



Interoperability Academy

Winter School
2019



European Interoperability Framework *ISA²* Programme



11 December 2019
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Innovation in *ISA²*

- **Experimentation in the DNA of *ISA²***
 - **Many CEF BBs piloting in *ISA²***
 - **Machine Translation (eTranslation)**
 - **Big Data (Big Data Test Infrastructure)**
 - **Blockchain (European Blockchain Service Infrastructure)**
 - **Many actions looking at Innovative Technologies in a Public Sector**



What is Interoperability?

- Interact
- Mutual goals
- Share information

**All about Digital
Cooperation**

- Business processes
- Exchange of data
- ICT systems

“Interoperability” means the ability of disparate and diverse organisations to interact towards mutually beneficial and agreed common goals, involving the **sharing of information and knowledge** between the organisations, through the **business processes** they support, by means of the exchange of data between their respective ICT systems

MORE THAN 20 YEARS DIGITISING PUBLIC ADMINISTRATIONS



1985-1992	1995	1999	2005	2010	2016	2020
CADDIA PROGRAMME	IDA Programme	IDAI Programme	IDABC Programme	ISA Programme	ISA ² Programme	
	Interchange of Data between Administrations	Follow-on programme of IDA	Interchange of Data between Administrations, Businesses and Citizens	Interoperability Solutions for Public Administrations	Interoperability Solutions for Public Administrations, Businesses and Citizens	

NEW EUROPEAN INTEROPERABILITY FRAMEWORK






EIF



#1
conceptual model



#4
levels of interoperability



#12
underlying principles



#47
recommendations



European Interoperability Framework





Connecting public administrations, businesses and citizens

ISA² Programme



Contributes to the implementation
of the **eGov Action Plan** (2016-2020) and the **EIF**

Contributes to completing the **DSM**

Importance stressed in the **Ministerial eGov Declaration
from Tallinn of 6 October 2017**

Contributes to many EU policies, e.g. Open DATA initiative, the PSI directive,
TOOP, Digital Single Gateway

Complements other EC programmes, e.g. CEF, European Social Fund
(Operational Programme, administrative capacity), Regional funds



ISA2 - the interoperability programme

Promote a holistic approach to interoperability

Cross border, cross sector and user centric public administrations

Identify, create and operate interoperability solutions

Facilitate the reuse of interoperability solutions by European public administrations



ISA² programme – The benefits

For public administrations



- Reduced time and cost for the development of IT solutions
- Solutions that work smoothly across borders and/or sectors
- High end-user satisfaction thanks to efficient administrative procedures

