



ISA² programme: Enabling interoperability within the Commission and in Europe

Brussels, 01 July 2016

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European Commission

PM² Community of Practice

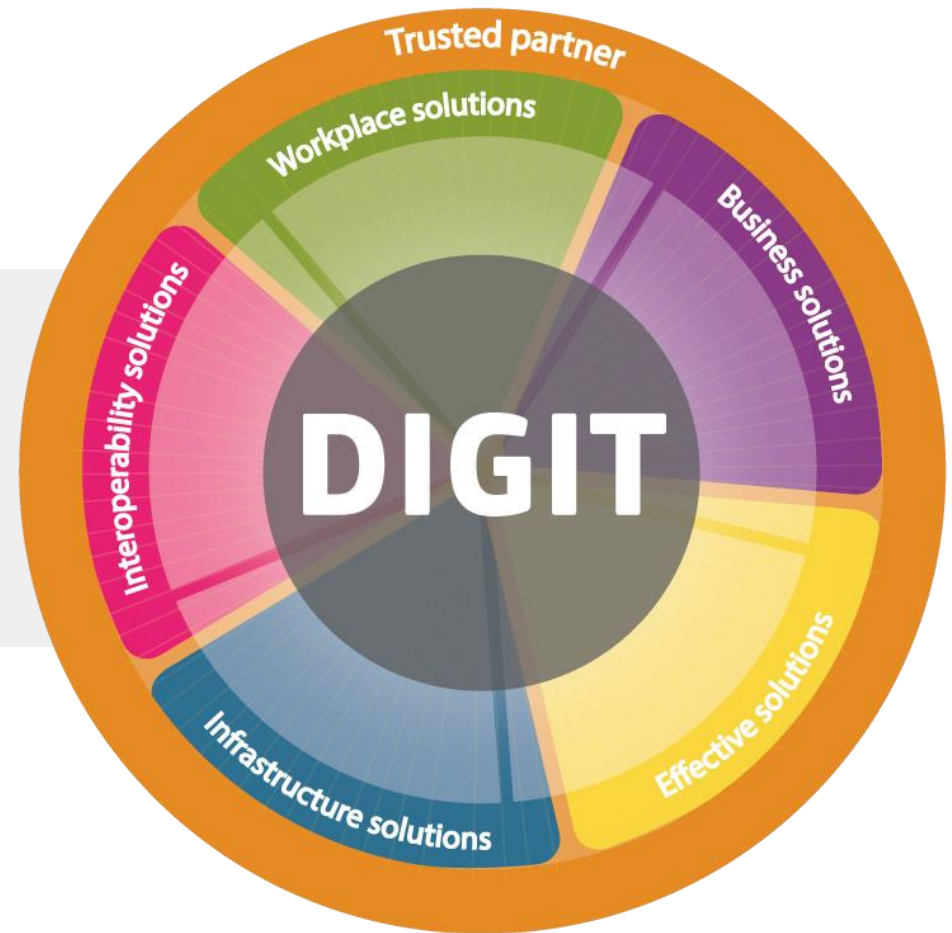
Why should I hear all this?

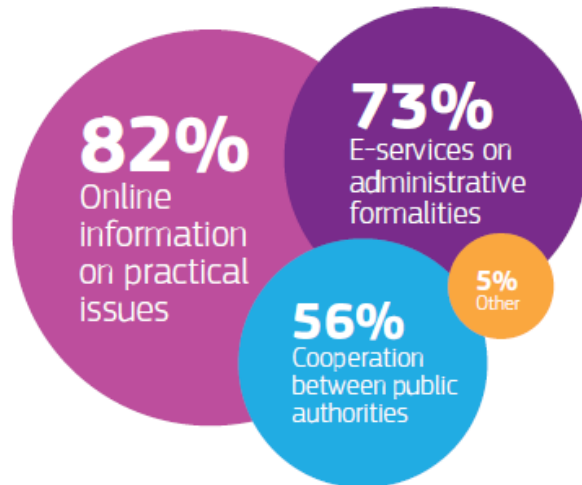


- It can help me reuse specs & software -> save money and time
- It can help me organise my tasks better through using architecture and assessment tools
- It can help me getting closer to EU law-making needs of ICT
- It can help me with funding: call for proposals just launched
- I will have to take up action anyway – the Commission has to implement the eGovernment Action Plan, part of which is the application of the "European Interoperability Framework" (although I may not know about it right now...)



"DIGIT is to lead the
digital transformation
of the Commission"



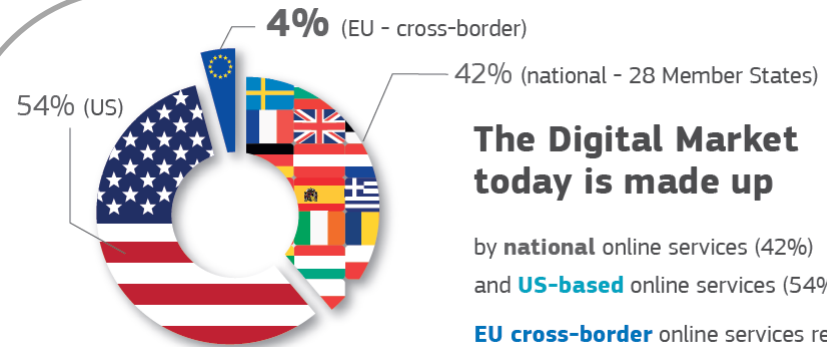


EU citizenship consultation 2015

Common values, rights and democratic participation

If you are planning to move to another EU country, what measures would help you to prepare?

