



# ISA<sup>2</sup> Programme

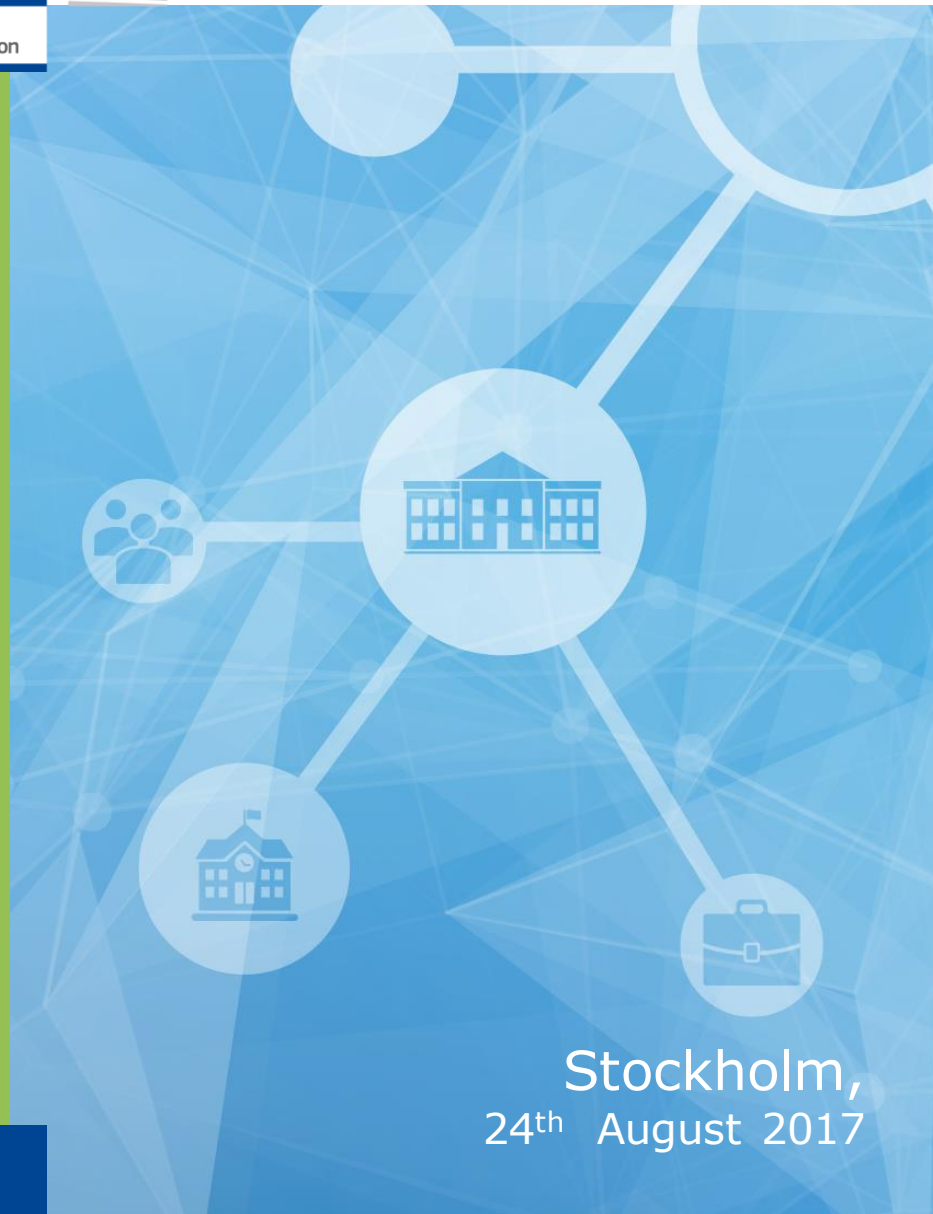
By Natalia

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(DG DIGIT) European Commission**

ISA<sup>2</sup>

Stockholm,  
24<sup>th</sup> August 2017





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**General view of ISA<sup>2</sup> Programme**

