JOINING UP GOVERNMENTS

EUROPEAN COMMISSION

ADMS.F/OSS Working Group

Motivation

1 Context

A clear need for sharing and reusing free and open-source software (F/OSS)

The Digital Agenda for Europe and the EIF

interoperability

better administrative coordination

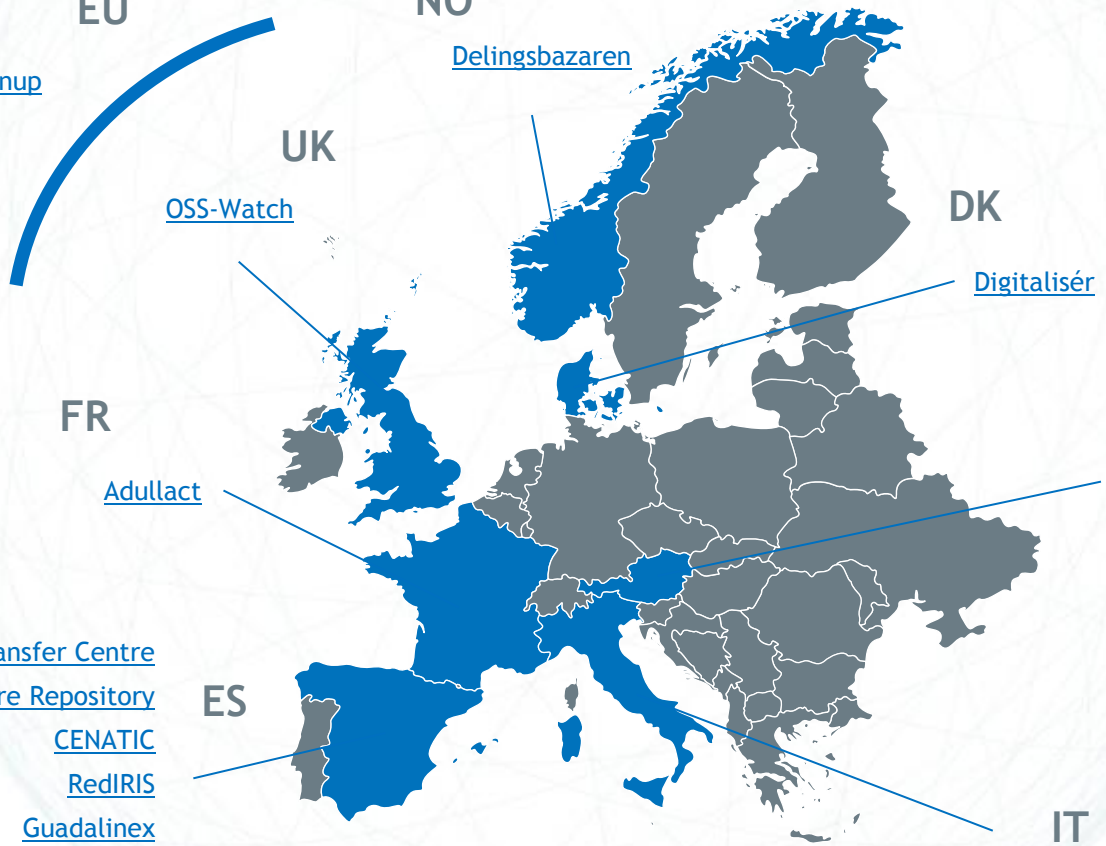
reuse

*"Need for a better **administrative coordination** between public administrations and applications that are interoperable and **based on open standards and open platforms**"*

