

# EIF and NIFO, connecting public administrations, businesses and citizens



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*OpenBelgium*  
**12<sup>th</sup> March 2018**

The background of the right side of the slide features a network diagram with various icons connected by lines. The icons include a group of people, a large building, a smaller building with a flag, and a briefcase. The diagram is set against a blue background with a geometric pattern of triangles and lines.

# A DIGITAL SINGLE MARKET NEEDS MODERN PUBLIC SERVICES

Digital by default

Openness and  
transparency

Cross-border by default

Interoperable

Once-only  
principle

Inclusiveness and  
accessibility

Trustworthiness  
and security

Common services

Common technical  
building blocks

Common  
standards and  
technical specs

Digital Single Market  
Strategy 2015

e-Government Action  
Plan 2016-2020

New European  
Interoperability  
Framework



# Overview of ISA<sup>2</sup> Programme



# 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:



# 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

## JOINUP

Collaborative platform to share and reuse IT solutions

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



## DCAT-AP

Metadata management and reuse of semantic assets

83,000 datasets from 15 national data portals



## CPSV-AP

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

1,100 times downloaded until January 2017



## OCS for ECIs

Gather statements of support online

33 out of 41 European Citizens Initiatives launched in 2016



## 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

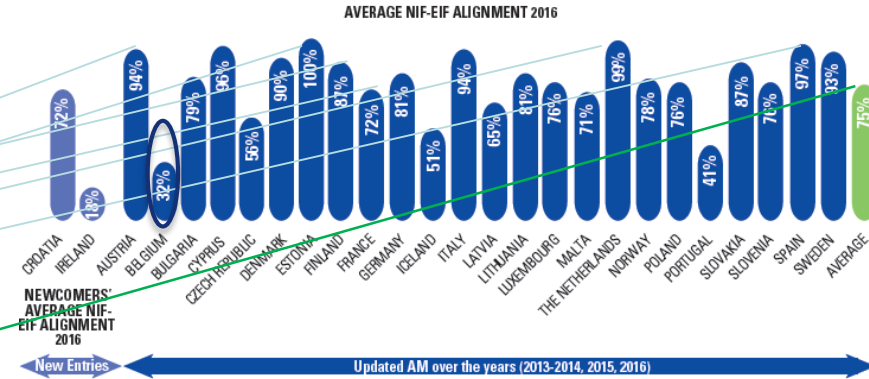
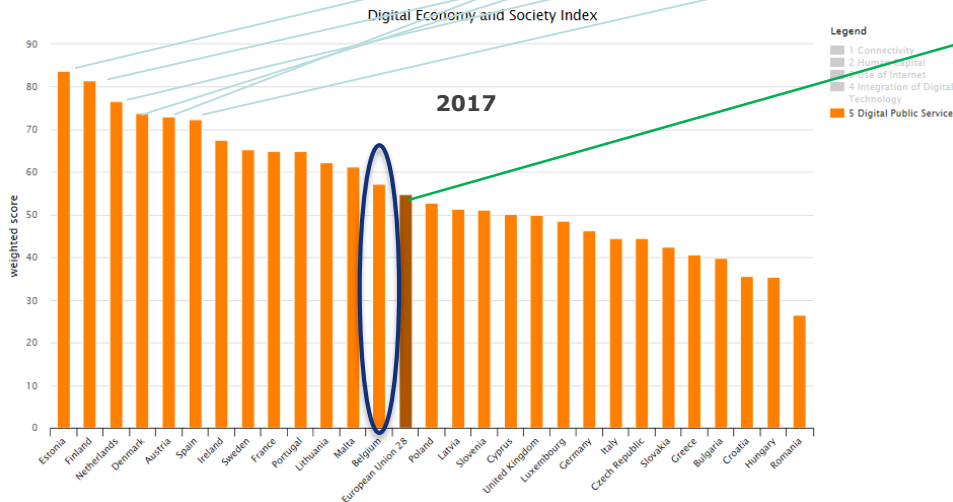




European Commission

# Digital public services - Current landscape

where interoperability scores high ...