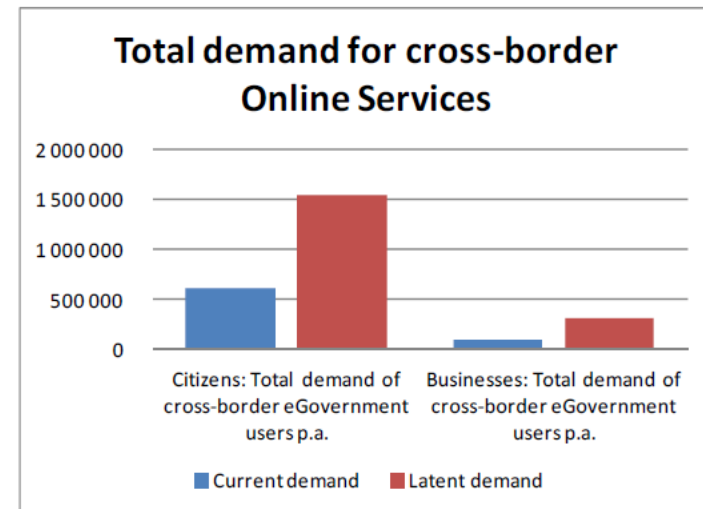
In 2012 13,6 m people lived and worked outside their MS (ESTAT)



The Digital Market today is made up

by **national** online services (42%) and **US-based** online services (54%)

EU cross-border online services represent only 4%



Tinholt, D., et al., *Study on Analysis of the Needs for Cross-Border Services and Assessment of the Organisational, Legal, Technical and Semantic Barriers*. Capgemini et al. for the European Commission, 2012

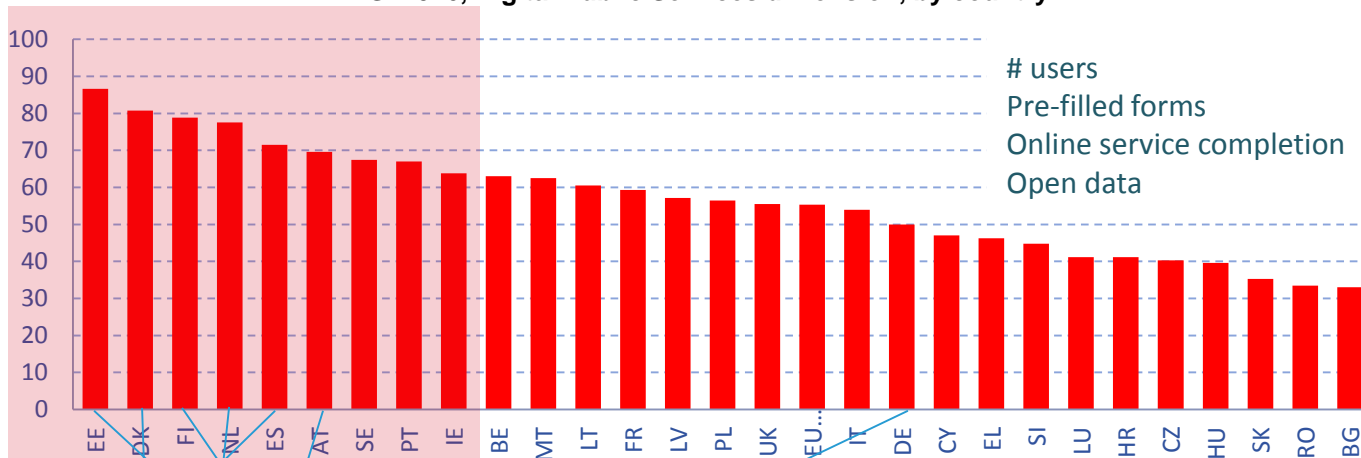


Interoperability and digital public services



European Commission

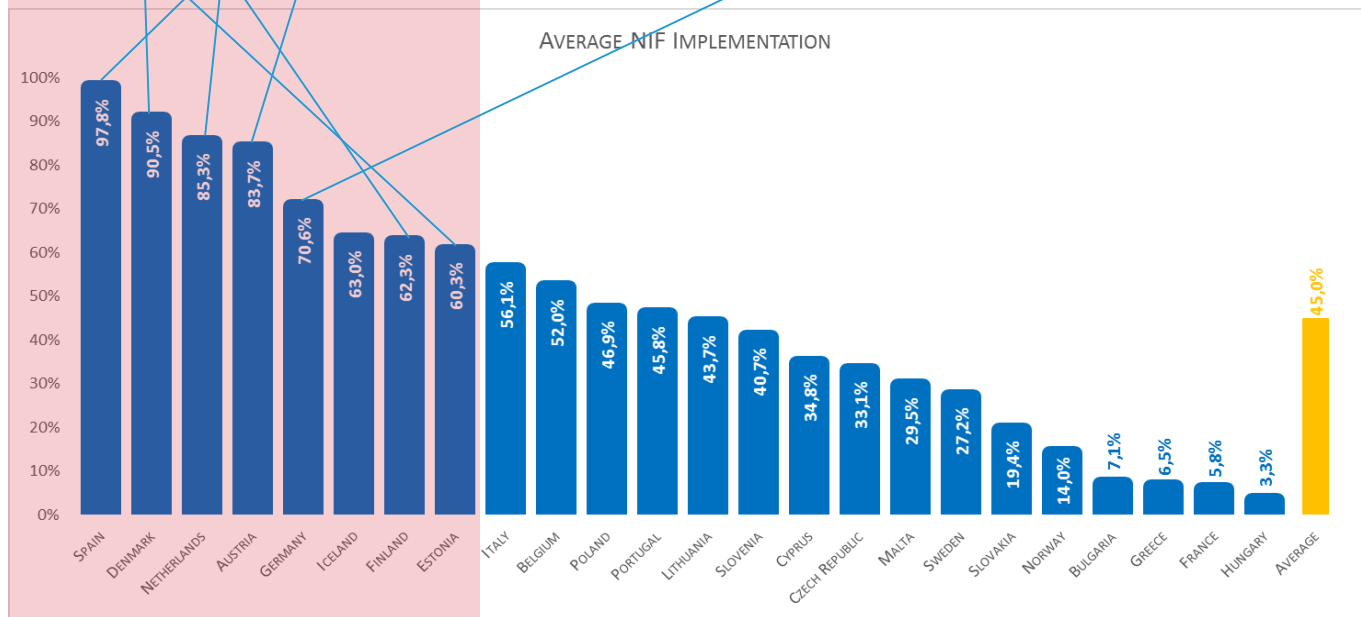
DESI 2016, Digital Public Services dimension, by country



