European Interoperability Framework

7 Sep 2017

Konstantinos Bovalis
Konstantinos.bovalis@ec.europa.eu
Deputy Head of the Interoperability Unit
Directorate-General for Informatics
European Commission
Citizens & businesses on the move

<table>
<thead>
<tr>
<th>Citizens active in another Member State as</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers</td>
<td>7.1 million (2013)</td>
</tr>
<tr>
<td>Students</td>
<td>571,000 (2010)</td>
</tr>
<tr>
<td>Residents</td>
<td>18.5 million (2014)</td>
</tr>
<tr>
<td>Tourists</td>
<td>223 million visits (2015)</td>
</tr>
<tr>
<td>Consumers</td>
<td>19% of online shoppers (2015)</td>
</tr>
<tr>
<td>Migrants between the Member States</td>
<td>1.3 million (2014) intra-EU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SMEs active in another Member State as</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exporters</td>
<td>5.5 million (26% of SMEs, 2009)</td>
</tr>
<tr>
<td>Investors</td>
<td>500,000 (2009)</td>
</tr>
<tr>
<td>Subcontractors</td>
<td>1.4 million (2009)</td>
</tr>
</tbody>
</table>

Total demand for cross-border Online Services

Digital public services
Current landscape

where interoperability scores high ...

... digital public services score high
Baseline – EIF 2010

So far so good ...

EU & national

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

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 2017

EU Institutions and Member States to implement

"European Interoperability Framework – Implementation Strategy"
Annex 1: Interoperability Action Plan (5 focus areas, 22 actions)
Annex 2: The European Interoperability Framework

(mainly) supported by ISA²
EIF 2017 add-ons

Alignment with policy development
- Digital Single Market (EIF revision in the Roadmap)
- **INSPIRE Directive**
- Revised Directive on Public Sector Information
- eIDAS Regulation

Alignment with emerging trends
- Interoperability governance
- Integrated service delivery
- Data/Information management
- 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 2017 – structure

EIF Conceptual Model

Interoperability Governance

Legal Interoperability
Organisational Interoperability
Semantic Interoperability
Technical Interoperability

Integrated Public Service Governance

Integrated Public Services
Coordination for Integrated Service Delivery

External Information sources and Services
Internal Information Sources and Services

Interoperability Principles

Security and Privacy

1. Conceptual model
4. Levels of interoperability
12. Underlying principles
47. Recommendations
The INSPIRE Directive is an important domain-specific illustration of an interoperability framework including legal interoperability, coordination structures and technical interoperability arrangements.

**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 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.
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.
Financial data standardization
Location interoperability
Statistical data
Joinup
eTrustEx
Semantic interoperability
Case management
eProcurement
sTesta – Testa-ng
Other actions

Interoperability Action Plan

17. Further support the implementation and enhancement of the INSPIRE Directive through the use of geospatial data in digital public services.

2017-2020
EC, MS
What's next?

• Oct 2017 ministerial declaration on eGovernment, EE presidency: EUIs and Member States to commit - among other eGov related things - on EIF implementation

• ISA² to continue supporting + monitoring the EIF (evaluation by end-2019) including INSPIRE related actions

• Commission to reflect on how 'digital and interoperable public administrations' fit into the post 2020 MFF
Join ISA initiatives at: ec.europa.eu/isa2 and joinup.ec.europa.eu