**EIF: European Interoperability Framework**

**EIRA: European Interoperability Reference  
Architecture**

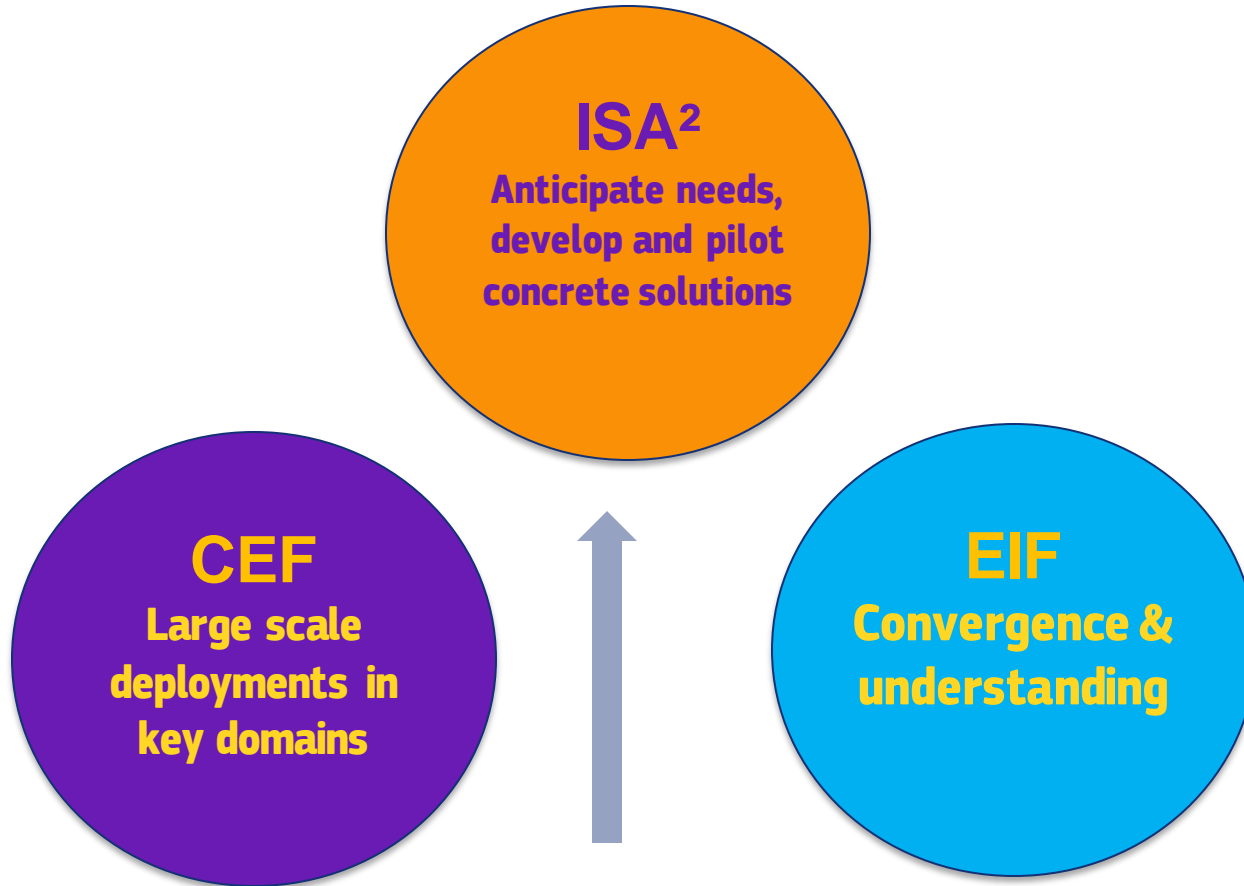
**CEF: Building Blocks**

**DPA: Digital Public Administration**



# ISA<sup>2</sup>

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



**High value added Services for everybody**



# CHECK OUT AND DOWNLOAD ISA<sup>2</sup> SOLUTIONS

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



## EU Survey

Multilingual online surveys

More than 5,400 surveys in 2016

## DCAT-AP

Metadata management and reuse of semantic assets

83,000 datasets from 15 national data portals



## OCS for ECIs

Gather statements of support online

33 out of 41 European Citizens Initiatives launched in 2016



## JOINUP

Collaborative platform to share and reuse IT solutions

Single access point to 2830 IT solutions  
72 communities  
30,219 users



## CPSV-AP

A data model for describing public services and the associated life and business events

1,100 times downloaded until January 2017



## e-TrustEX

A secure document exchange platform

500,000 electronic messages in 2014  
Used by:

European Commission & EU bodies  
7 National Parliaments  
8 Permanent Representations



## TESTA

A data communication network service, operated by the European Commission

80 applications in various EU policies domains  
10 services at Member State level