Digital public services score high

where interoperability scores high

Source: European Commission, Digital Agenda





POLICY

- Digital Single Market strategy
- European Semester

FUNDING

- Interoperability Solutions for European Public Administrations, businesses and citizens (ISA²)
- Connected Europe Facility (CEF)
- European Structural Funds (ESF)
- European Regional Development Fund (ERDF)
- Horizon2020

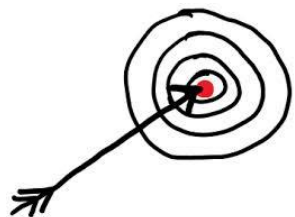
LEADERSHIP

- Coordination between Member States

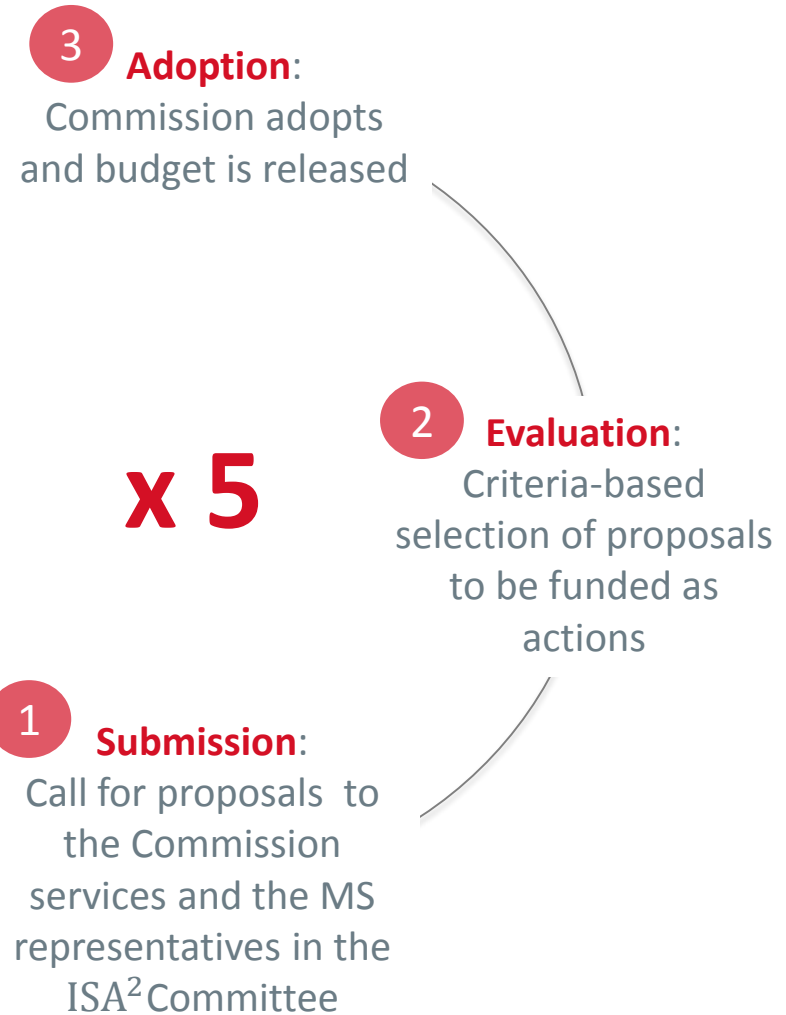




- 2016-2020
- 131 M€



- Public Administrations
- Business
- Citizens



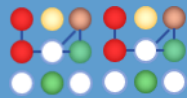


FRAME through a Framework
STEER through a Strategy
DESIGN Architectures and Specifications

SCREEN Legislation
ASSESS ICT impact of EU legislation

IDENTIFY
COLLECT
ASSESS

DOCUMENT
MAP
PUBLISH
in a
Cartography



DEVELOP

DEPLOY
OPERATE



Links with other EU initiatives

- › Connecting Europe facility (CEF)
- › European Semester
- › European Structural and Investment Funds (ESIF)
- › Other Policies/Services (Home, Justice, Growth, Competition, Eurostat ...)





European Commission

example

3 Creating an European Digital Economy and society with growth potential

DSM
Roadmap
(2016)

