

# ISA<sup>2</sup> Programme & EIF



**Natalia**

**ARISTIMUÑO PEREZ**

**Head of Interoperability Unit,  
DG DIGIT European Commission**

A network diagram on a blue background with white lines and nodes. The central node is a large circle containing a building icon. Other nodes include a group of people, a school building, and a briefcase.

INTEROP SUMMIT 2018,  
Brussels, Belgium  
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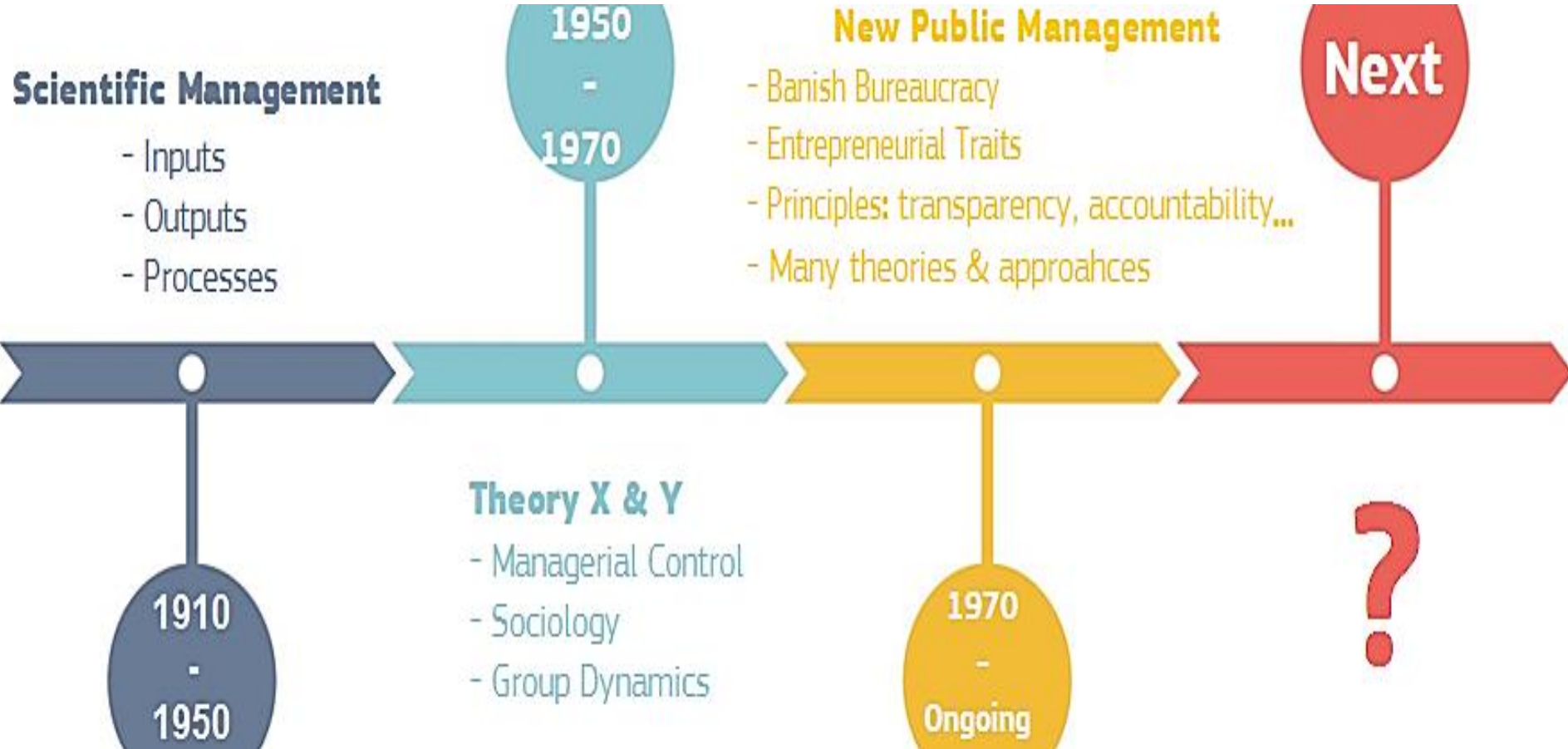