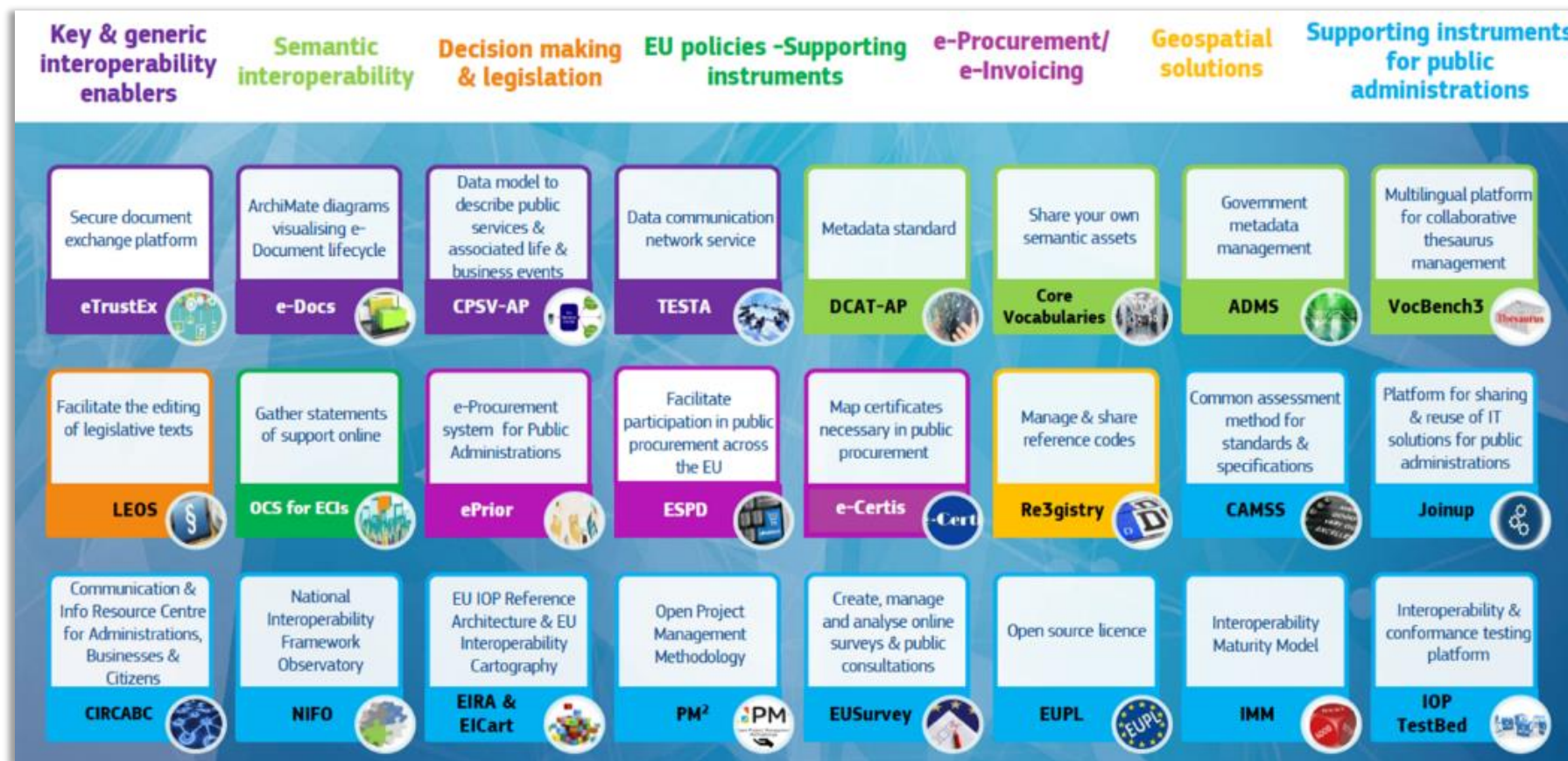
For businesses and citizens



- Quicker and cheaper administrative procedures
- Less red tape



ISA² solutions





Sharing & Reuse action





Collaborative platform

Offers services to e-Government professionals to share experiences and solutions

Observatory

News, events, documents on interoperability such as studies



joinup

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

Reusable Source Code for setup own platform

<https://github.com/ec-europa/joinup-dev/releases>

Repository of shared & reused solutions

software, IT specifications, data models, common principles, business process

Federation with other repositories



Share and reuse Interoperability solutions for public administrations, businesses and citizens

Start typing to search...

105
Collections
Collaborate around thematic

2746
Solutions
Interoperability solutions ready to use

16195
Events, discussions, news ...
To keep you up to date

Joinup is a collaborative platform created by the European Commission and funded by the European Union via the [Interoperability solutions for public administrations, businesses and citizens](#) (ISA²) Programme. It offers several services that aim to help e-Government professionals share their experience with each other. We also hope to support them to find, choose, re-use, develop and implement interoperability solutions.

Graph4Jan Movie
Presentation

The Graph4Jan Movie presents a linked data solution for searching and analysing agricultural public funding data in terms of objectives of the

Linked Government Data,

document

Reinforcing public management
11/09/2018

Barcelona City Council has released La Bústia Ètica I de Bon Govern (Ethical mailbox and of Good Governance), a secure

Ajuntament de Barcelona, Sensors,

news

'Buy from startups' strategy pays off for City of Antwerp
Open source case study

Abstract A new administrative coalition has forced Digipolis Antwerp to rethink its

"case studies"

document

SEMIC 2018 Linked Digital Public Administrations

14/06/2018 event





ISA² solutions - EIRA



EIRA: European Interoperability Reference Architecture

A solution by
ISA² Programme



WHEN IS THIS SOLUTION FOR YOU?

You would like to set up your own national collaborative platform and catalogue of reusable IT solutions providing similar services to those of Joinup.eu.

WHAT CAN WE OFFER YOU?

The European Interoperability Reference Architecture (EIRA©) helps you classifying and organising building blocks relevant to interoperability, which are used in the delivery of digital public services. The goal is to facilitate interoperability and reuse when developing public services.