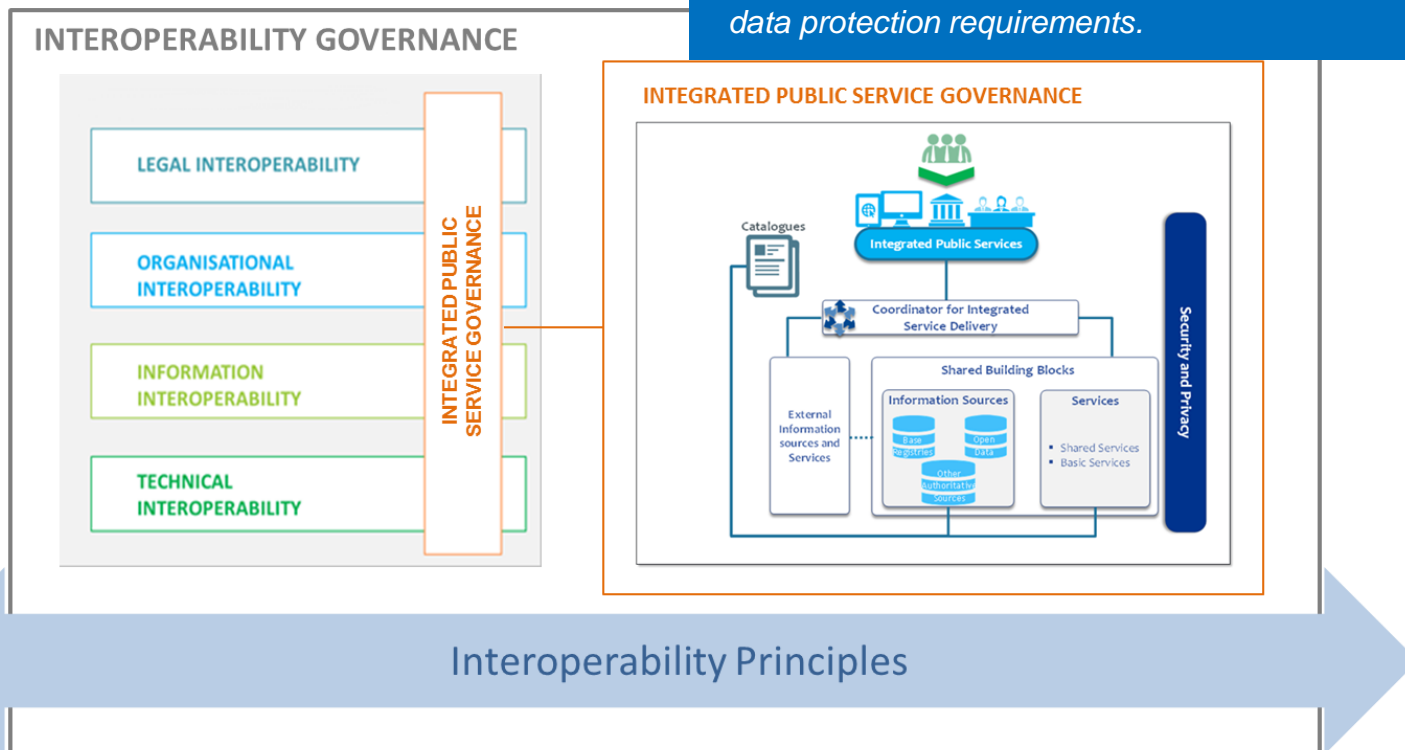
Big data and cloud



Digital data stored in cloud:
2013: 20% - 2020: 40%
The use of big data by the top 100 EU manufacturers could lead to savings worth €425 billion

Recommendation 28:

Ensure that legislations are screened with a view to identify interoperability barriers. When preparing legislation for the establishment of a European public services, seek for coherence with relevant legislation, perform a “digital check” and consider data protection requirements.



EIF conceptual model





Strategy - EIS



Framework EIF

Principles, Recommendations and Conceptual models





European Interoperability Framework (EIF)

ΕΙΡΑΜΟΙΚ (EIF)
 Ευρωπαϊκό Πλαίσιο
 για την Αλληλεπίδραση

EIRA

European Interoperability Reference Architecture

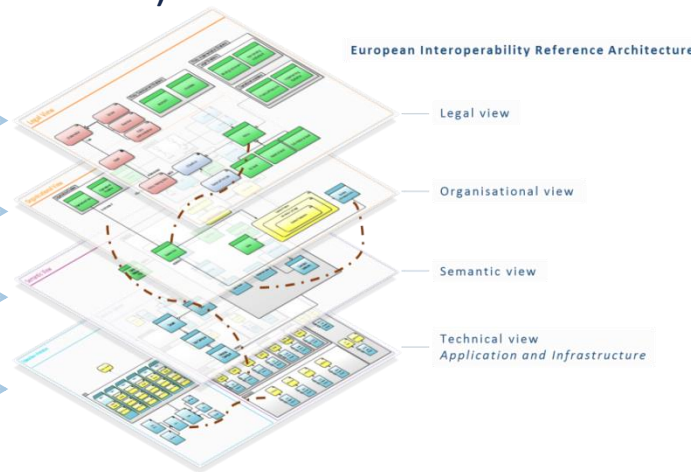
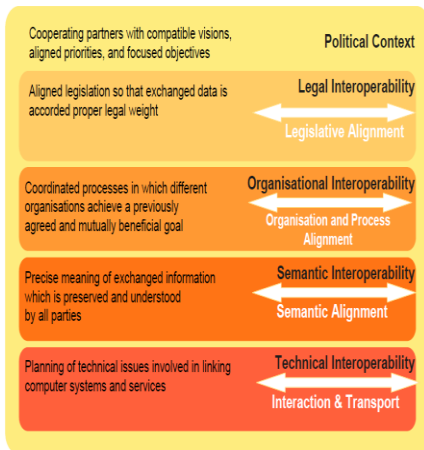
A reference architecture for delivering digital public services (across borders and sectors).

EICart

European Interoperability Cartography



A mapping of IOP solutions to the Building Blocks of the EIRA.



Trans-European System	Workflow Enablers		Data Exchange Enablers				Security Service			
	Choreography Service	Orchestration Service	Data Transmission Service	Data Transformation Service	Data Translation Service	Data Validation Service	Signature Service	Identity Management Service	Access Management Service	Audit Service
e-PRIOR	No	No	Yes	e-PRIOR provides data transformation components (XSLT transformations)	No	e-PRIOR provides data validation services (XSD validation, Schemacon validation)	No	No	No	Capability of e-Prior
GENIS S	No	No	e-TrustEE e-Delivery	No	MultiPoint Building Block manages translation of multilingual applications	No	No	ESAS	No	No
e-Trustee	No	No	Yes	e-Trustee provides data transformation components (XSLT transformations)	No	e-Trustee provides data validation services (XSD validation, Schemacon validation)	No	No	No	Capability of e-Trustee
POSTA	No	No	Yes, digital network infrastructure	No	No	No	No	No	No	No
COMETS	No	No	Yes, digital network infrastructure	Yes, electronic exchange of structured and unstructured data (e)	No	No	No	Yes, authenticate users	Yes, authorize access	No





