The new European Interoperability Framework

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ISA²

The problem

Digital but … fragmented

Public Services

Source: http://beetfusion.com/blogs/bob-davis/silo%E2%80%99d-business-issues-impede-inventory-control-inventory-optimization-can-help

Data

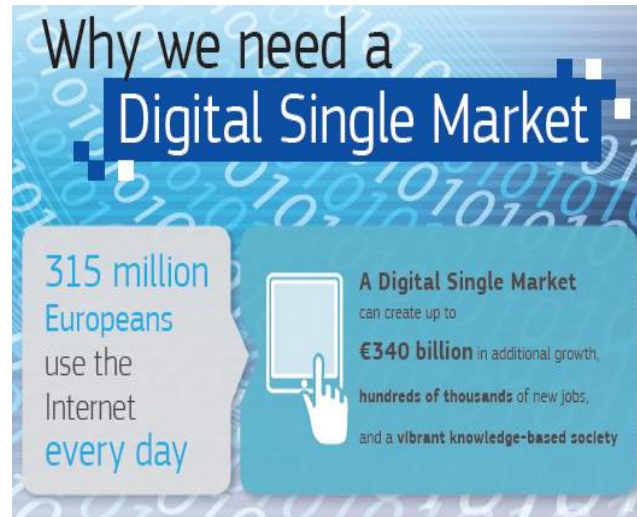| Domestic	Mind my business
Not fully digital	Mind my ICT

Everywhere	Format ?
Management	Security

Context

We want a Digital Single Market

- Online (digital) services
- Digital networks
- Cyber security
- Sharing of info
- Big data
- Cloud
- E-Government
- Standards & **interoperability**

Why we need a Digital Single Market

315 million Europeans use the Internet every day

A Digital Single Market can create up to €340 billion in additional growth, hundreds of thousands of new jobs, and a vibrant knowledge-based society

- 50% EU GDP
- Public procurement 19% of EU GDP
- 25% of total employment in EU

Public Sector

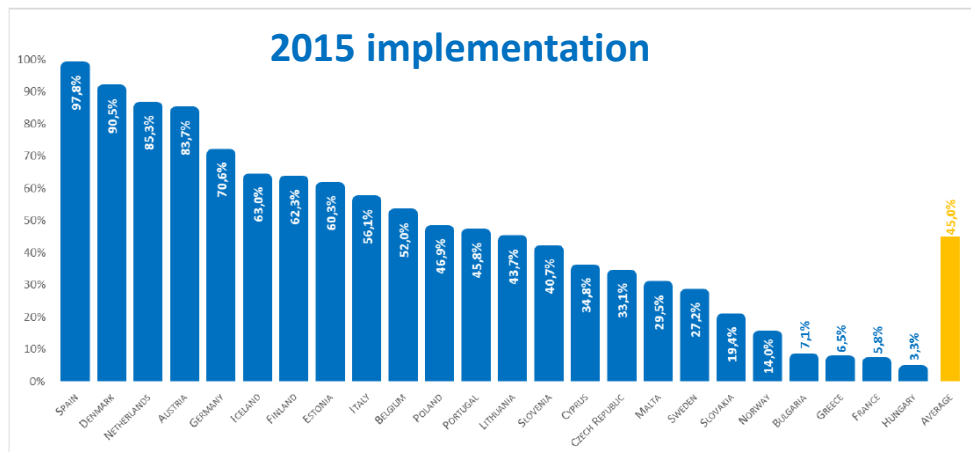| Once-only principle **5 billion/year** | Open data market value potential of **40 billion/year** | e-Procurement **50 billion/year** | e-Invoicing **2.3 billion/year** |

Baseline – EIF 2010

So far so good

EU & national

2015 implementation

Country	%
Spain	97,8%
Denmark	90,5%
Netherlands	85,3%
Austria	83,7%
Germany	70,6%
Iceland	63,0%
Finland	62,3%
Estonia	60,3%
Italy	56,1%
Belgium	52,0%
Poland	46,9%
Portugal	45,8%
Lithuania	43,7%
Slovenia	40,7%
Cyprus	34,8%
Czech Republic	33,1%
Malta	29,5%
Sweden	27,2%
Slovakia	19,4%
Norway	14,0%
Bulgaria	7,1%
Greece	6,5%
France	5,8%
Hungary	3,3%
AVERAGE	45,0%

2014 alignment

72%

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

ISA/ISA² programmes

CEF programme

New EIF?