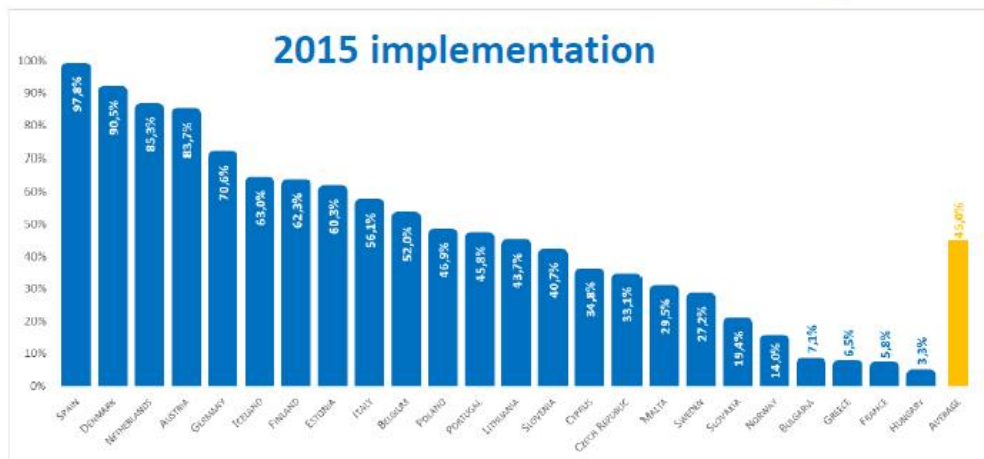
# EIF

## EUROPEAN INTEROPERABILITY FRAMEWORK

**Connecting public administrations, businesses and  
citizens**

## So far so good

EU & national



### 2014 alignment



There is an overall very good NIF-EIF alignment across countries for 2014

Domain specific

- e-Health interoperability framework
- eIDAS Regulation – interoperability framework for mutual recognition of IDs
- INSPIRE Directive, location interoperability
- Connecting Europe Facility building blocks

Support by





## ... but still some way to go



### Alignment with policy development

- Digital Single Market (**EIF revision in the Roadmap**)
- Revised Directive on Public Sector Information
- eIDAS Regulation
- e-Government Action Plan 2016-2020



### Alignment with emerging technological trends

- Interoperability governance
- Integrated service delivery
- Information Management (big & open data)
- European Interoperability Reference Architecture
- Security & privacy