# Connecting public administrations, businesses and citizens



**DIGITAL is everywhere.  
It should be used as a key enabler in  
any Public Service**

# THE PUBLIC SECTOR HAS BEEN TRANSFORMING SINCE THE BEGINNING





**By 2025, everyone on Earth is expected to have internet access.**



# ISA<sup>2</sup> Programme

**INTEROPERABILITY SOLUTIONS FOR PUBLIC ADMINISTRATIONS,  
BUSINESSES AND CITIZENS**



# ISA<sup>2</sup> PROGRAMME

More than 30 years digitising public administrations across the EU



1985-1992

1995

1999

2005

2010

2016

2020

**CADDIA  
PROGRAMME**

**IDA  
Programme**

Interchange of  
Data between  
Administrations

**IDAII  
Programme**

Follow-on  
programme of IDA

**IDABC  
Programme**

Interchange of Data  
between  
Administrations,  
Businesses and  
Citizens

**ISA  
Programme**

Interoperability  
Solutions for Public  
Administrations

**ISA<sup>2</sup> Programme**

Interoperability  
Solutions for Public  
Administrations,  
Businesses and  
Citizens





# ISA<sup>2</sup> Programme solutions

Check out our interoperability and open source solutions to cut red tape. More to come!

## Key & generic interoperability enablers

## Semantic interoperability

## Decision making & legislation

## EU policies -Supporting instruments

## e-Procurement/ e-Invoicing

## Geospatial solutions

## Supporting instruments for public administrations

Secure document exchange platform <b>eTrustEx</b>	ArchiMate diagrams visualising e-Document lifecycle <b>e-Docs</b>	Data model to describe public services & associated life & business events <b>CPSV-AP</b>	Data communication network service <b>TESTA</b>	Metadata standard <b>DCAT-AP</b>	Share your own semantic assets <b>Core Vocabularies</b>	Government metadata management <b>ADMS</b>	Multilingual platform for collaborative thesaurus management <b>VocBench3</b>
Facilitate the editing of legislative texts <b>LEOS</b>	Gather statements of support online <b>OCS for ECIs</b>	e-Procurement system for Public Administrations <b>ePrior</b>	Facilitate participation in public procurement across the EU <b>ESPD</b>	Map certificates necessary in public procurement <b>e-Certis</b>	Manage & share reference codes <b>Re3gistry</b>	Common assessment method for standards & specifications <b>CAMSS</b>	Platform for sharing & reuse of IT solutions for public administrations <b>Joinup</b>
Communication & Info Resource Centre for Administrations, Businesses & Citizens <b>CIRCABC</b>	National Interoperability Framework Observatory <b>NIFO</b>	EU IOP Reference Architecture & EU Interoperability Cartography <b>EIRA &amp; EICart</b>	Open Project Management Methodology <b>PM<sup>2</sup></b>	Create, manage and analyse online surveys & public consultations <b>EUSurvey</b>	Open source licence <b>EUPL</b>	Interoperability Maturity Model <b>IMM</b>	Interoperability & conformance testing platform <b>IOP TestBed</b>

You click, we link!