… 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

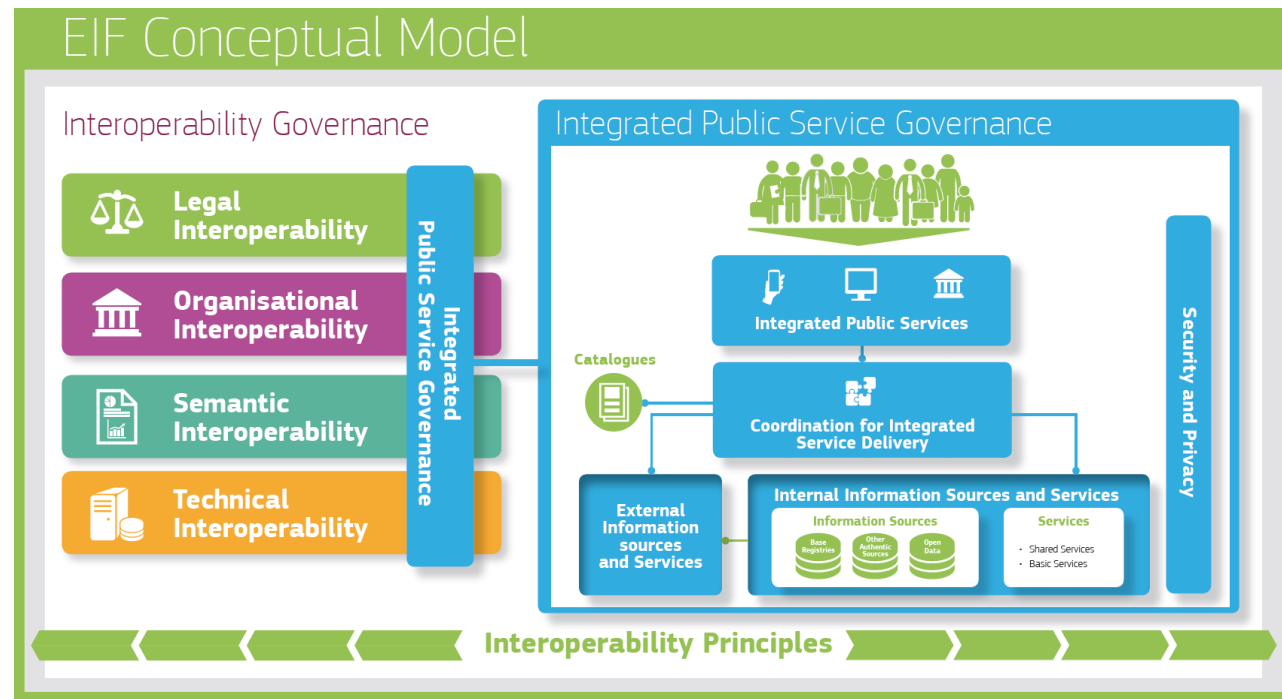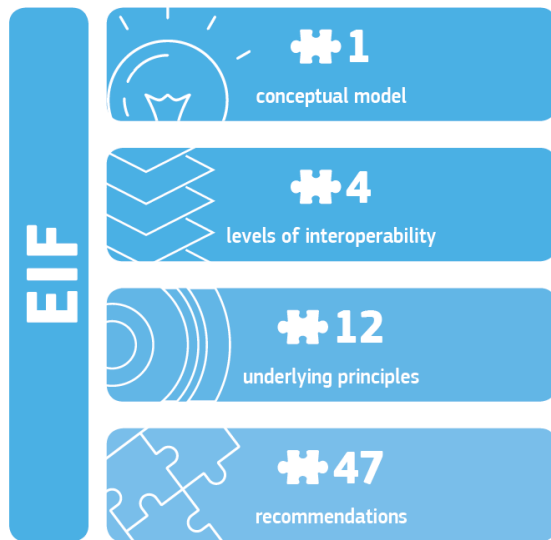### Alignment with emerging technological trends

- 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

EIF

- **1** conceptual model
- **4** levels of interoperability
- **12** underlying principles
- **47** recommendations

EIF Conceptual Model

Interoperability Governance

- Legal Interoperability
- Organisational Interoperability
- Semantic Interoperability
- Technical Interoperability

Integrated Public Service Governance

Integrated Public Service Governance

Catalogues

Integrated Public Services

Coordination for Integrated Service Delivery

External Information sources and Services

Internal Information Sources and Services

Information Sources
- Base Registries
- Other Authentic Sources
- Open Data

Services
- Shared Services
- Basic Services

Security and Privacy

Interoperability Principles

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 ISA² sharing and reuse framework for IT solutions**[12] **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.[13]