### More focus on EIF implementation

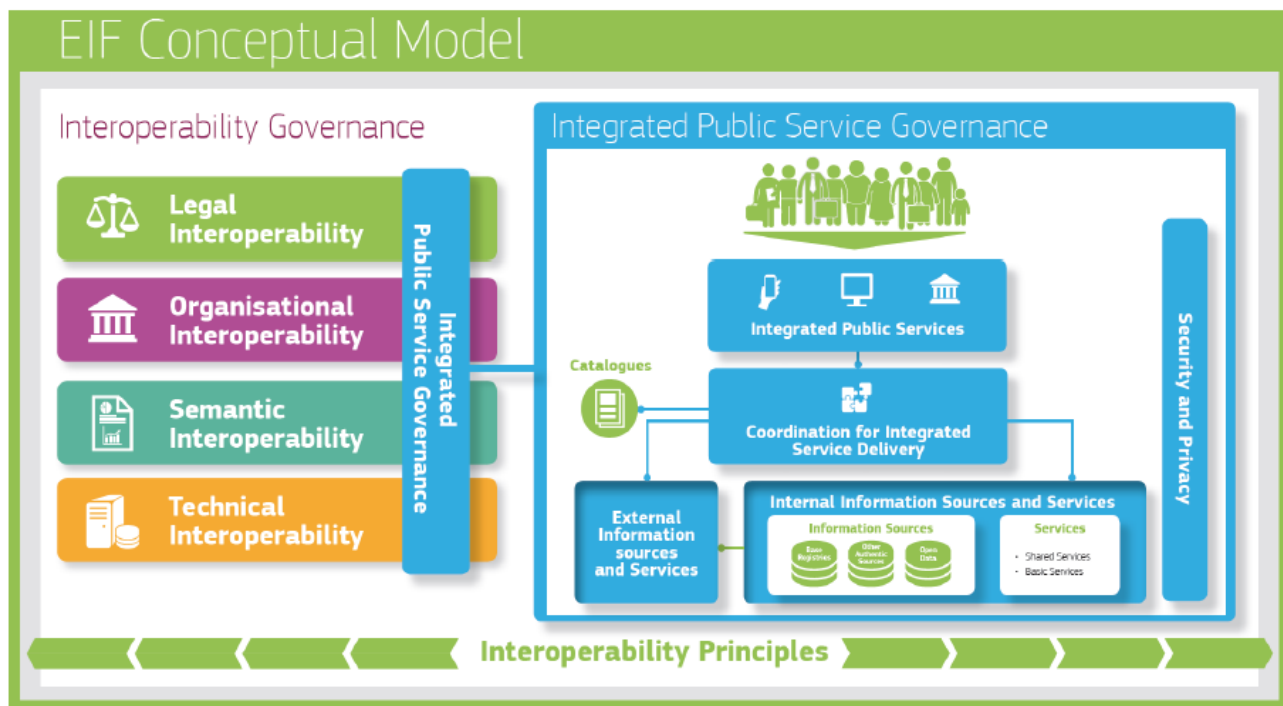
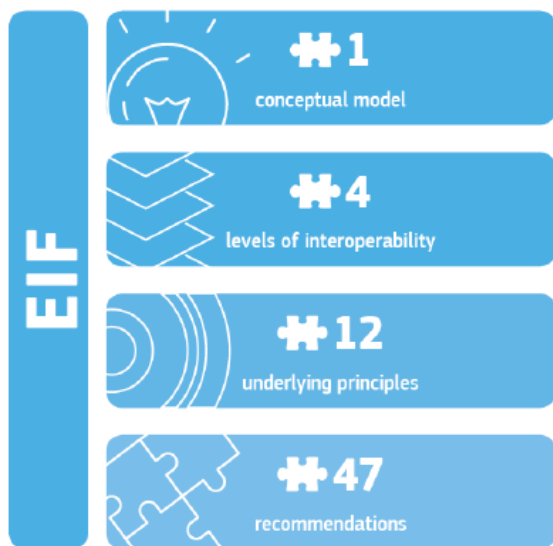
- More concrete recommendations
- Point to specific solutions that can facilitate implementation
- Interoperability Action Plan



