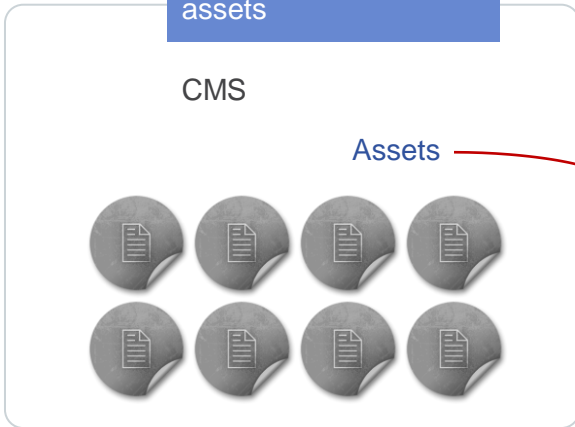
This publication presents the key findings from the survey. It shows that Member States are increasingly becoming aware of the importance of metadata and that a number of initiatives exist to work towards effective and efficient metadata management. The results were used as a direct input for the [Report on existing Semantic Asset Repositories](#).





# ADMS

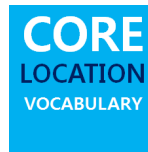
1 Analyse your semantic assets



2 You describe your assets following ADMS specification

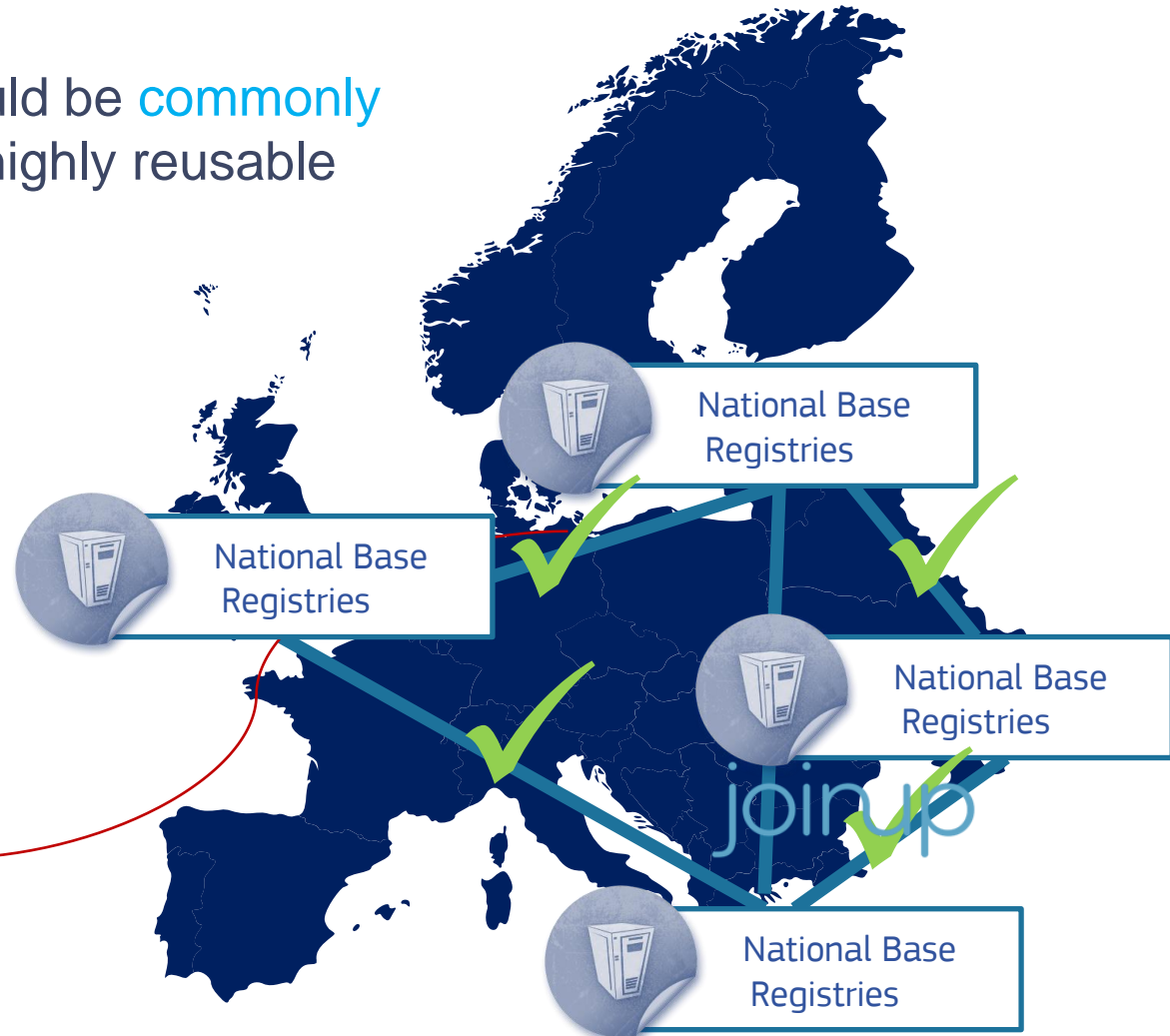
3 Assets can be searched and retrieved





# Core Vocabularies

Semantic definitions should be **commonly agreed** on fundamental, highly reusable concepts



*Consensus building on common vocabularies should start at a higher level of abstraction that goes beyond borders*



# ADMS and Core Vocabularies



## RDF Schema

RDF schema is provided as RDF/XML and as human readable text