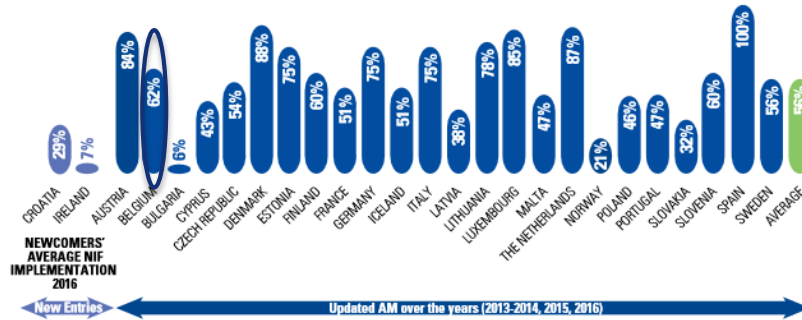
...digital public services score high



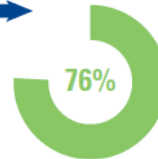
European Commission

# So far so good ...

AVERAGE NIF IMPLEMENTATION 2016



There is an overall excellent NIF-EIF alignment across countries for 2016, with slight increase if compared with previous years



EU & national

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



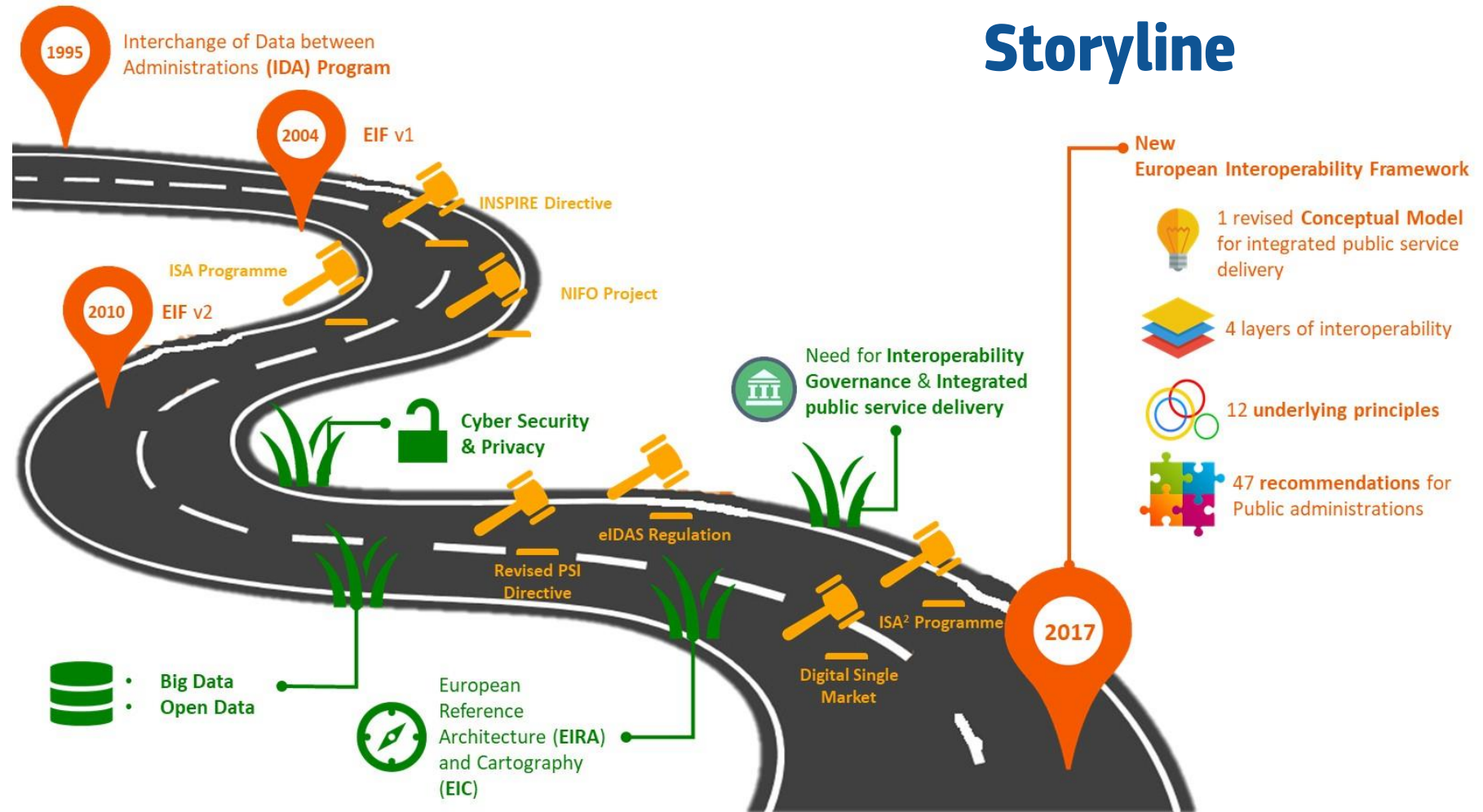
ISA/ISA<sup>2</sup> programmes



CEF programme



# EIF Overview Storyline



# The political context: Tallinn Declaration



*"We confirm our commitment to the vision laid out in the EU eGovernment Action Plan 2016-2020 and in the European Interoperability Framework"*

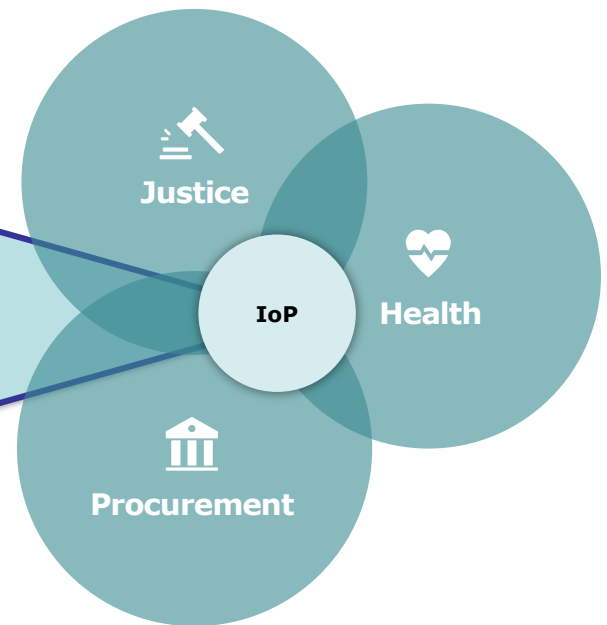
## **Ministerial Declaration on eGovernment The Tallinn Declaration, Friday 6 October 2017**

## The political context: Tallinn Declaration

The Tallinn Declaration recognised that the digital transformation of public administration can be greatly facilitated by interoperability (IoP)

EU2017.EE

1. Digital-by-default
2. Once-only
3. Trustworthiness and Security
4. Openness and transparency
5. Interoperability by default
6. Horizontal enabling policy steps
7. Cross-border by default