✚ Recommendation 6:
Reuse and share solutions, and cooperate in the development of joint solutions when implementing European public services.
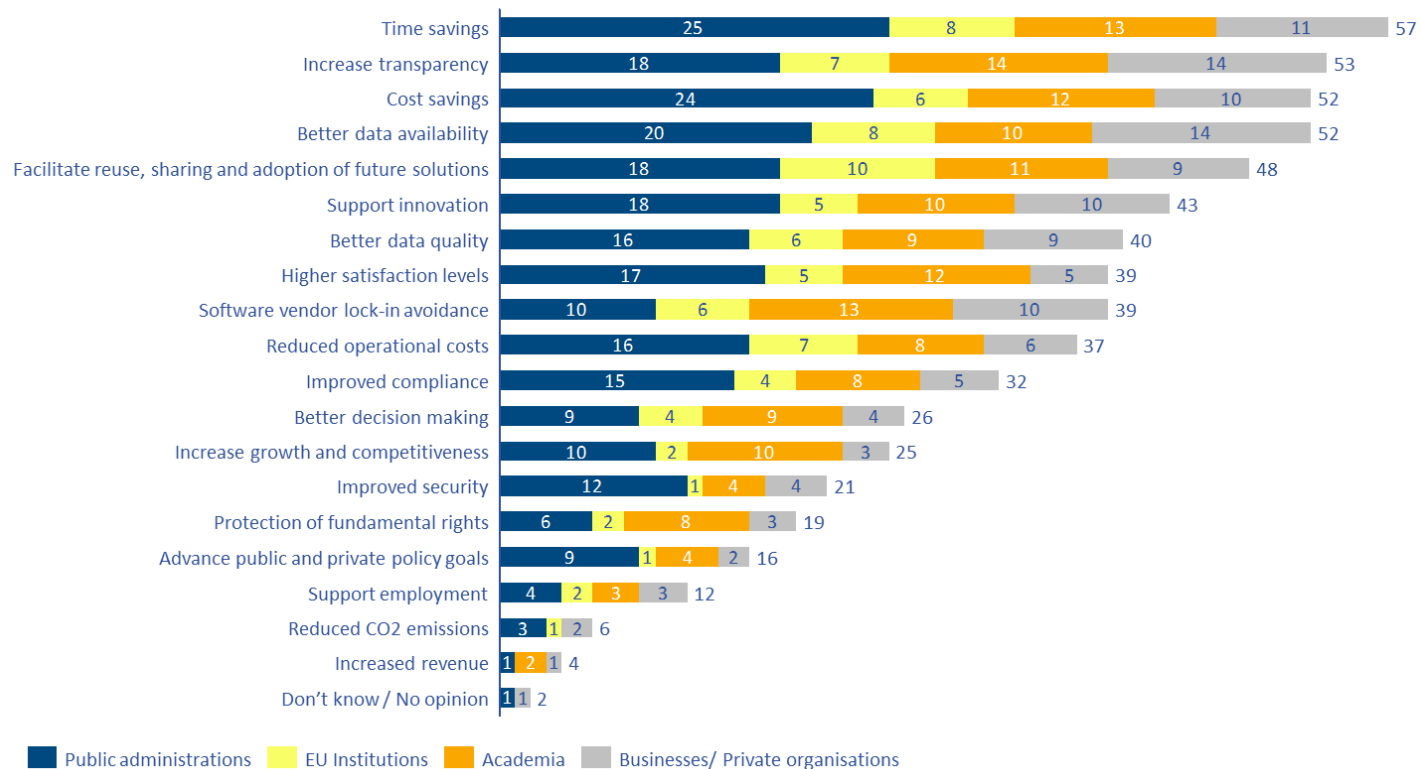
✚ Recommendation 7:
Reuse and share information and data when implementing European public services, unless certain privacy or confidentiality restrictions apply.

EIF - benefits

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?

Area	Public administrations	EU Institutions	Academia	Businesses/ Private organisations	Total
Time savings	25	8	13	11	57
Increase transparency	18	7	14	14	53
Cost savings	24	6	12	10	52
Better data availability	20	8	10	14	52
Facilitate reuse, sharing and adoption of future solutions	18	10	11	9	48
Support innovation	18	5	10	10	43
Better data quality	16	6	9	9	40
Higher satisfaction levels	17	5	12	5	39
Software vendor lock-in avoidance	10	6	13	10	39
Reduced operational costs	16	7	8	6	37
Improved compliance	15	4	8	5	32
Better decision making	9	4	9	4	26
Increase growth and competitiveness	10	2	10	3	25
Improved security	12	1	4	4	21
Protection of fundamental rights	6	2	8	3	19
Advance public and private policy goals	9	1	4	2	16
Support employment	4	2	3	3	12
Reduced CO2 emissions	3	1	2		6
Increased revenue	1	2	1		4
Don't know / No opinion	1	1			2

Legend: Public administrations, EU Institutions, Academia, Businesses/ Private organisations

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.

ISA²

EC proposes

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 ISA² (131 M€, 2016-2020)

More about the EIF
ec.europa.eu/isa2/eif

Event coming up soon

SEMANTIC INTEROPERABILITY CONFERENCE
SEMIC 2017
14 June 2017
Valletta, Malta

SEMIC 2017: Data and Information Management

For more info and registrations: **http://europa.eu/!FK48bQ**

Stay tuned on the conference news: **#SEMIC2017 - @SEMICEU**