Re-uses existing Linked Data vocabularies, notably Dublin Core and FOAF



## XML Schema

XML schema builds on Universal Business Language

Re-uses information elements provided by Core Components Technical Specification (CCTS) of UN/CEFACT

License?

This specification is released under the “ISA Open Metadata Licence v1.1” that can be retrieved from

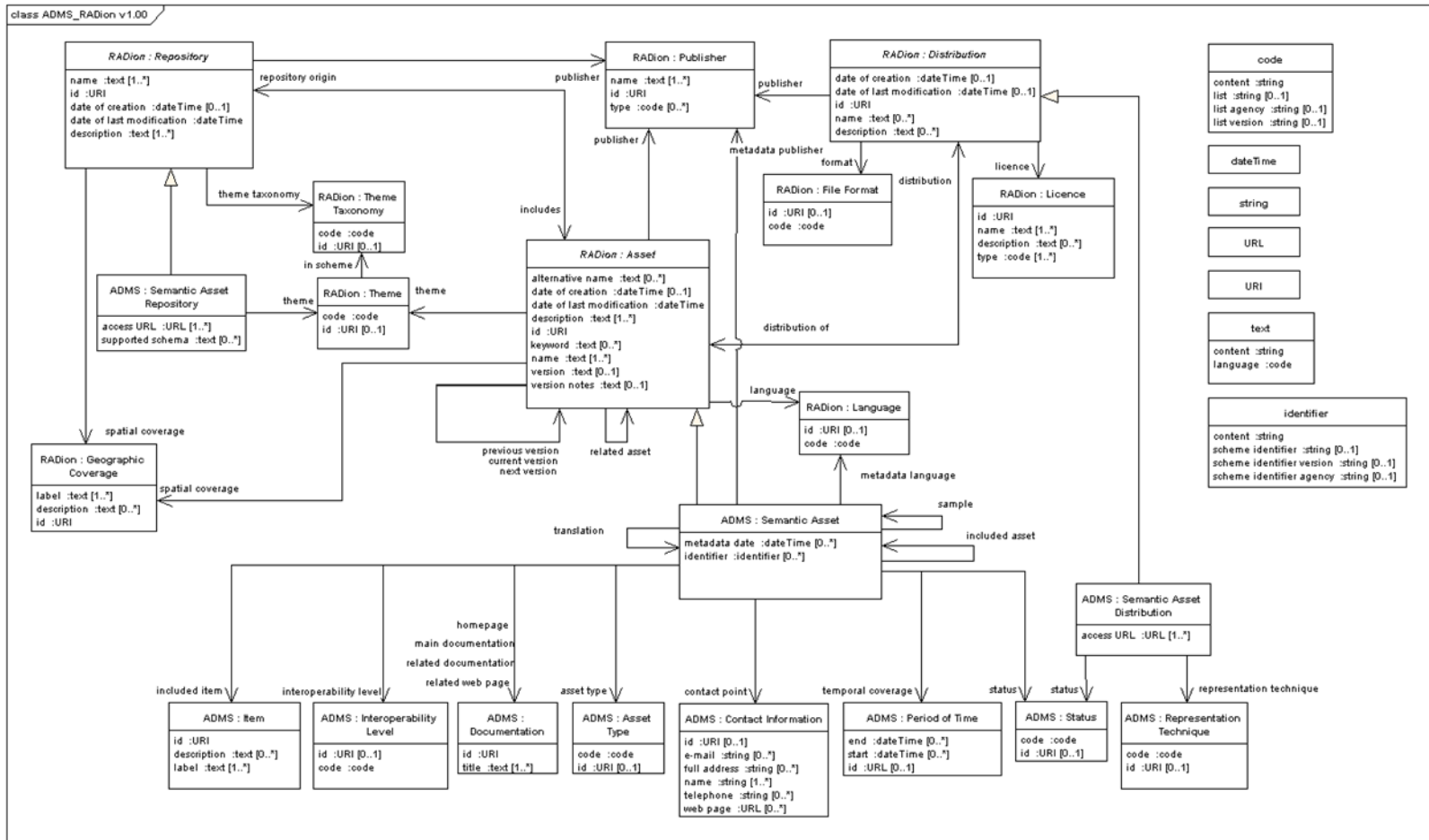
<https://joinup.ec.europa.eu/category/licence/isa-open-metadata-licence-v11>