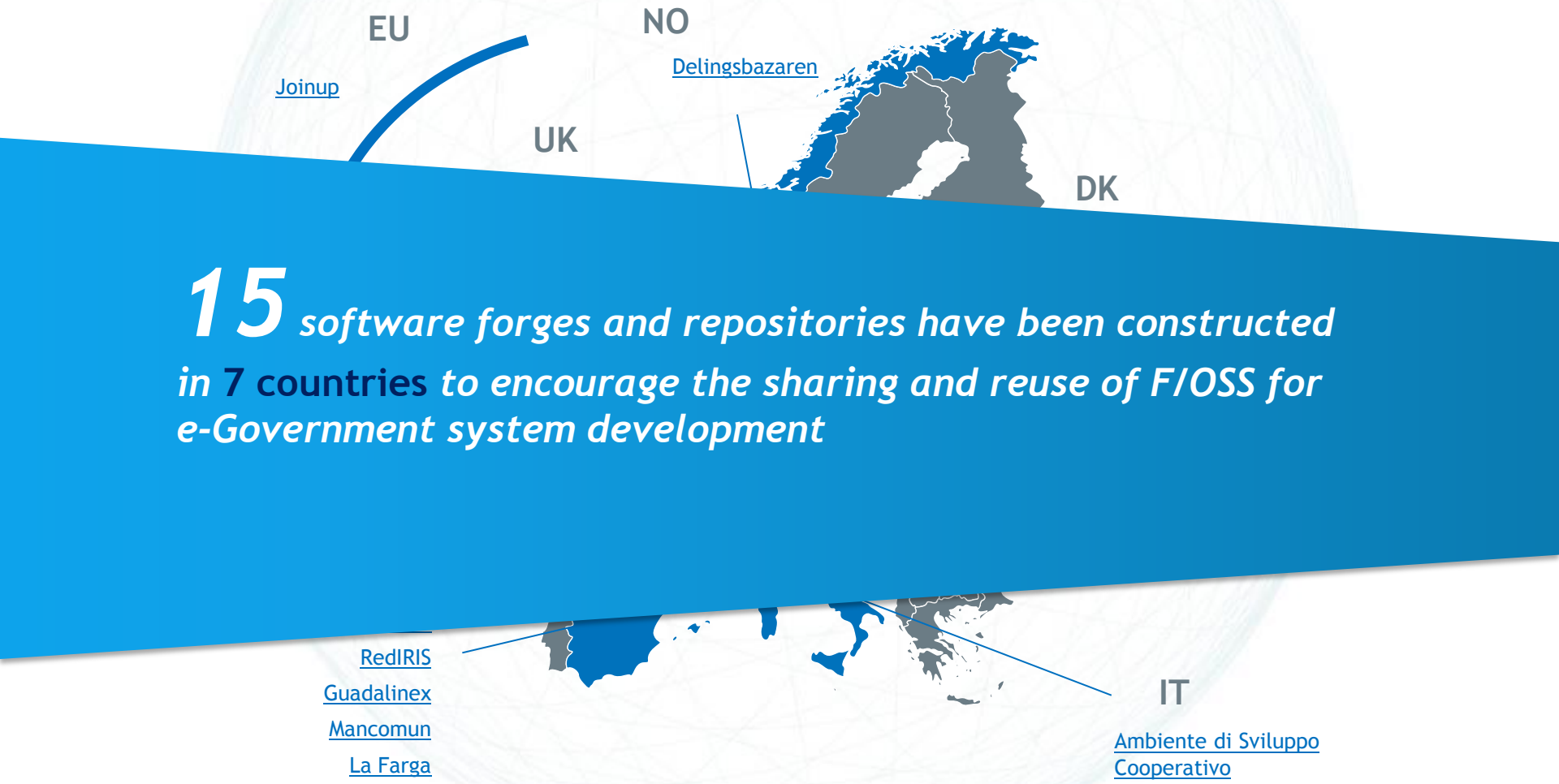
- *The European Interoperability Framework (EIF) recommends public administrations to "reuse and share solutions and to cooperate on the development of joint solutions when implementing European public services. In this context, the EIF encourages applying the principle of openness when jointly developing custom-made software systems.*