## ... 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

# 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**

(mainly) supported by ISA<sup>2</sup>



# EUROPEAN INTEROPERABILITY FRAMEWORK

GUIDING EU MEMBER STATES SINCE 2005



2005

**IDABC Programme**

Interchange of Data between Administrations, Businesses and Citizens

**EIF V1**

2010

**ISA Programme**

Interoperability Solutions for Public Administrations

**EIF V2**

2016

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

Interoperability Solutions for Public Administrations, Businesses and Citizens

**EIF V3**

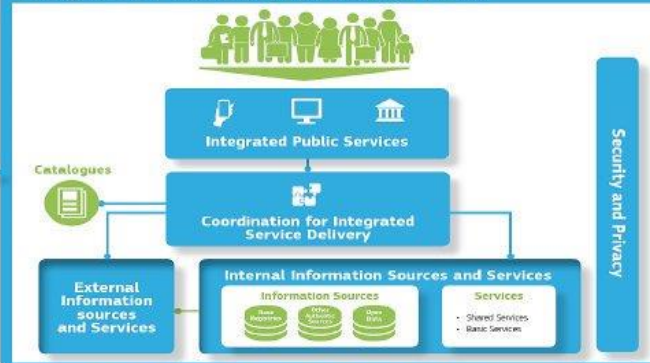
2020

## EIF Conceptual Model

Interoperability Governance



Integrated Public Service Governance



Interoperability Principles

Check out our interoperable open source solutions







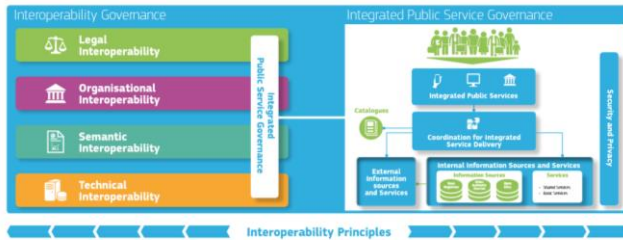
European Commission

# EIF Overview: EIF Elements

## Detailed view of the EIF structure:



### 1 Conceptual Model



**EXAMPLE** *Recommendation 39:*  
Match each base registry with appropriate metadata including the description of its content, service assurance and responsibilities, the type of master data it keeps, conditions of access and the relevant licences, terminology, a glossary, and information about any master data it uses from other base registries.