# 3 ADMS



# Full ADMS model with RADion





# How to implement ADMS?

Catalogue | Library |  
Repository | List | Collection

Platform

- Semantic Policy document
- Metadata Specification
- Metadata Schema
- Controlled Vocabulary Mapping Specification
- Syntax Specification Code List
- Semantic Implementation Guideline
- Register of organisations
- Geographic Reference

**ADMS**

ASSET  
DESCRIPTION  
METADATA  
SCHEMA

Describe using ADMS  
RDF / XML

Rest Web Services

E-mail

Upload on  
Joinup

Harvesting

Other platforms

joinup

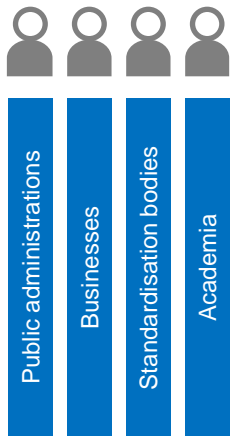


# Use case Federation

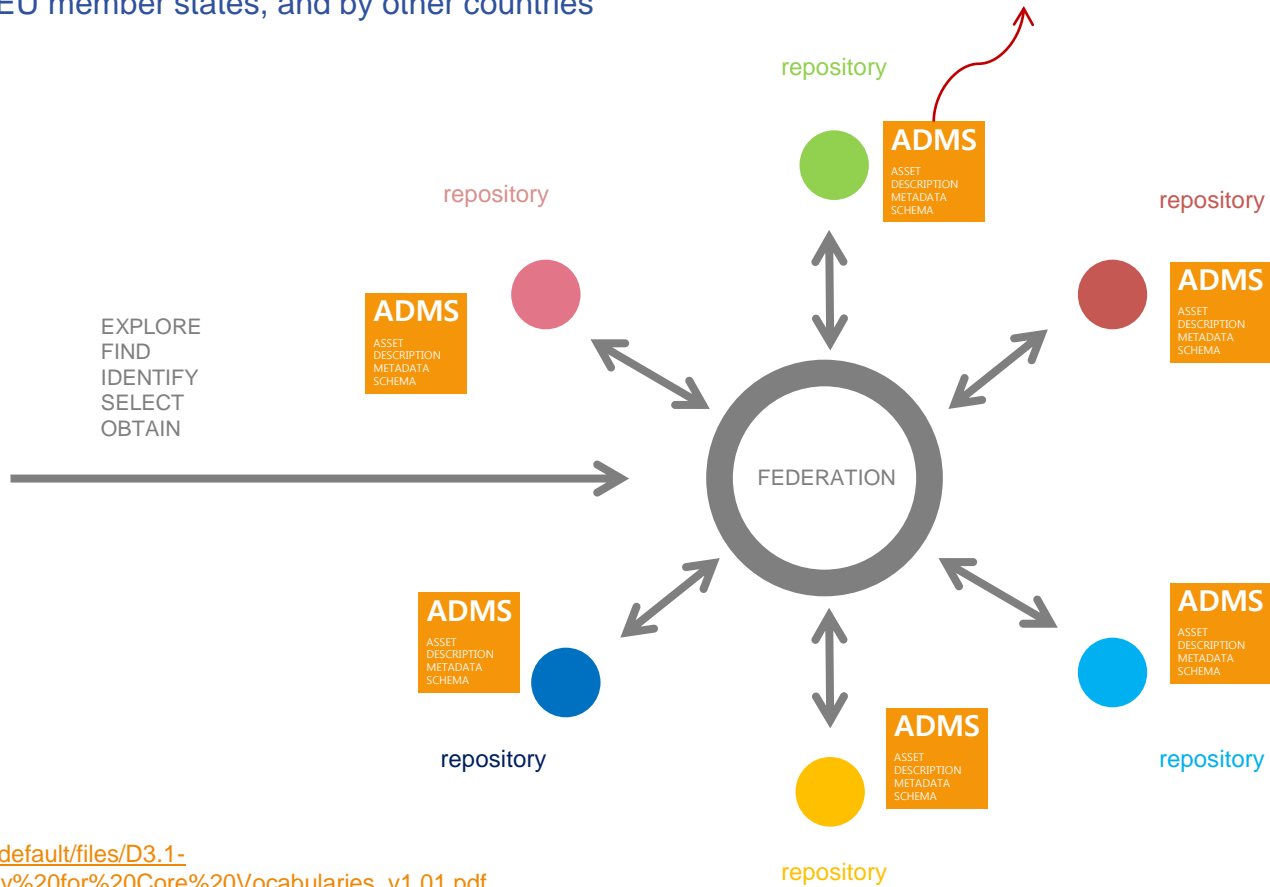
Service to eGovernment system developers and designers to **Explore, Find, Identify, Select and Obtain** Semantic Assets developed in different EU member states, and by other countries and organisations

*ADMS intended to allow exchange of information about assets in order to build a federated access point to assets described in distributed repositories*

With common metadata schema



EXPLORE  
FIND  
IDENTIFY  
SELECT  
OBTAIN



## Methodology

[https://joinup.ec.europa.eu/sites/default/files/D3.1-Process%20and%20Methodology%20for%20Core%20Vocabularies\\_v1.01.pdf](https://joinup.ec.europa.eu/sites/default/files/D3.1-Process%20and%20Methodology%20for%20Core%20Vocabularies_v1.01.pdf)