open standards

Software catalogues in the EU public sector

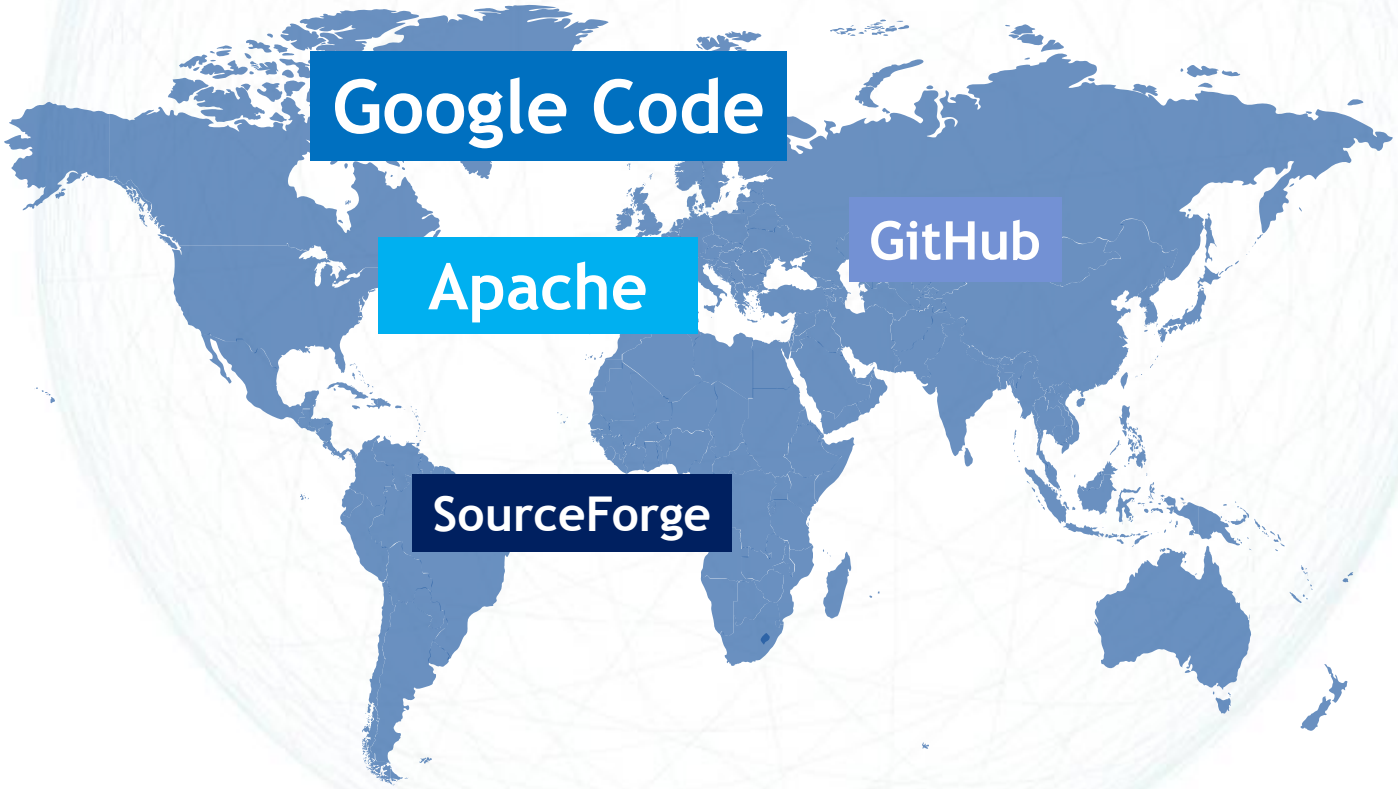


Software catalogues in the EU public sector



***15** software forges and repositories have been constructed in **7 countries** to encourage the sharing and reuse of F/OSS for e-Government system development*

General-purpose software catalogues



Stakeholder needs

ISA Programme

Encourage the sharing and reuse of interoperability solutions for public administrations across border an sectors.