ISA<sup>2</sup>

Learn more:



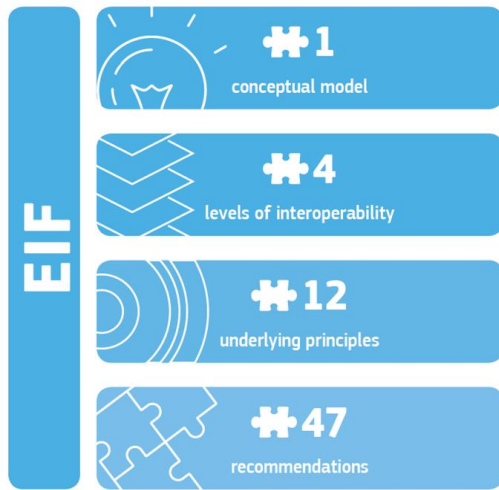


# EIF

## EUROPEAN INTEROPERABILITY FRAMEWORK

**Connecting public administrations, businesses and  
citizens**

# EIF (European Interoperability Framework)

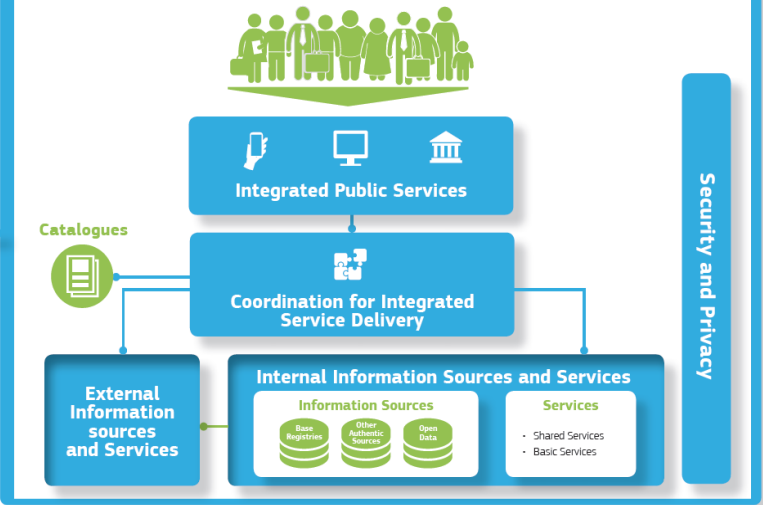


## EIF Conceptual Model

### Interoperability Governance

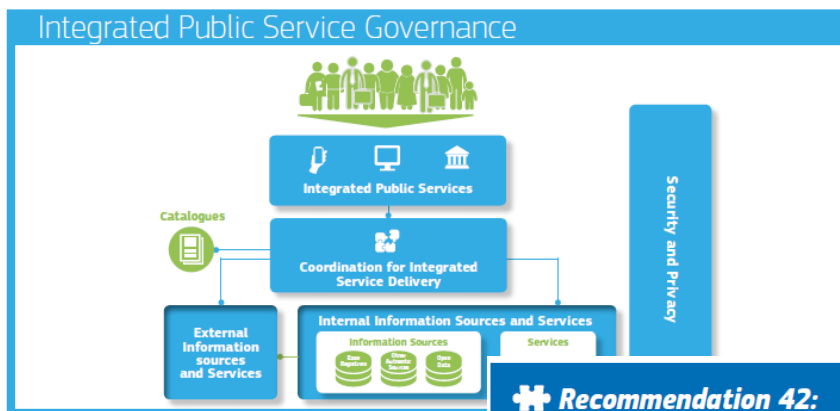


### Integrated Public Service Governance



### Interoperability Principles

# EIF from abstract to practical



Use specs such as DCAT-AP (or extensions i.e. GeoDCAT-AP), CPSV, ADMS to describe open data, public services and interoperable solutions

## + Recommendation 42:

Publish open data in machine-readable, non-proprietary formats. Ensure that open data is accompanied by high quality, machine-readable metadata in non-proprietary formats, including a description of their content, the way data is collected and its level of quality and the licence terms under which it is made available. The use of common vocabularies for expressing metadata is recommended.

## + Recommendation 44:

Put in place catalogues of public services, public data, and interoperability solutions and use common models for describing them.