EIRA benefits



Designing

Accelerate the design of systems that support the delivery of interoperable digital public services (across borders and sectors).



Assessing

Provide a reference model for comparing existing architectures in different policy domains and thematic areas, to identify focal points for convergence and reuse.



Communicating and Sharing

Help documenting the most salient interoperability elements of complex systems and facilitate the sharing of reusable solutions.

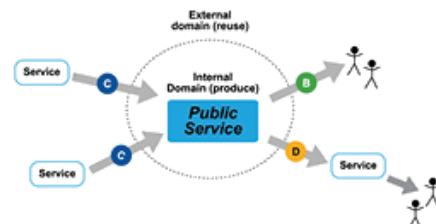


Discovering and Reusing

Ease the discovery and reuse of interoperability solutions through the TES Cartography using the CarTool.



ISA² solutions - IMAPS



IMAPS: Interoperability Maturity Assessment of a Public Service

A solution by
ISA² Programme



WHEN IS THIS SOLUTION FOR YOU?

You want to assess the interoperability readiness of your digital public services and raise awareness of the need for interoperable solutions.

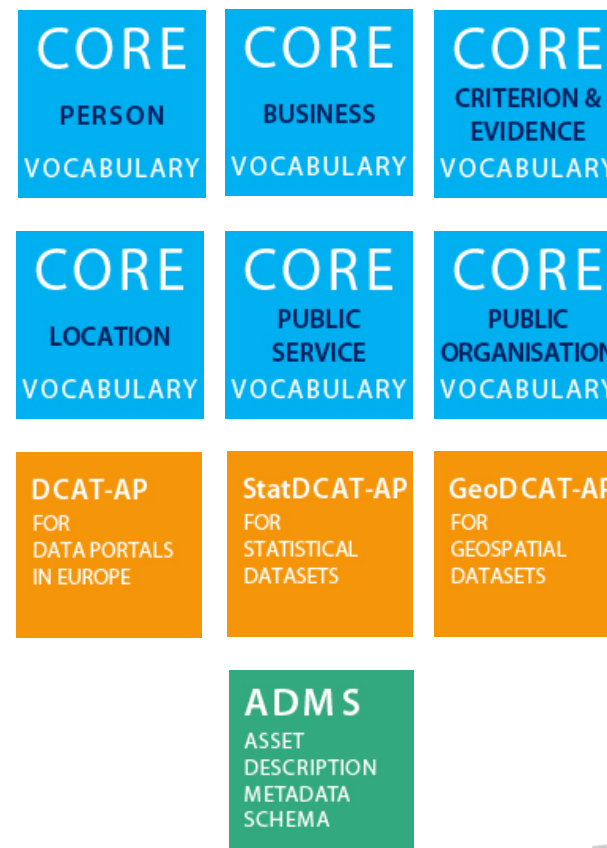
WHAT CAN WE OFFER YOU?

IMAPS will evaluate and ultimately improve European public service interoperability maturity. It currently consists of: A compact and user-friendly self-assessment through the IMAPS online survey. This 30-minute questionnaire looks at the context of the public service, how the service is delivered, how it consumes existing services and how it is managed. On completion of the IMAPS, the Results Output offers tailored recommendations and confidential improvement guidance.



ISA² solutions - Core Vocabularies and Application Profiles

- Data models
 - Simplified
 - Re-usable
 - Extensible
 - Context-neutral
- Starting point for
 - New systems development (logical data model)
 - Information exchange between systems (common baseline)
 - Data *integration*
 - Open data publishing