Public administrations

Increasing need for cross-border and cross-sector digital interactions with external parties

The sharing and reuse of F/OSS for e-government across borders and sectors corresponds to an actual and **increasing need** of important stakeholders

F/OSS projects

Attract public administrations to reuse their software and want to build a community of contributors.
Equal visibility, independent of the hosting location.

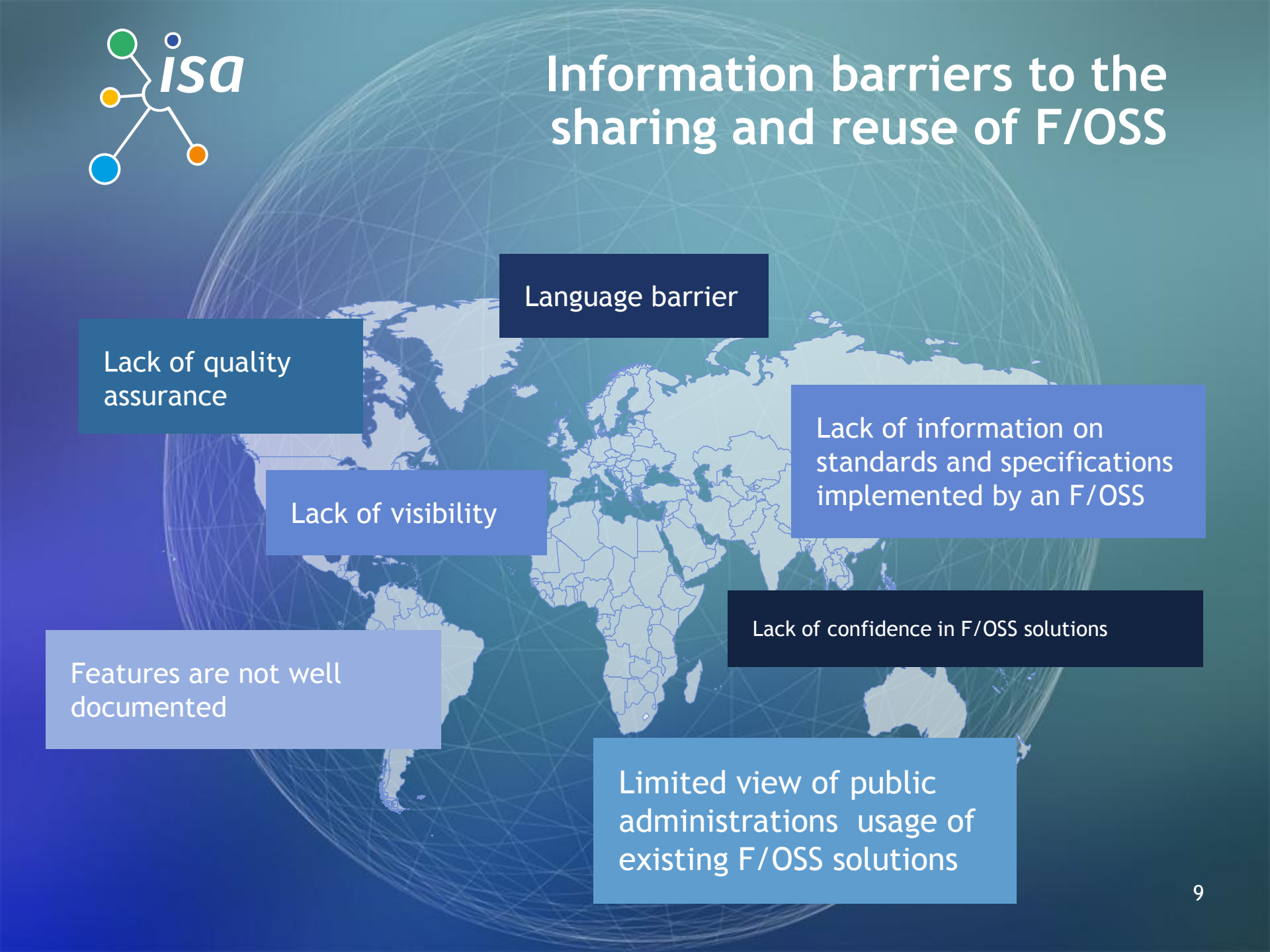
Governments

Encourage the sharing and reuse of F/OSS for e-Government.