ENTERPRISE ARCHITECTURE

How to go from **As-Is** to **To-Be**

INTEROPERABILITY ARCHITECTURE

How to organise & discover BBs
Assess & communicate architectures

SYSTEM ARCHITECTURE

How to implement BBs

Context neutral architecture development resources



✓ **Focus** on Building Blocks (BBs) and how they relate to one another

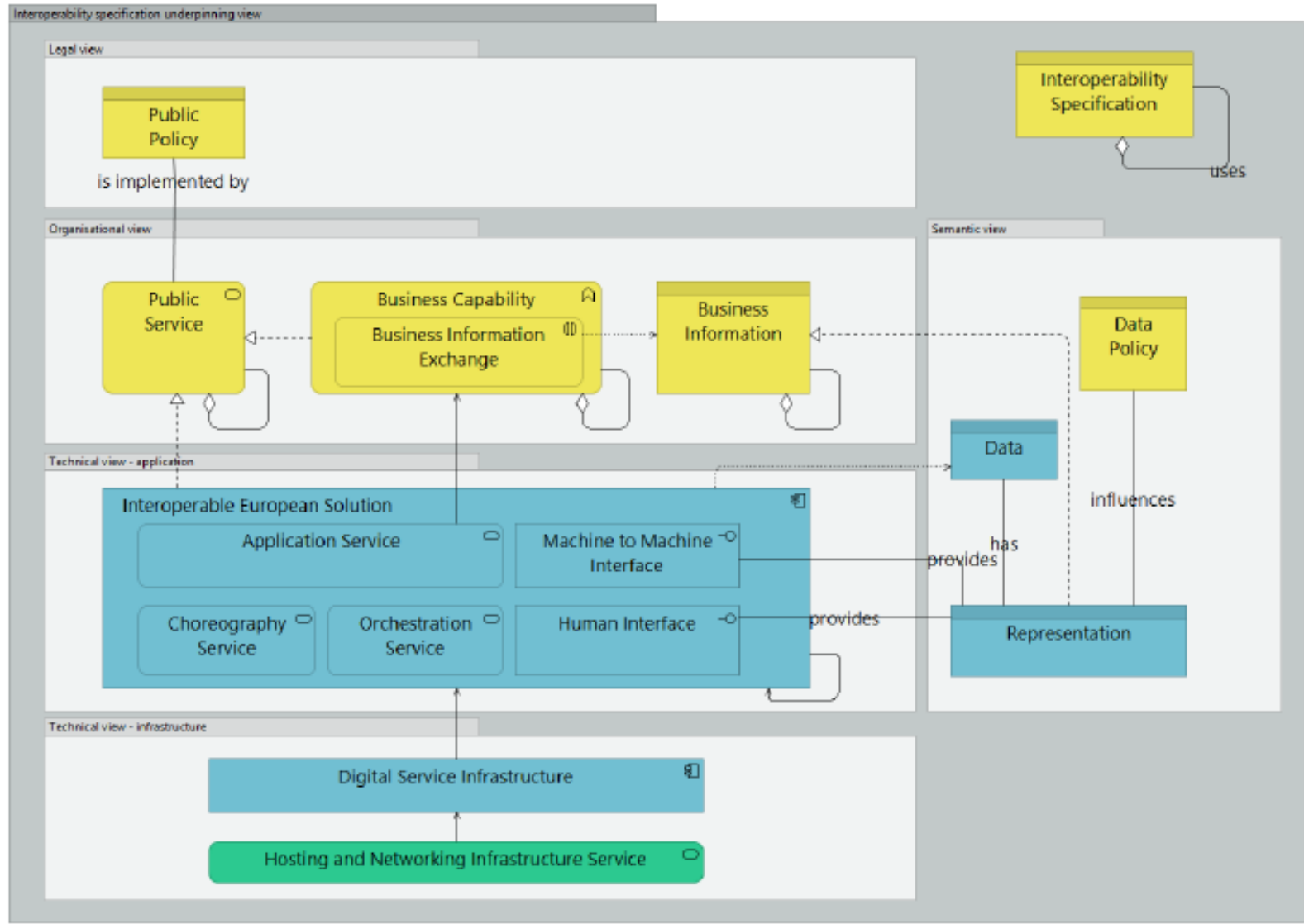
Context specific architecture development resources