### 4 Layers of interoperability



**Legal interoperability** to ensure that organisations operating under different legal frameworks, policies and strategies are able to work together.



**Organisational interoperability** to align business processes of PAs and relevant information exchanged



**Semantic interoperability** to ensure that the precise format and meaning of exchanged data and information is preserved and understood throughout exchanges between parties



**Technical interoperability** covers the applications and infrastructures linking systems and services.



### 12 Underlying Principles



1. Subsidiarity and proportionality
2. Openness
3. Transparency
4. Reusability
5. Technological neutrality and data portability



6. User-centricity
7. Inclusion and Accessibility
8. Security & Privacy
9. Multilingualism



10. Administrative simplification
11. Preservation of information
12. Assessment of effectiveness and efficiency



### 47 Recommendations



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## Base of the questionnaire

# EIF Overview: **EIF Elements**

## Detailed view of the EIF structure



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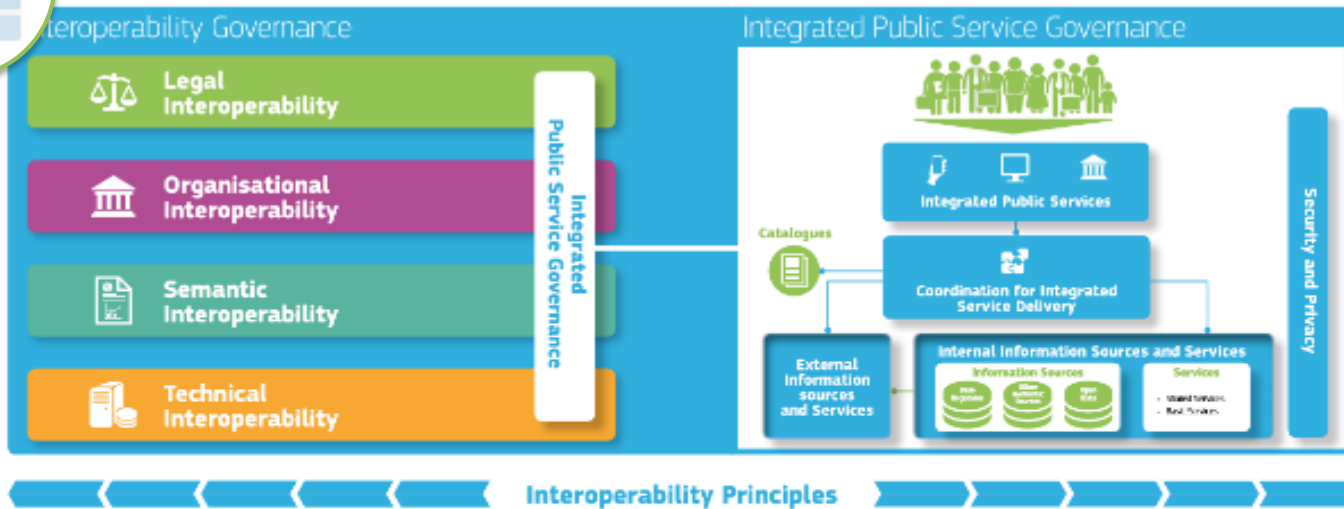
# EIF Overview