# EIF overview



## Revised ... and more complete





## 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>

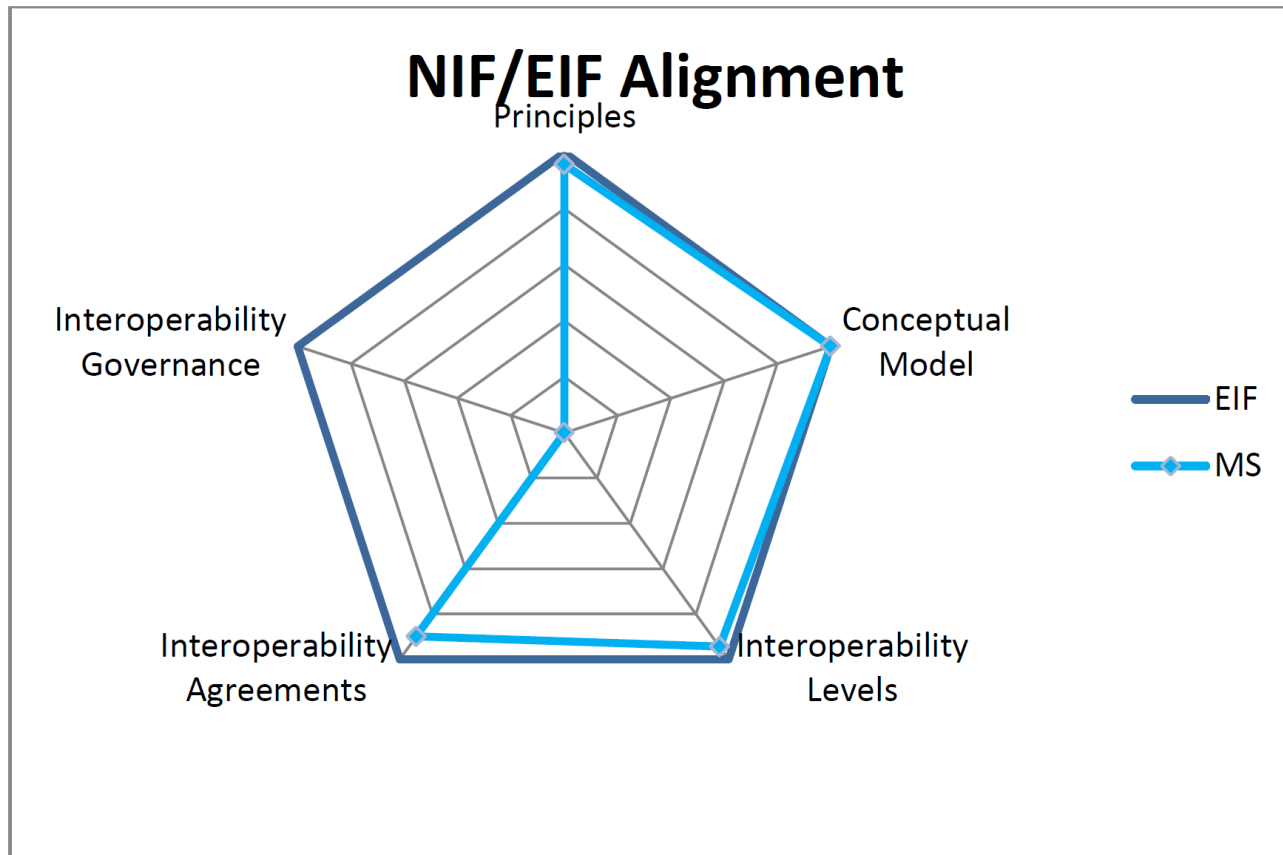
### ✚ *Recommendation 6:*

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.

# NIFO Factsheet – Sweden





## EU Institutions and Member States to implement



Communication, COM(2017) 134, 23 Mar 2017

*"European Interoperability Framework – Implementation Strategy"*

Annex 1: **Interoperability Action Plan** (5 focus areas, 22 actions)

Annex 2: The **European Interoperability Framework**

**Support by ISA<sup>2</sup> (131 M€, 2016-2020)**





# 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. Alignment



COM(2017) 134 &  
ANNEX 1

Interoperability Implementation Strategy

**Governance and strategy**

Focus areas?  
Objectives?  
When?

ANNEX 2

What?

European Interoperability Framework (EIF)

**Framework and principles**

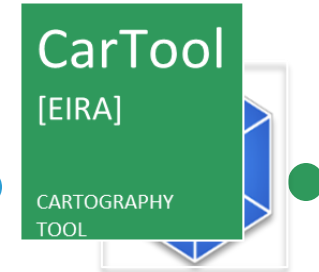
How?

European Interoperability Reference Architecture (EIRA)

**Implementation Guidelines and Specifications**

[http://eur-lex.europa.eu/resource.html?uri=cellar:2c2f2554-0faf-11e7-8a35-01aa75ed71a1.0017.02/DOC\\_1&format=PDF](http://eur-lex.europa.eu/resource.html?uri=cellar:2c2f2554-0faf-11e7-8a35-01aa75ed71a1.0017.02/DOC_1&format=PDF)  
[http://eur-lex.europa.eu/resource.html?uri=cellar:2c2f2554-0faf-11e7-8a35-01aa75ed71a1.0017.02/DOC\\_2&format=PDF](http://eur-lex.europa.eu/resource.html?uri=cellar:2c2f2554-0faf-11e7-8a35-01aa75ed71a1.0017.02/DOC_2&format=PDF)  
[http://eur-lex.europa.eu/resource.html?uri=cellar:2c2f2554-0faf-11e7-8a35-01aa75ed71a1.0017.02/DOC\\_3&format=PDF](http://eur-lex.europa.eu/resource.html?uri=cellar:2c2f2554-0faf-11e7-8a35-01aa75ed71a1.0017.02/DOC_3&format=PDF)

# EIRA. Use Cases



## Designing

- ● Design solution architectures
- ● Create Cartography



## Assessing

- ● Assessing solution architectures
- ● Portfolio mgmt decision support
- ● Support Impact Assessment on ICT



## Communicating and Sharing

- ● Document interoperability solutions



## Discovering and Reusing

- ● Search for interoperability solutions



# 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

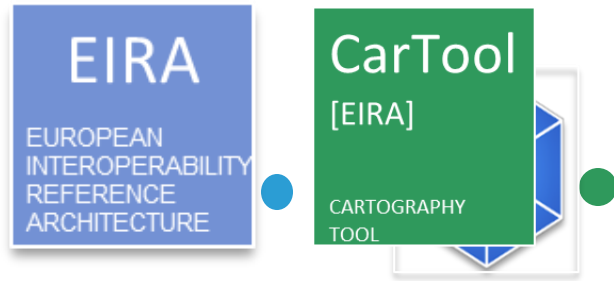
Help documenting the most salient interoperability elements of complex systems and facilitate the sharing of reusable solutions.