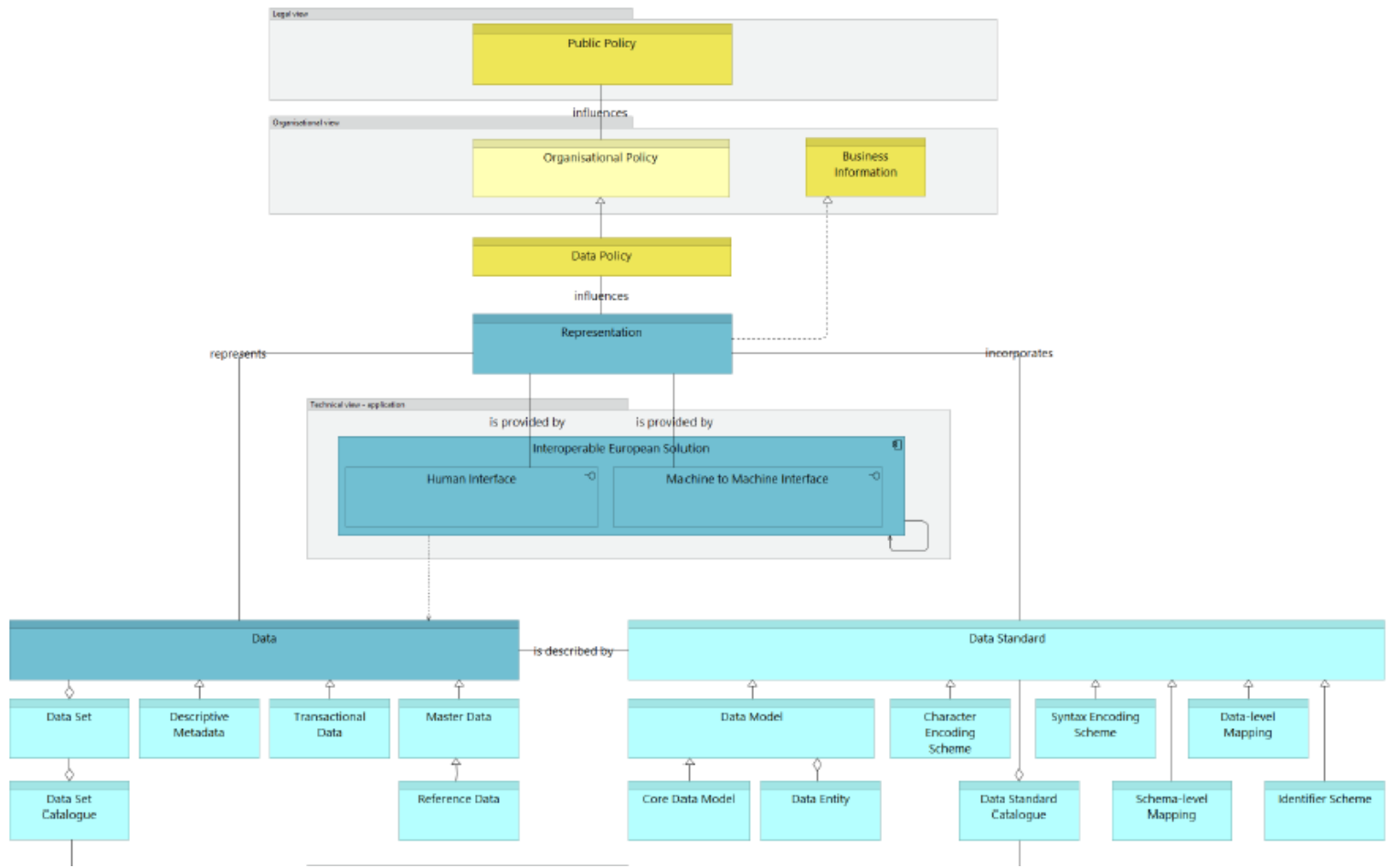


✓ **Mapping** of existing solutions to the BBs of the EIRA

For example:





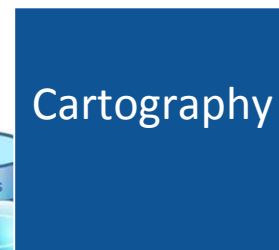
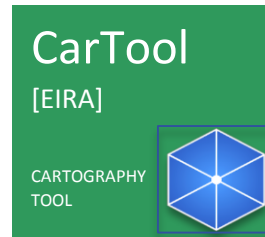




DG using the
CarTool



Documentation
on a Solution in
production



Member
States ...



The **CarTool** allows to

- 1) design, document and search according to EIRA and
- 2) export descriptions of solutions in MEF standard format

A **Cartography** is the outcome of mapping/decomposing existing solutions or documenting new ones against a taxonomy (EIRA in our case)