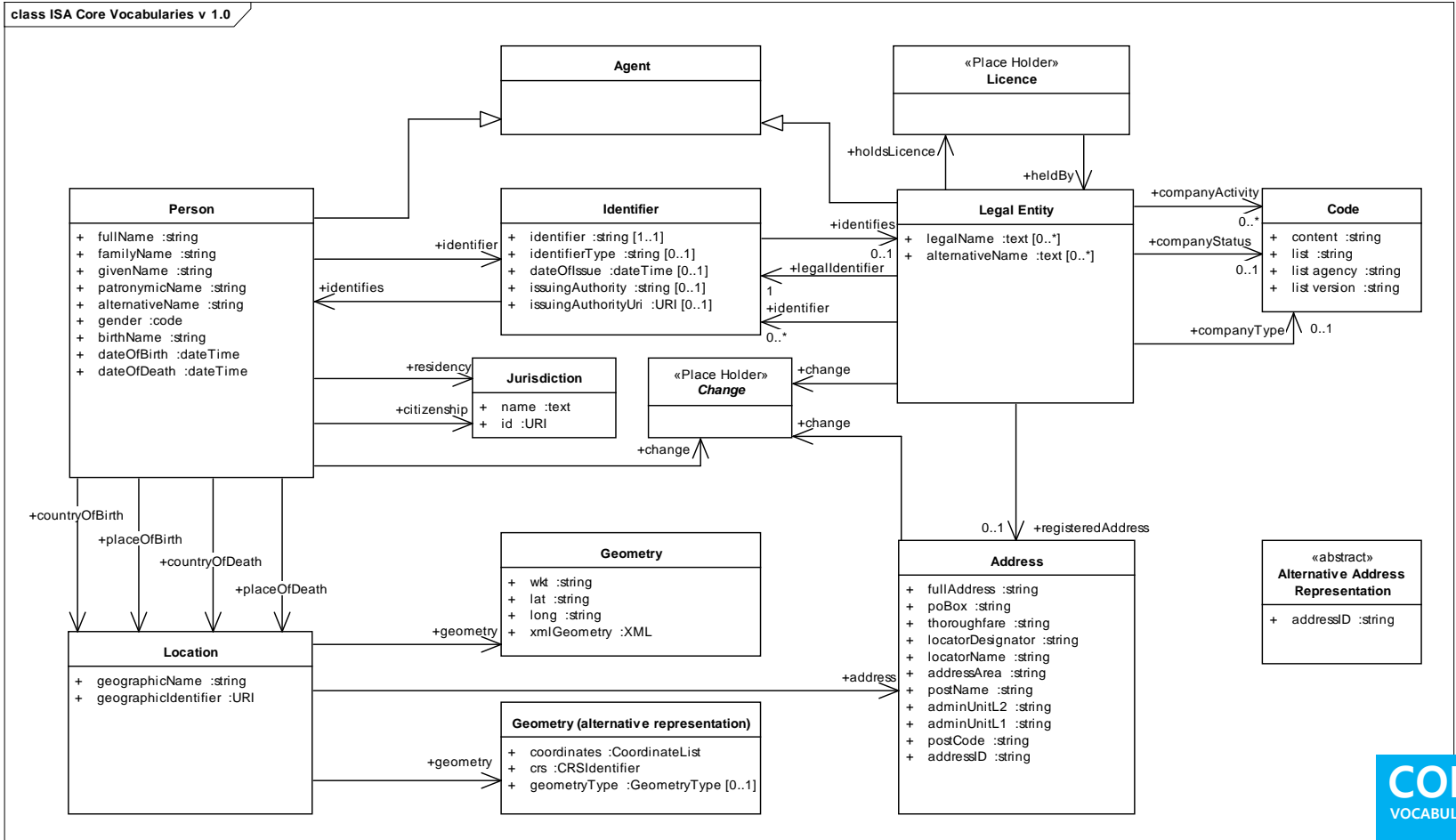




# 3 Core Vocs



# Core Vocabularies Specification





# Core Vocabulary Working Group in figures

## Multi disciplinary working group

67 people

21 Member States and the US, South Africa and Croatia

+ EU institutions  
Standardization bodies  
External experts/academia

PwC and W3C facilitation + W3C methodology

Methodology

[https://joinup.ec.europa.eu/sites/default/files/D3.1-Process%20and%20Methodology%20for%20Core%20Vocabularies\\_v1.01.pdf](https://joinup.ec.europa.eu/sites/default/files/D3.1-Process%20and%20Methodology%20for%20Core%20Vocabularies_v1.01.pdf)

The Core Vocabularies version 1.00 was contributed to W3C



Danish Enterprise and Construction Authority

Malta Information  
Technology Agency

SmartInformatics Limited - british airports

Joint Research Centre (European Commission)

Vrije Universiteit Amsterdam

USW Ltd

Scottish Government

Epimorphics

The Danish Agency for Digitization

LinkedGov

CSI-Piemonte - Governo e Gestione

OGC (Open Geospatial Consortium )

DERI

**CORE  
LOCATION  
VOCABULARY**

Chaired by JRC/H6 Digital Earth and  
Reference Data (INSPIRE Directive).