## Public administrations

- More data and of good quality for better decision making
- Sharing and reuse to avoid vendor lock-in
- More credibility and trust



## Citizens

- Easy to identify and use the needed public service
- Submission of data once-only
- Tracking progress and giving feedback
- More participation



## Businesses

- Easy access to public services
- Easy to fulfil reporting obligations
- New opportunities by using open public data

**Cost and time savings**

# Interoperability principles

**1: Subsidiarity and proportionality**  
1 recommendation

**2: Openness**  
3 recommendations

**3: Transparency**  
1 recommendation

**4: Reusability**  
2 recommendations

**5: Technological neutrality and data portability**  
2 recommendations

**6: User-centricity**  
4 recommendations

**7: Inclusion and accessibility**  
1 recommendation

**8: Security and privacy**  
1 recommendation

**9: Multilingualism**  
1 recommendation

**10: Administrative simplification**  
1 recommendation

**11: Preservation of information**  
1 recommendation

**12: Assessment of Effectiveness and Efficiency**  
1 recommendation

# Reuse and EIF

## Reuse & share at the core

### Underlying principle 4: reusability

There are some key challenges that limit the sharing and reuse of IT solutions, at technical, organisational, legal and communication levels. **The ISA<sup>2</sup> sharing and reuse framework for IT solutions<sup>12</sup> provides recommendations for public administrations** to help them overcome these challenges and share/reuse common IT solutions. Reuse and sharing can be effectively supported by collaborative platforms.<sup>13</sup>

#### ✚ *Recommendation 6:*

Reuse and share solutions, and cooperate in the development of joint solutions when implementing European public services.

#### ✚ *Recommendation 7:*

Reuse and share information and data when implementing European public services, unless certain privacy or confidentiality restrictions apply.

# Sharing and Reuse of IT solutions Framework

- Advises public administrations on how they can create reusable IT solutions and how they can benefit from reusing already existing ones
- Should be used at all development stages of IT solutions & all levels of public administrations



Identifies 4  
main types of  
barriers



10 key  
recommendations



13 recommended  
measures for  
central bodies



16 supporting  
instruments



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

🔍 Start typing to search...

 92  
Collections

Collaborate around thematic

 2706  
Solutions

Interoperability solutions  
ready to use

 16204  
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](#) (ISA<sup>2</sup>) 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.

### PM<sup>2</sup> presentation

Joinup Moderator  
13/10/2017

I will have the honour to present PM<sup>2</sup> and the Open PM<sup>2</sup> Initiative during the "Rencontres du Management de Projet"

news 



EIRA

0  solution 

### Brand new Joinup

Joinup Moderator  
04/10/2017

Welcome to the brand new Joinup! Joinup, the European Commission's collaboration platform for digital government