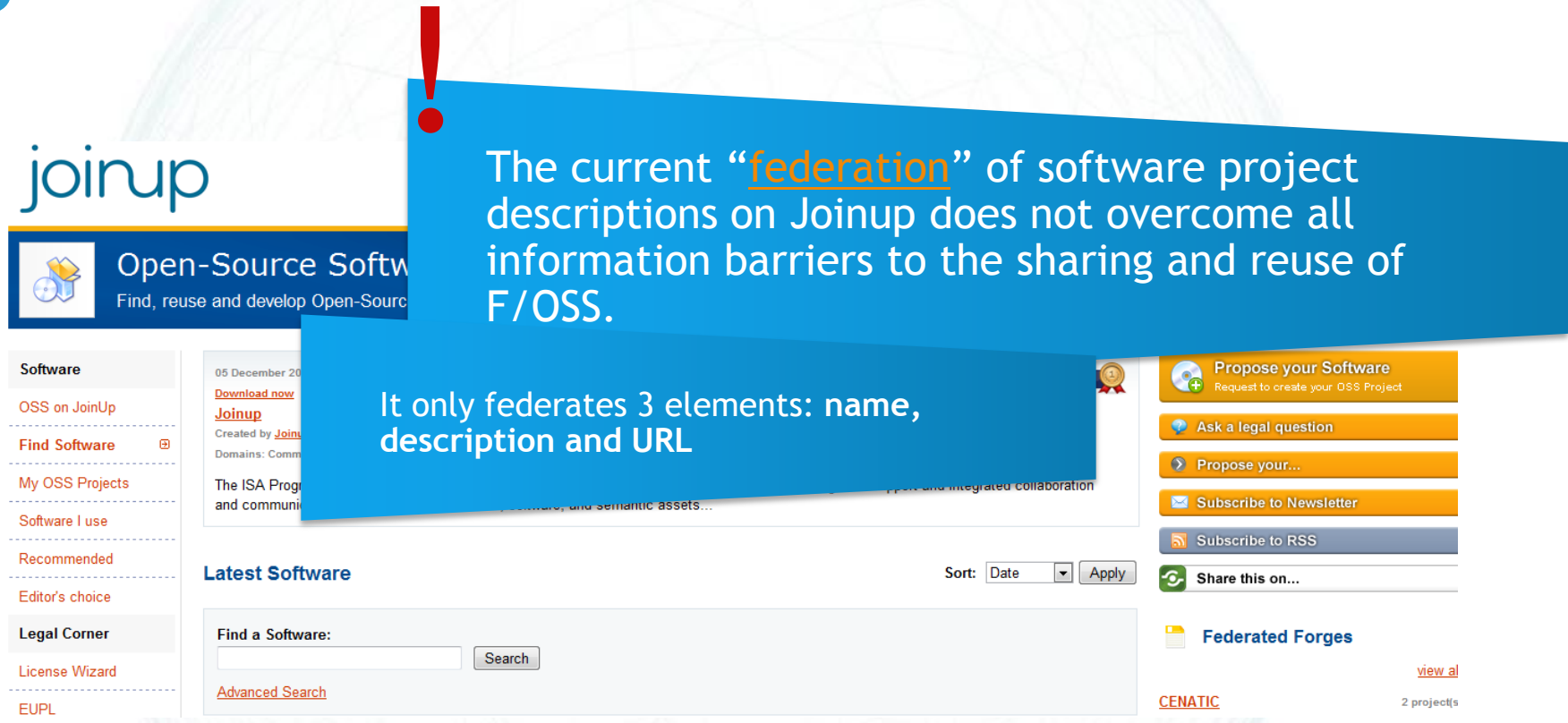
Problem 2

How to overcome information barriers to the sharing and reuse of e-Government F/OSS?