eGOVERNMENT
CORE
VOCABULARIES

DCAT
APPLICATION
PROFILE FOR
EUROPEAN
DATA PORTALS

ADMS
ASSET
DESCRIPTION
METADATA
SCHEMA

**ADMS
F/OSS**

**CORE
PERSON**
VOCABULARY

**CORE
BUSINESS**
VOCABULARY

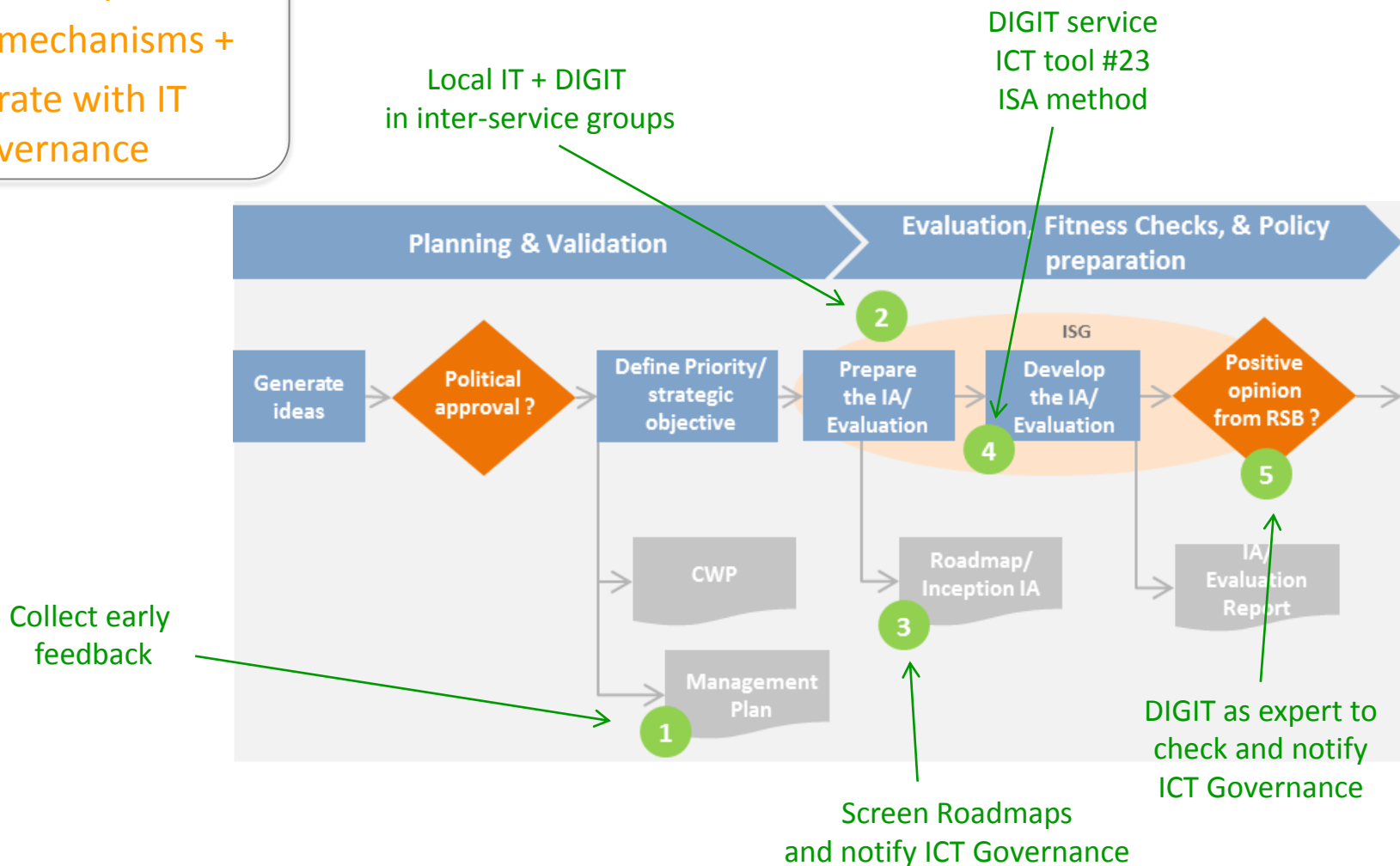
**CORE
LOCATION**
VOCABULARY

**CORE
PUBLIC
SERVICE**
VOCABULARY





Start early +
Control mechanisms +
Integrate with IT
Governance



Digital transformation

Workplace of the future

Consolidation and Standardisation

ICT security

ICT financing

- Business process harmonisation
(scan legal bases to identify core business process -> common phrasing -> common ICT systems)
- DESIA, e-Procurement, e-Grants
- Enterprise Architecture
- Mobile Apps






Better Regulation
Toolbox
ICT tool #23

http://ec.europa.eu/smart-regulation/guidelines/tool_23_en.htm

ISA² ICT
Assessment
method

The draft updated method

- The draft method  (2 MB)
- The ICT Inception Report template  (302 kB)
- The ICT Final Report template  (297 kB)

http://ec.europa.eu/isa/actions/03-ict-implications-assessment/3-1action_en.htm

ICT Register of
Roadmaps

Assessment date	Status	# Entries	# Entries with ICT impacts	# Entries with HIGH ICT impacts	# Entries with MEDIUM ICT impacts	# Entries with LOW ICT impacts
May 2016	Under review by Commission DGs	134	33	7	15	11
April 2016	Published - Last updated	123	31	7	13	11
March 2016	Published	111	28	7	11	10
February 2016	Published	103	25	7	9	9
January 2016	Published	96	23	7	7	9

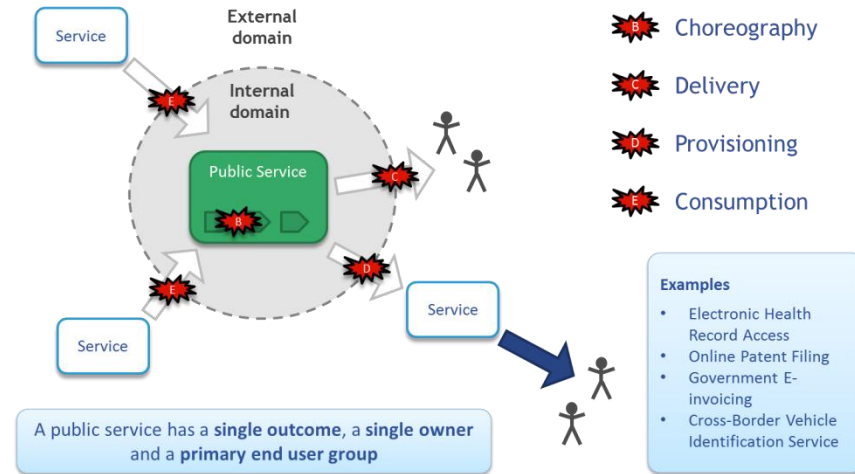
<https://webgate.ec.europa.eu/CITnet/confluence/x/PgXcHw>





The model assesses the interoperability maturity of a service and detect areas needing further improvement

http://ec.europa.eu/isa/ready-to-use-solutions/imm_en.htm

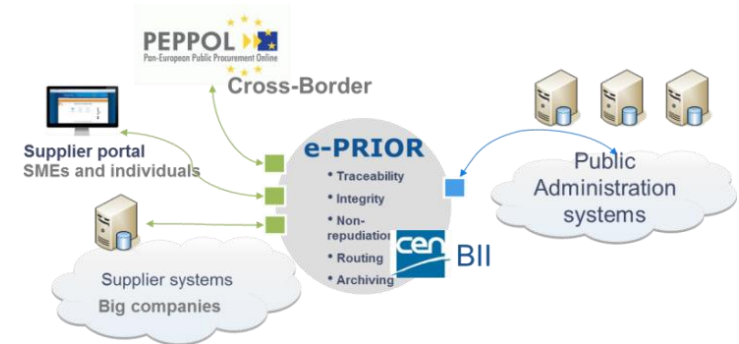
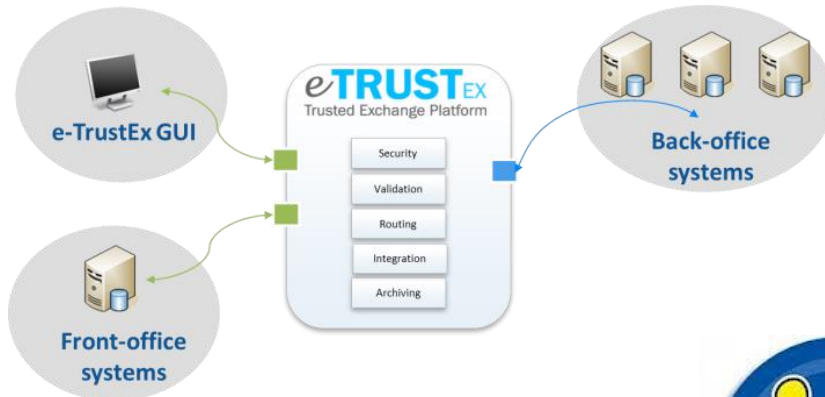


Assess ICT Standards and Specifications

<https://joinup.ec.europa.eu/community/camss/description>



The screenshot shows the 'joinup' website interface. The header includes the European Commission logo and the 'joinup' logo. Below the header, there is a navigation bar with the text 'Share and reuse interoperability solutions for public administrations'. The main content area displays the 'Common Assessment Method for Standards and Specifications (CAMSS)' community page. The page includes a search bar, a 'Join this community' button, and a list of navigation links: Overview, CAMSS Wiki, CAMSS Assessments, CAMSS Tools, List of Standards, Change Management, Members list, Related, Forums, Communicati..., and About. The page also features social media icons for Facebook and Twitter.