new joinup launch

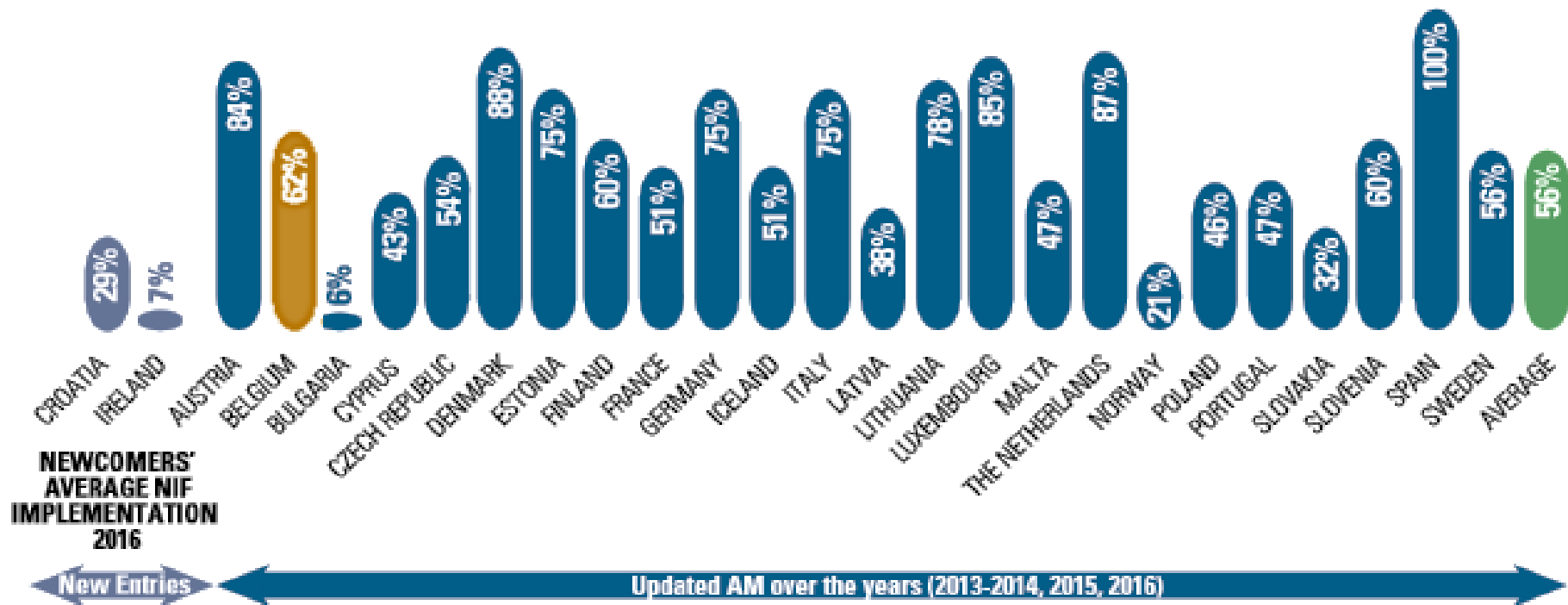
news 



EUPL

108  collection 

### AVERAGE NIF IMPLEMENTATION 2016



# European Interoperability Framework

Roadmap for the digitalisation of Public Administrations





# EIRA

**European Interoperability  
Reference Architecture**

**Building efficient digital public services**

# EIRA. Why EIRA? (\*)



(art 3)

".... The ISA<sup>2</sup>programme shall support and promote:

- f) the mapping and analysis of the overall interoperability landscape in the Union **through the establishment, maintenance and improvement of the EIRA and the EIC as instruments to facilitate the re-use of existing interoperability solutions and to identify the areas where such solutions are still lacking;**
- (g) **the maintenance, updating, promotion and monitoring of the implementation of the EIS, the EIF and the EIRA "**

(\*) DECISION (EU) 2015/2240 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2015  
<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015D2240>

# 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.

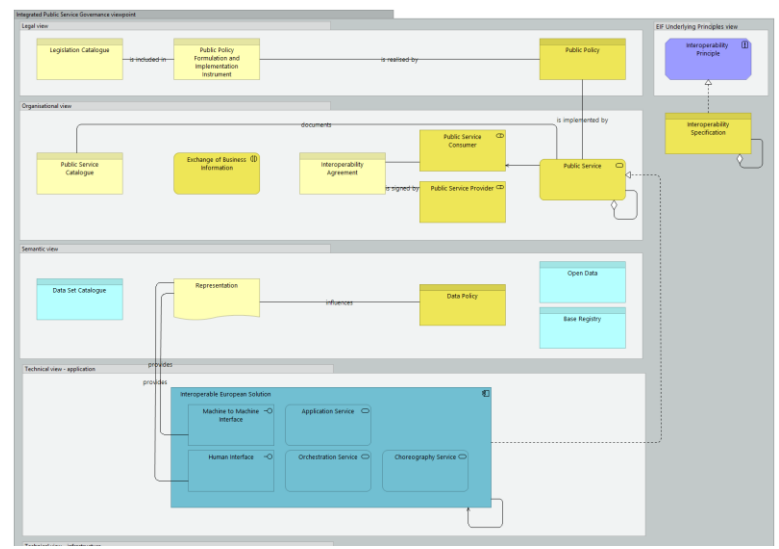
# EIF - EIRA alignment



## EIF Framework and principles



## EIRA Implementation guidelines and specifications



## Always with they eye on the users

"EIRA© is particularly useful in tackling this. In particular, as a European model it could promote the enterprise architectural alignment between different institutions and regions in Belgium".