DG DIGIT

Egovlabs

**CORE LOCATION TF**

The address specification is already an important  
element on the INSPIRE data models

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Reichstädter

[https://joinup.ec.europa.eu/asset/core\\_location/release/100](https://joinup.ec.europa.eu/asset/core_location/release/100)

Eurojust

Data Fusion/IEEE

Universal Postal Union

Federal Ministry of Interior - Germany

Irrational.org

MTA SZTAKI

**DG SANCO**

Norwegian Mapping Authority

Open Geospatial Consortium

Publications Office of the European Union

Federal Agency for Cartography and Geodesy (BKG), Germany

University of Pretoria



Enterprise Registry Solutions / European Business Register

# Core Business Task Force

Ministry of Justice – The Netherlands

Vrije Universiteit Amsterdam

Malta Information  
Technology Agency

SmartInformatics Limited - british airports

USW Ltd

Scottish Government

The Danish Agency for Digitization

European Banking Authority (EBA)

University of Zagreb

**CORE  
BUSINESS  
VOCABULARY**

Chaired by DG MARKT/F2, responsible  
for European Business Registry project.

DG DIGIT

**CORE BUSINESS TF**

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[https://joinup.ec.europa.eu/asset/core\\_business/release/100](https://joinup.ec.europa.eu/asset/core_business/release/100)

Eurojust

DERI

LinkedGov

XBRL

Data Fusion/IEEE

German Research Center for Artificial Intelligence Federal Ministry of Interior - Germany

Irrational.org

Banco de España

DG MARKT

**DG SANCO**

Open Corporates

Publications Office of the European Union

Centre of Registers and Information Systems



# Core Person Task Force

Danish Enterprise and Construction Authority

Tudor Research Centre

Malta Information  
Technology Agency

SmartInformatics Limited - british airports

Vrije Universiteit Amsterdam

USW Ltd

Scottish Government

Danish National Police

The Danish Agency for Digitization

LinkedGov

CSI-Piemonte - Governo e Gestione

e-Codex

University of Zagreb



DERI

Chaired by Eurojust.

DG DIGIT

Eurojust promotes via the EPOC IV project the interoperability in the judicial domain amongst MSs.

Egovlabs

CORE PERSON TF

[https://joinup.ec.europa.eu/asset/core\\_person/release/100](https://joinup.ec.europa.eu/asset/core_person/release/100)

Eurojust

Synergetics

XBRL

DG JUST

Data Fusion/IEEE

Ministerio de Política Territorial y Administración Pública

Federal Ministry of Interior - Germany

Irrational.org

Statistics Norway

MTA SZTAKI

DG SANCO

Inforesight Ltd

Département Titres Identités

Federal Agency for Cartography and Geodesy (BKG), Germany

Publications Office of the European Union

Local Government Denmark



# Get involved

## Join ISA Initiatives on Joinup

<http://goo.gl/sLHIU>

**ADMS**  
ASSET  
DESCRIPTION  
METADATA  
SCHEMA

<http://goo.gl/3VCZU>

**CESAR**  
COMMUNITY OF  
EUROPEAN  
SEMANTIC ASSETS  
REPOSITORIES

<http://goo.gl/tY9ty>

eGOVERNMENT  
**CORE**  
VOCABULARIES

<http://goo.gl/q2RQx>

**CORE**  
**PERSON**  
VOCABULARY

<http://goo.gl/VODFF>

**CORE**  
**BUSINESS**  
VOCABULARY

<http://goo.gl/dqOnm>

**CORE**  
**LOCATION**  
VOCABULARY

<http://goo.gl/03xkP>

**ADMS**  
**SW**



<http://goo.gl/eK1EY>



@SEMICEu



<http://joinup.ec.europa.eu>





“It is the unexpected re-use of information which is the value added by the web”

Tim Berners-Lee