Information barriers to the sharing and reuse of F/OSS



Problems with the federated forges on Joinup



Dependent on a technology that is specific to GForge 4 and FusionForge. Software description metadata from other infrastructures cannot be automatically retrieved

Solution 3

1. An XML and RDF vocabulary to describe software assets
2. An enhanced, federated catalogue of F/OSS for e-Government

Opportunities

"Semantic Web" and "Linked Data"

Initiatives such as the "Semantic Web" and "Linked Data" are making it possible to integrate information from disparate information sources

DOAP specification

Several software catalogues provide or harvest software descriptions via the DOAP specification.

DOAP has become a de-facto standard to describe software projects on the Web.

ADMS

ADMS entails a opportunity for the ISA programme to relate (semantic) interoperability assets, to the sharing and reuse of, and free and open software for e-Government system development.

Machine-readable format

Publication of software description metadata on the Web in an open, machine-readable format further enhances its visibility and reuse

Metadata harmonization

Several initiatives to harmonize metadata about software assets in the open-source community.

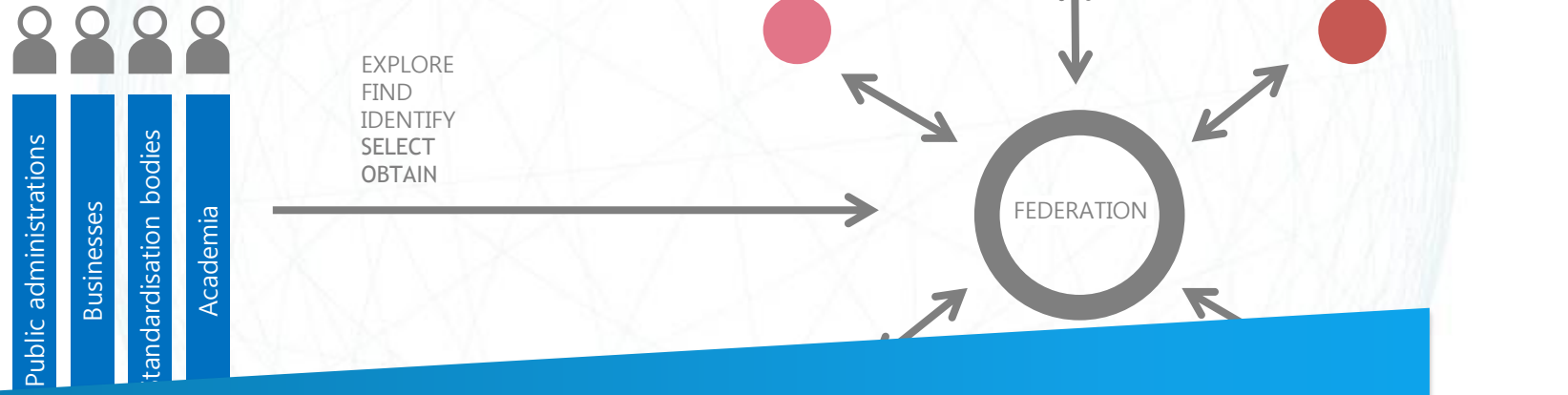
an XML and RDF vocabulary to describe software assets

Metadata category	Metadata property or relationship	Available in DOAP	Description	Explore	Find	Indentify	Select	Obtain
descriptive metadata	title	name	the title of the software in multiple languages		■	■		■
	description	description, shortdesc	descriptive text in multiple languages		■	■		
	identifier		identifier for the software		■	■		■
	URI	location	uniform resource identifier		■	■		■
	version	version	version of the software release		■	■		■
	related software		related software		□			
	is replaced by		a newer version of the software		□	□		□
	release	file-release	a release of the software					□
applicability	domain		the domain of the software (e.g. using EuroVoc descriptors)	■	□		□	
	spatial coverage		geographic region in which the software can be used	■	□		□	
	multilingual		whether or not the software can be configured to				□	
							□	