"As FPS BOSA DT's main mission is to promote Digital transformation, most of their recommendations to other public administration are based on EIRA© and CEF building blocks -e.g. eDelivery, Electronic Registered Delivery Services (ERDS)".

### Arnaud REPER

Domain Architect  
Digital Transformation Office  
FOD Beleid en Ondersteuning  
SPF Stratégie et Appui



## HAPPY USER OF EIRA

FPS BOSA DT was first introduced to EIRA© within the ISA<sup>2</sup> programme's action 'European Interoperability Architecture (EIA)'. As part of the activities performed under this action, the team of FPS BOSA DT participated in workshops held from July to September 2016 with the objective to promote the use of EIRA© by EU Member States. During these workshops the team of FPS BOSA DT learned and tested EIRA© in a real-life case to better understand the benefits it can offer to their organisation. In the context of these workshops, their solution 'Ecosystem' was mapped to EIRA©/CarTool© and specific architectural model was prepared.

Furthermore, FPS BOSA DT uses CarTool© together with EIRA© to model solutions. The main challenge encountered while using EIRA© was getting consensus between business and technical people as well as aligning their understanding and objectives. This challenge was most pronounced when validating architecture models between top-management and IT operational staff. In addition, another challenge in Belgium was the variety of laws between the regions making it difficult to have one common approach when developing a solution. EIRA©/CarTool© is particularly useful in tackling this. In particular, as a European model it could promote the enterprise architectural alignment between different institutions and regions in Belgium.

FPS BOSA DT uses the following areas of support:

- Decoupling functionalities in Architectural Building Blocks;
- Providing the key Interoperability enablers Architectural Building Blocks;
- Accelerating development cycle.

EIRA©/CarTool© enables FPS BOSA DT's to:

- Reuse EU Building blocks;
- Promote interoperability between different level of administrations;
- Use the EU experience to speed up the transition to digital government;
- Provide guidance for the digital agenda for digital Belgium;
- Support the digital agenda of Belgium.

As FPS BOSA DT's main mission is to promote Digital transformation, most of their recommendations to other public administration are based on EIRA©/CarTool© and CEF building blocks (e.g. eDelivery, Electronic Registered Delivery Services (ERDS)). They highly recommend the use of EIRA© to other administrations, as it helps to save money in developing solutions, and enables the collaboration with public administrations across the EU.

Once FPS BOSA DT began using EIRA©, at first they found it complex to use due to its multiple views. Thus, to understand every block they required a lot of interaction and feedback within the organisation. However, following this initial learning phase, FPS BOSA DT found the architecture blueprint provided by the European Commission to be very useful. FPS BOSA DT now shares the blueprint with their partners within the Belgian federal and regional government. Currently, they find it faster and easier to setup different solutions, reusing building blocks from the EU and are currently using EIRA©/CarTool© in the development of the 'eBox' solution.





# SEMIC 2018

Semantic Interoperability Conference

## Linked Digital Public Administrations

14 June 2018 - Sofia, Bulgaria

#SEMIC2018  
@EU\_isa2

Initiative supported by the ISA<sup>2</sup> Programme





European  
Commission



**Questions?**



# ISA<sup>2</sup> programme

*You click, we link*

Run by the ISA Unit at DIGIT (European Commission) with 131€M budget, the ISA<sup>2</sup> programme provides public administrations, businesses and citizens with specifications and standards, software and services to reduce administrative burdens.



@EU\_ISA2

[isa2@ec.europa.eu](mailto:isa2@ec.europa.eu)

[ec.europa.eu/isa2](http://ec.europa.eu/isa2)