## Discovering and Reusing

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

# EIRA. How EIRA & CarTool support IOP in e-Government?



- Providing a controlled vocabulary
- Decoupling functionalities in Architectural Building Blocks
- Facilitating the identification of IOP specifications
- Providing the key interoperability enabler ABBs
- Accelerating development cycle
- Enabling cartographies
- Promoting discovery/reusability
- Supporting Portfolio Mgmt Decision Making
- Supporting Public Policy formulation

	Designing	Assessing	Communicating and Sharing	Discovering and Reusing
Providing a controlled vocabulary	● ●	● ●	● ●	● ●
Decoupling functionalities in Architectural Building Blocks	● ●	● ●	● ●	● ●
Facilitating the identification of IOP specifications	● ●	● ●	● ●	● ●
Providing the key interoperability enabler ABBs	● ●	● ●	● ●	● ●
Accelerating development cycle	● ●	○ ○	○ ○	● ●
Enabling cartographies	○ ●	○ ●	○ ●	○ ●
Promoting discovery/reusability	● ●	● ●	● ●	● ●
Supporting Portfolio Mgmt Decision Making	○ ●	○ ●	○ ●	○ ●
Supporting Public Policy formulation	○ ●	○ ●	○ ●	○ ●

# EIRA. Deployment state of play



- ✓ EIRA/CarTool downloads: **+1600**
- ✓ Pilots/Workshops in European Institutions: EC, Council, Committees
- ✓ Pilots/Workshops in Member States: EE, NL, DK (2), ES, CZ, BE, LUX
  - ✓ In EE EIRA was used to model **EESTI** (High level model of all the public services)
  - ✓ In DK was used to model **e-Prescription** (Patient treatment Public Service) and in September it will be used to compare reference architectures

# EIRA. Next priorities



- ✓ Workshops in 3 Member States in 2018
- ✓ Release of EIC v1.0.0 with a focus on EC highly Reusable & interoperable solutions (i.e. CEF)
- ✓ Support Member States:
  - ✓ in the creation of their national cartographies using CarTool
  - ✓ Promotion of the common guidelines to assess reusability and interoperability in the Member States
  - ✓ Sharing national solutions in the EIC
- ✓ Further understanding/identification of key interoperability enablers (\*)
- ✓ Further understanding on interoperability specifications

(\*) 'key interoperability enablers' means interoperability solutions that are necessary to enable the efficient and effective delivery of public services across administrations 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>





# DPA

# Digital Public

# Administrations



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

# THE PUBLIC SECTOR HAS BEEN TRANSFORMING SINCE THE BEGINNING

## Scientific Management

- Inputs
- Outputs
- Processes

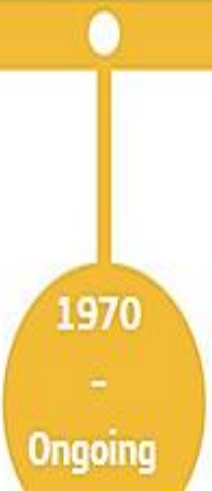


## Theory X & Y

- Managerial Control
- Sociology
- Group Dynamics

## New Public Management

- Banish Bureaucracy
- Entrepreneurial Traits
- Principles: transparency, accountability...
- Many theories & approaches





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

**How could we harness such a DIGITAL reality for Public Administrations?**





**For convergence and efficiency ?  
- in our Infrastructures for example -**



**For streamlining Digital Public Services  
& scaling-up Innovation ?**





**For mutual recognition by design, via cross-border interoperability ?**



**For providing trusted digital consultancy when really needed ?**

# Digital Public Administration Programme

## DPA- Consultancy Hub

Technical assistance

## DPA- Innovation Hub

Networks of excellence

## DPA- public services

Expansion of the services provided by CEF and ISA<sup>2</sup>, focus on data services

## DPA- Infrastructure

Secure cloud platform/ rationalisation of investments

**DPA- Inter-operability  
and reuse of services**





**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.



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