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Connecting public administrations, businesses and citizens

ISA² Programme

EIF: European Interoperability Framework

EIRA: European Interoperability Reference Architecture
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.

**Scientific Management**
- Inputs
- Outputs
- Processes

**1950 - 1970**

**New Public Management**
- Banish Bureaucracy
- Entrepreneurial Traits
- Principles: transparency, accountability...
- Many theories & approaches

**1910 - 1950**

**Theory X & Y**
- Managerial Control
- Sociology
- Group Dynamics

**1970 - Ongoing**

**Next**
By 2025, everyone on Earth is expected to have internet access.
ISA² Programme
INTEROPERABILITY SOLUTIONS FOR PUBLIC ADMINISTRATIONS, BUSINESSES AND CITIZENS
ISA² PROGRAMME
More than 30 years digitising public administrations across the EU

1985-1992: CADDIA PROGRAMME
1995: IDA Programme
1999: IDAI Programme
2005: IDABC Programme
2010: ISA Programme
2016: ISA² Programme
2020:

- CADDIA PROGRAMME
  Interchange of Data between Administrations
- IDA Programme
  Follow-on programme of IDA
- IDAI Programme
  Interchange of Data between Administrations, Businesses and Citizens
- IDABC Programme
  Interoperability Solutions for Public Administrations
- ISA Programme
  Interoperability Solutions for Public Administrations, Businesses and Citizens
- ISA² Programme
  Interoperability Solutions for Public Administrations, Businesses and Citizens
ISA² 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
Archimate diagrams visualising e-Document lifecycle
Data model to describe public services & associated life & business events
Data communication network service
Metadata standard
Share your own semantic assets
Government metadata management
Multilingual platform for collaborative thesaurus management

Facilitate the editing of legislative texts
Gather statements of support online
e-Procurement system for Public Administrations
Facilitate participation in public procurement across the EU
Map certificates necessary in public procurement
Manage & share reference codes
Common assessment method for standards & specifications
Platform for sharing & reuse of IT solutions for public administrations

LEOS
OCS for ECIs
ePrior
ESPD
e-Certis
Re3gistry
CAMSS
Joinup

Communication & Info Resource Centre for Administrations, Businesses & Citizens
National Interoperability Framework Observatory
EU IOP Reference Architecture & EU Interoperability Cartography
Open Project Management Methodology
Create, manage and analyse online surveys & public consultations
Open source licence
Interoperability Maturity Model
Interoperability & conformance testing platform

CIRCABC
NIFO
EIRA & EICart
PM²
EUSurvey
EUPL
IMM
IOP TestBed

You click, we link!
Connecting public administrations, businesses and citizens
EIF (European Interoperability Framework)

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
    - Information Sources
    - Services: Shared Services, Basic Services

Interoperability Principles

1. Conceptual model
4. Levels of interoperability
12. Underlying principles
47. Recommendations
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.
New EIF benefits

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

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\(^1\) 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.\(^2\)

**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
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) 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.
European Interoperability Framework

Roadmap for the digitalisation of Public Administrations
EIRA
European Interoperability Reference Architecture
Building efficient digital public services
EIRA. Why EIRA? (*)

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.

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

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

EIRA
Implementation guidelines and specifications

Integrated Public Service Governance

European Commission
Always with the 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)"
Questions?
Run by the ISA Unit at DIGIT (European Commission) with 131€M budget, the ISA² programme provides public administrations, businesses and citizens with specifications and standards, software and services to reduce administrative burdens.