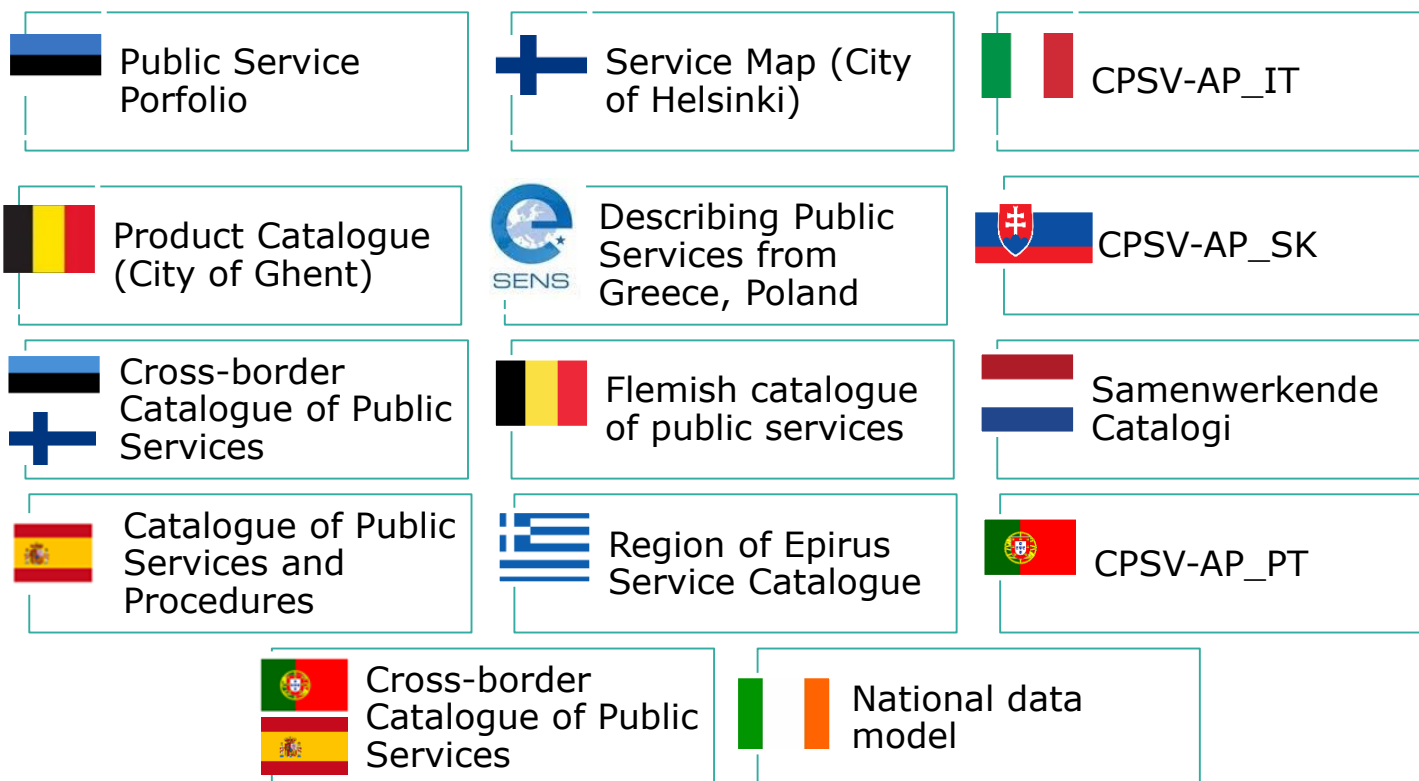
ISA² solutions CPSV-AP

The Core Public Service Vocabulary Application Profile is a data model for the description of public services, life and business events.

-  Finding information about public services more easily
-  Building user-centric catalogues of public services at all levels
-  Managing portfolios of public services
-  Publishing descriptions of life and business events and related public services



CPSV-AP





The ISA² Interoperability Test Bed

The ISA² Interoperability Test Bed is an online, intuitive and self-service platform for conformance testing of IT systems against semantic and technical specifications

Test Bed value proposition (<https://www.itb.ec.europa.eu/docs/guides/latest/valueProposition/>)



Powered by DIGIT ISA² Action 2016.25



Based on the GITB CEN Workshop Agreement



What can it be used for?

Conformance testing

- ✓ API simulation
- ✓ Content validation
- ✓ Protocol verification
- ✓ Conversation validation
- ✓ Self-service tests
- ✓ Report exports
- ✓ Progress monitoring
- ✓ Conformance certificates

Interoperability testing



Flexible deployment model

Cloud-based

- ✓ Shared ISA² instance
- ✓ Private communities
- ✓ Publicly accessible
- ✓ Managed by ITB team

On-premise

- ✓ Private instance
- ✓ Dockerised service
- ✓ Automated updates
- ✓ Managed by users



ISA² solutions - EUSurvey



euSurvey

A solution by
ISA² Programme



WHEN IS THIS SOLUTION FOR YOU?

You would like to create and conduct multilingual online surveys or consultations with easy analysis of results.

WHAT CAN WE OFFER YOU?