Machine
Translation





A multi-purpose platform:

- Interoperability observatory
- Communities of interest on interoperability
- Collaborative work environment
- Catalogue of interoperability solutions

	Unique visits per month	30.000
	Registered users	>15.000
	Library items, news items and events	>2.500
	Communities of interests	65
	Federated repositories	44
	Interoperability solutions	>3.000
	Downloads of solutions per month	>3.000
	Availability	99,98%





01

IOP ENABLERS

- Base Registries
- Catalogue of Services
- sTesta
- IPV6
- e-TrustEX
- e-documents



02

SEMANTIC IOP

- ADMS
- DCAT-AP
- Core Vocabularies
- eIDAS (natural/legal person)

03

DATA (ACCES TO, SHARING, OPEN)

- Statistical data
- Financial data standardization
- Business reporting
- Big data
- Open data

04

GEOSPATIAL

- Location interoperability solutions for eGovernment

05

E-PROCUREMENT, E-INVOICING

- Prepare CEF e-Procurement DSI
- Open e-PRIOR
- e-Certis/ESPD
- Common procurement vocabularies

06

DECISION MAKING & LEGISLATION

- Analysis of participation to policy making
- ICT impact of EU legislations
- ELI ...

07

EU POLICIES

- Common Information Sharing Environment
- Case Management

08

SUPPORTING INSTRUMENTS

- EIS
- EIRA & EIC
- IMM
- CAMSS
- EUSurvey
- CIRCABC
- Joinup
- NIFO ...

09

ACCOMPANYING MEASURES

- Communication
- Monitoring and Evaluation

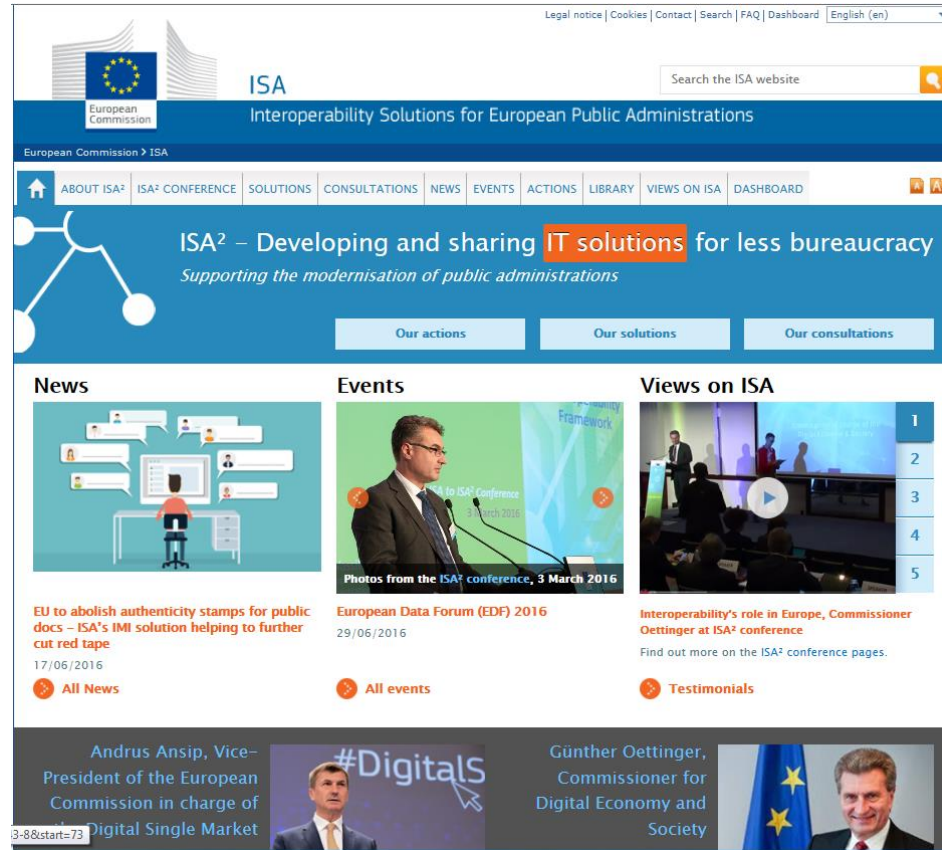




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Q & A



The screenshot shows the homepage of the ISA (Interoperability Solutions for European Public Administrations) website. At the top, there is a navigation bar with links for 'Legal notice', 'Cookies', 'Contact', 'Search', 'FAQ', and 'Dashboard', along with a language selector set to 'English (en)'. Below this is the ISA logo and a search bar. The main header features the text 'ISA Interoperability Solutions for European Public Administrations' and a navigation menu with items like 'ABOUT ISA²', 'ISA² CONFERENCE', 'SOLUTIONS', 'CONSULTATIONS', 'NEWS', 'EVENTS', 'ACTIONS', 'LIBRARY', 'VIEWS ON ISA', and 'DASHBOARD'. The central banner reads 'ISA² – Developing and sharing IT solutions for less bureaucracy' and 'Supporting the modernisation of public administrations', with buttons for 'Our actions', 'Our solutions', and 'Our consultations'. Below the banner are three columns: 'News' with an article about abolishing authenticity stamps, 'Events' with a photo from the ISA² conference, and 'Views on ISA' with a testimonial from Commissioner Oettinger. At the bottom, there are portraits of Andrus Ansip and Günther Oettinger with their respective titles.

Join ISA initiatives at: <http://ec.europa.eu/isa/>
and @ <http://joinup.ec.europa.eu>



joinup