## EIF Elements

### Detailed view of the EIF structure



#### 1 Conceptual Model



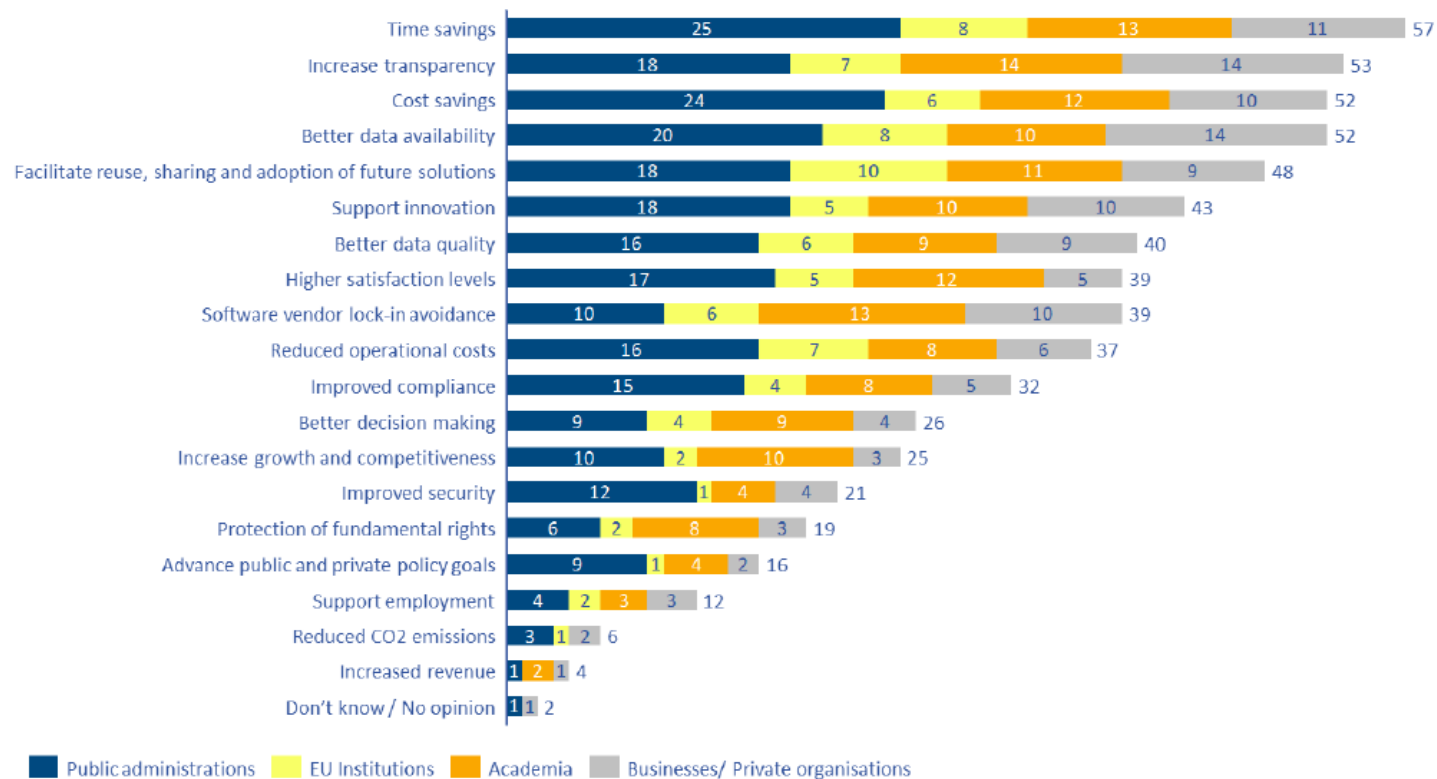
#### + Recommendation 39:

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## Expectations !

*In which area(s) do you expect the EIF to contribute the most with regard to the implementation of interoperability in the different Member States as well as in Europe in general?*



**Source:** results from the open public consultation with public administrations, academia/research/standardisation organisations, business and private organisations and the targeted consultation with EU institutions/agencies.

## Data is a boost to interoperability and better public service delivery

*Recommendation 2:*

**Publish the data you own as open data unless certain restrictions apply.**

*Recommendation 4:*

**Give preference to open specifications, taking due account of the coverage of functional needs, maturity and market support and innovation.**

*Recommendation 7:*

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

*Recommendation 30:*

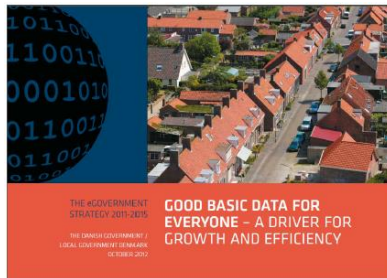
**Perceive data and information as a public asset that should be appropriately generated, collected, managed, shared, protected and preserved.**



### Implementation Examples



### Open Standards for local administrations OSLO (Belgium – Flanders)



### Basic Data program (Denmark)

Use specs such as  
DCAT-AP (or extensions i.e. GeoDCAT-  
AP), CPSV-AP, 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.