The solution is twofold. On the hand, there is the enhanced software description metadata schema (ADMS.F/OSS)

Building an enhanced, federated catalogue of F/OSS for e-Government

With common metadata schema



On the other hand, there is the enhanced federation of the different national software catalogues, repositories, and forges which enhances the sharing and reuse of F/OSS solutions.

e catalogue

Advantages

overcome information barriers

help overcome the information barriers related to the sharing and reuse of interoperability solutions among public administrations

Better search

Allows searching for software from a single point of access

A common specification to describe software assets on the Web will give better visibility, better search, help overcome information barriers and provide a better linking

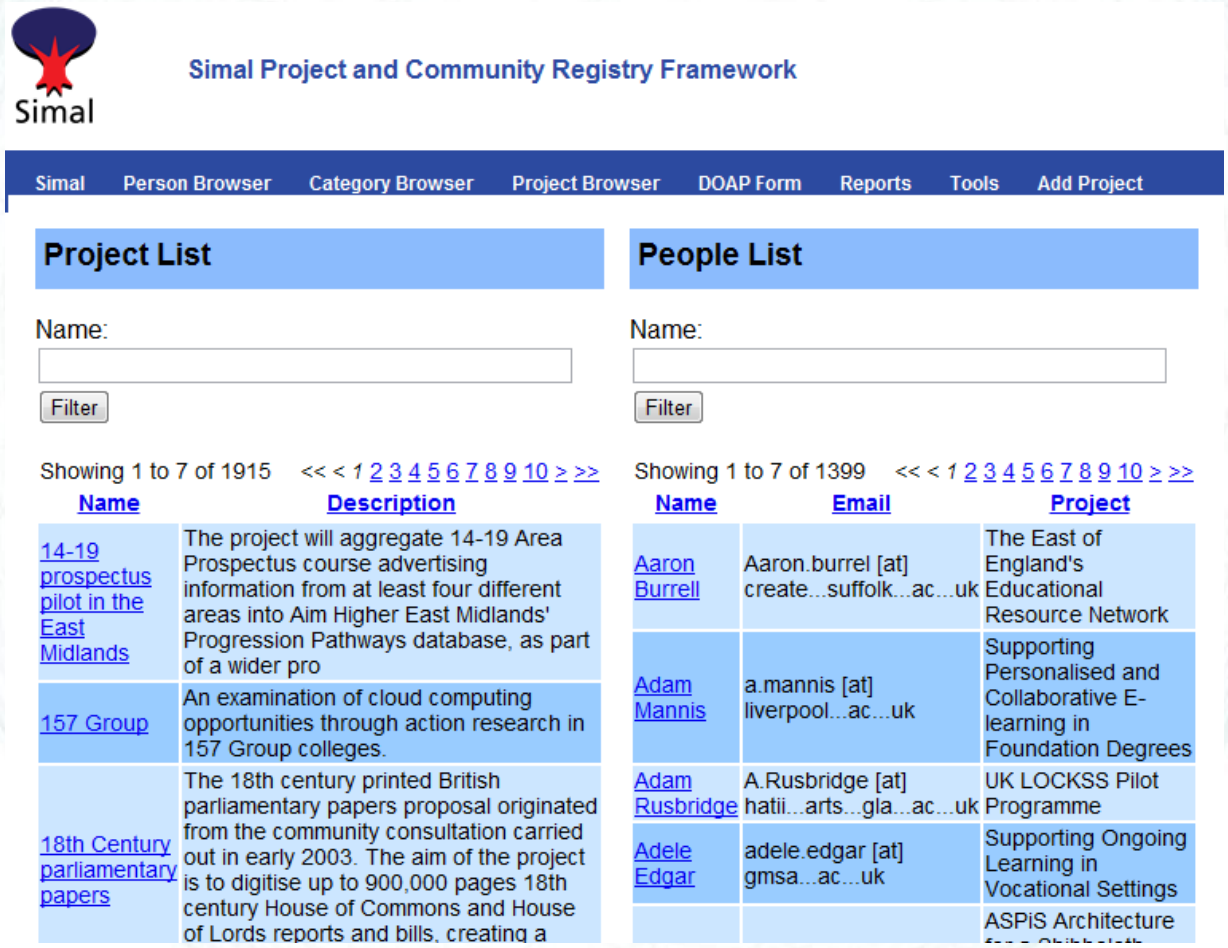
Better visibility

Increased and equal visibility, independent of the hosting location.