With the EUSurvey online portal or software, available for download on Joinup, we can provide you with a free, open source and easy-to-use tool for the creation and management of multilingual surveys and public consultations over the web. The web-based application makes it easy both for respondents to answer the questions and for survey managers to analyse the results.



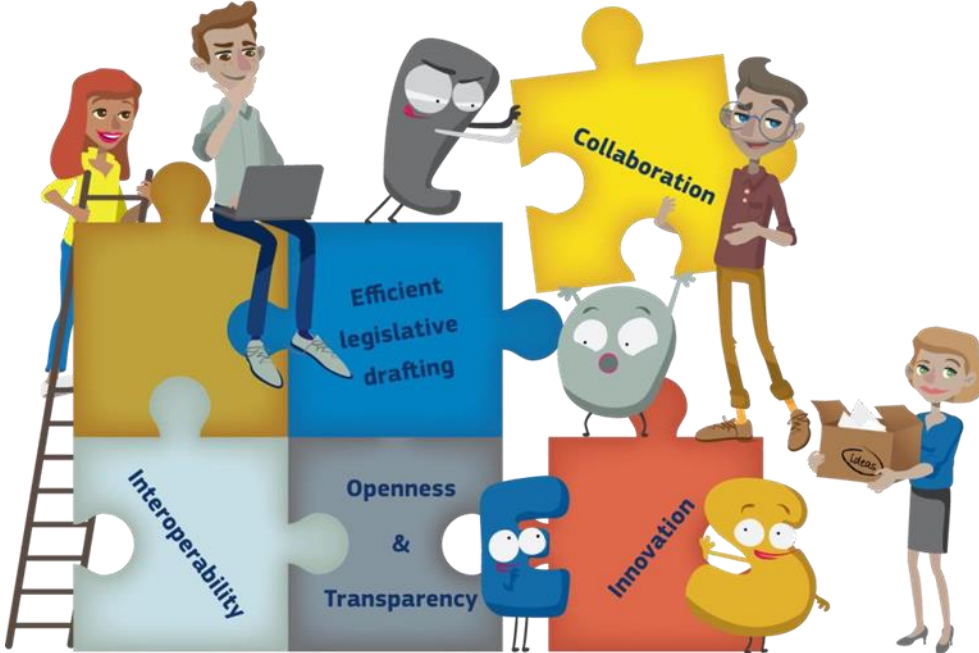
ISA² solutions - LEOS

"Make legislation drafting more efficient"

LEOS is designed to help those involved in drafting legislation, which is usually part of a complex process, by facilitating efficient online collaboration.

"Focus on the content not on the structure".

The structure, that is where we aim to be as restrictive as possible because this helps the drafters follow the rules and avoid mistakes.





LEOS benefits



Efficiency

Designed to improve the efficiency of legislation drafting.



Interoperability

Based on a well established standard (Akoma Ntoso) for simple technology-neutral electronic representations in XML format of parliamentary, legislative and judiciary documents.



Cost saving

LEOS solution is a result of years of experience and work in the field and it is released as open source under EUPL.



Extensible

LEOS configured to support different legal templates, structural rules and roles.



Usability

Designed with the user in mind to make the process easier.

Interoperability

Academy





Contribute to Develop Digital Skills in Public Sector

- **Catalogue of all learning resources** produced by ISA² solution and the EIF (2019)
- **Produce learning paths and user profiles** (2019)
- **Explore certification schemes for the EIF** (2020)?
- **Propose content on a eLearning platform** (2020)

Workshop this afternoon!



What then?

- **Interoperability is essential**
 - Acknowledged in many policies
 - EIF implemented in many EU countries & beyond
- **How the EIF should evolve?**
 - Workshop this afternoon on « Evolution of EIF »
- **What about solutions of ISA² after ISA²?**
 - Plenary tomorrow on Digital Europe.

ISA²

INTEROPERABILITY SOLUTIONS
FOR PUBLIC ADMINISTRATIONS,
BUSINESSES AND CITIZENS



QUESTION & ANSWERS



ISA² programme

You click, we link.

Stay in touch

ec.europa.eu/isa2

 @EU_isa2

 ISA² Programme

 ISA² Programme

 isa2@ec.europa.eu

Run by the Interoperability Unit at DIGIT (European Commission) with 131€M budget, the ISA2 programme provides public administrations, businesses and citizens with specifications and standards, software and services to reduce administrative burdens.