# EIF Monitoring Mechanism Strategic view



## VISION

Article 1.2 of the ISA<sup>2</sup> Decision states that *"the Commission, through the ISA<sup>2</sup> programme, shall **monitor the implementation of the EIF**"*.



## MISSION

Establish the **degree of implementation** of the EIF in Member States through the measurement of **specific primary/secondary indicators** for each of its 47 recommendations.



## GOAL

Provide each Member State with its **level of implementation of the EIF** based on a **recommendation by recommendation measurement**.



## Inputs

### Primary indicators

- › Definition of new primary indicators and reuse of existing indicators from previous NIFO when secondary indicators either do not exist or are not yet available

### Secondary indicators

- › External indicators from data sources of relevant EC legislation, initiatives and activities that measure interoperability (e.g. Open Data Portal, eGovernment Benchmark Report)

## NIFO/EIF Monitoring Mechanism

## Benefits

Granular & concrete measurement of a country's level of EIF implementation

Enables ISA<sup>2</sup> programme to leverage on existing indicators

Valuable input for ISA<sup>2</sup> programme mid-term & final evaluations

Provides evidence for potential synergies across EC to further common objectives

Marketing tool for ISA<sup>2</sup> as an enabler of core EU policies

# Towards the new observatory



## Scope

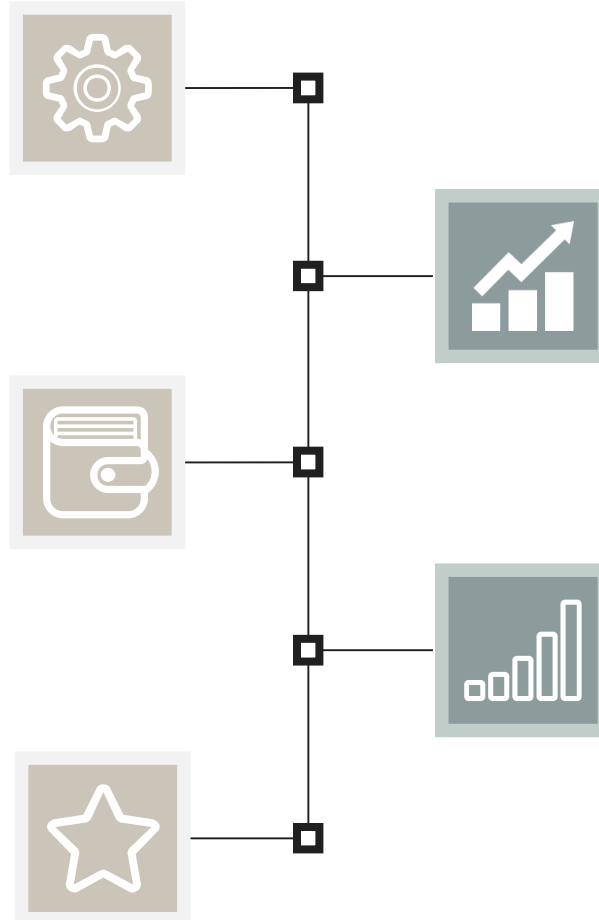
- **NIFO factsheets** for 28 EU Member States and EFTA countries.
- **eGovernment factsheets** for 28 EU Member States, EFTA countries, Turkey, FYROM as well as for the European Commission.

## Analytical Capabilities

- Users can find **best practices**.
- View NIFO and eGovernment factsheets.
- Find and share their own news and events items.

## End-users

- EU public administrations.
- National experts and policy officers.
- European Commission.
- ICT industry.



## Data Sources

- NIFs are updated by the responsible national authorities.
- NIFO and eGovernment factsheets are updated by the contracting authority, with data supplied by the national contact points.

## Main Outputs

Users can access:

- eGovernment and NIFO factsheets;
- Yearly updates to the Analytical Model;
- Annual report on the **State of Play on Interoperability** in Europe.





# 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.*

**Stay in touch**

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

**@EU\_isa2**

**isa2@ec.europa.eu**

**Run by the Interoperability 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.**