Better linking

Build and explore semantic networks of people, free and open software, and open standards

Example 1: Simal - The software catalogue of OSS Watch



Example 2: The Software Catalogue of the Apache Software Foundation

Home

Indexes

- Alphabetical
- Categories
- Language
- PMC
- Project Listing
- Releases
- Standards

Feeds

DOAP Files

- Guidelines
- Create a DOAP File
- DOAP File FAQ
- Categories
- Programming Languages
- PMC

Documentation

- Dependencies
- PMC Data
- Standards

References & Thanks

Apache Batik

DOAP

Batik is a Java-based toolkit for applications or applets to use images in the Scalable Vector Graphics (SVG) format for various purposes, such as display, generation and manipulation.

Programming Languages	SVG
Categories	xml, graphics
Mailing Lists	http://xmlgraphics.apache.org/batik/mailing-list.html
Bug/Issue Tracker	http://issues.apache.org/bugzilla/buglist.cgi?query_format=specific&order=relevance+desc&bug_status=__open__&product=Batik&content=
License	Apache License Version 2.0
Project Website	http://xmlgraphics.apache.org/batik/
PMC	Apache XML Graphics

Project Release Information

Releases can be downloaded from http://xmlgraphics.apache.org/download.cgi

Most recent releases:

Release	Version	Date
Batik 1.6	1.6	2005-04-11
Batik 1.7beta1	1.7beta1	2007-03-29
Batik 1.7	1.7	2008-01-09

Access to the source code:

Browse	http://svn.apache.org/viewcvs.cgi/xmlgraphics/batik/
SVN Direct	http://svn.apache.org/repos/asf/xmlgraphics/batik/trunk

Part of a bigger solution

The maintenance of a software catalogue for e-Government system development is not an isolated measure. Policy makers and public administrations need to continue to invest in a combination of mesaures:

1. The provision of legal advice related to the sharing and reuse of F/OSS;
2. The creation of procurement policies, regulations, guidelines, and processes to support the procurement of F/OSS;
3. The construction and maintenance of a catalogue of open-standards and a software catalogue for e-Government system development;
4. Guidance with the effective support of a community of developers and users.

Annex 4

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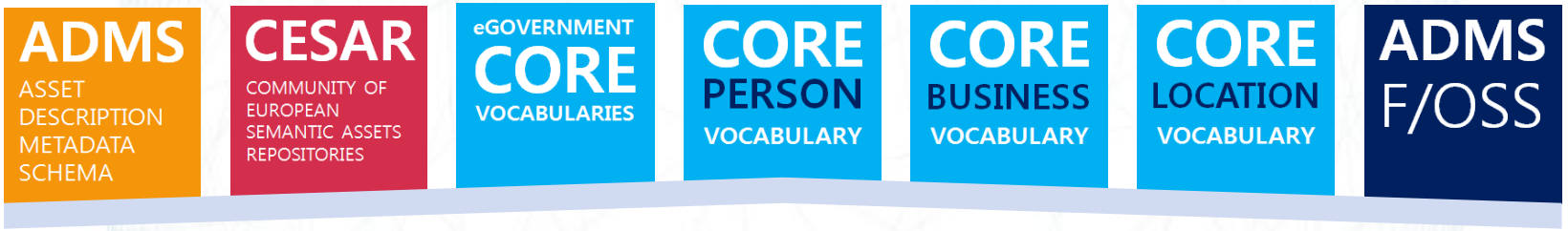
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