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ELRA XXVI GENERAL ASSEMBLY

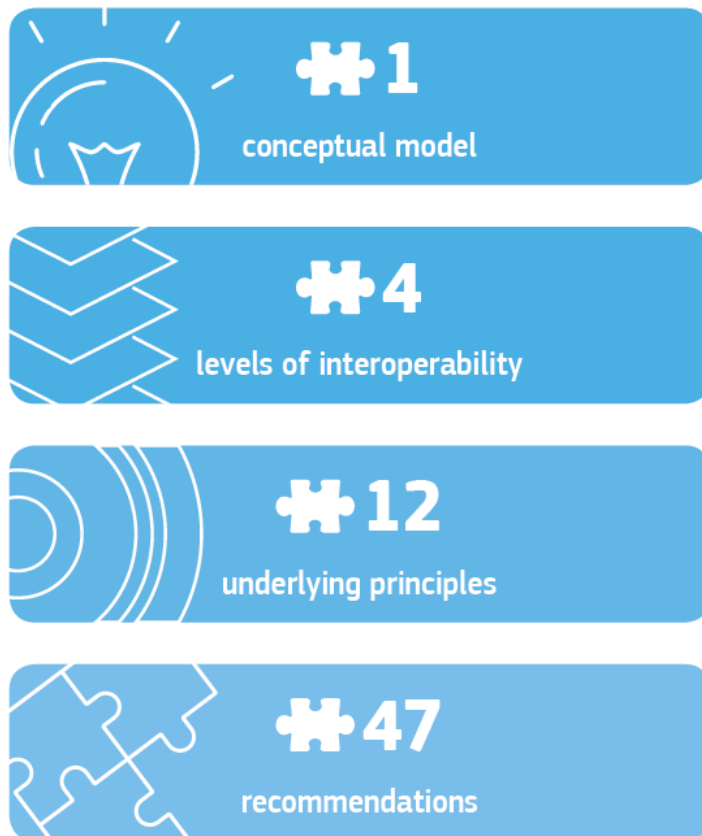## Registry information in the European Interoperability Framework

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The ISA² programme

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.
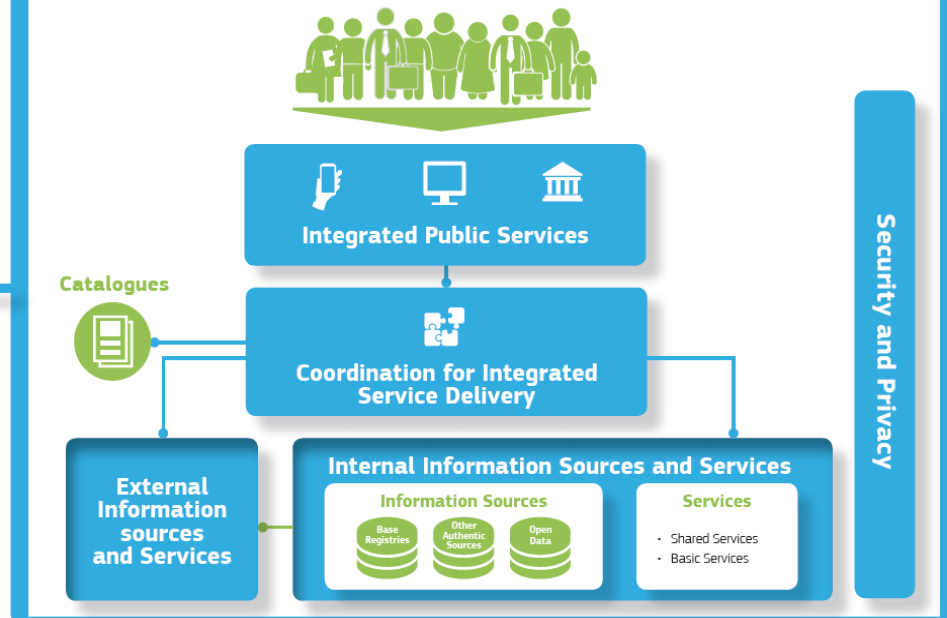
EIF

1 conceptual model

4 levels of interoperability

12 underlying principles

47 recommendations

Conceptual model

EIF Conceptual Model

Interoperability Governance

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

Integrated Public Service Governance

Integrated Public Service Governance

Integrated Public Services

Catalogues

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

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Base Registries

According to the EIF, base registries are the cornerstone of European public service delivery, e.g.

- Municipality registers
- Business Registers
- Land Registers

Recommendation 37:
Make authoritative sources of information available to others while implementing access and control mechanisms to ensure security and privacy in accordance with the relevant legislation.

Recommendation 38:
Develop interfaces with base registries and authoritative sources of information, publish the semantic and technical means and documentation needed for others to connect and reuse available information.

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.

Recommendation 40:
Create and follow data quality assurance plans for base registries and related master data.

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Semantic Interoperability

- Semantic interoperability ensures that the precise **format and meaning of exchanged data** and information is preserved and understood throughout exchanges between parties, in other words 'what is sent is what is understood'.

- In the EIF, semantic interoperability covers both semantic and syntactic aspects:

  - The semantic aspect refers to the **meaning** of data elements and the relationship between them. It includes developing vocabularies and schemata to describe data exchanges, and ensures that data elements are understood in the same way by all communicating parties;

  - The syntactic aspect refers to describing the exact **format** of the information to be exchanged in terms of grammar and format.

ISA²'s specifications

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Specification	Examples of use
Core Business	**Business Registers Interconnection System (BRIS)** OpenCorporates portal
Core Criterion and Core Evidence	European Single Procurement Document (ESPD)
Core Location	Belgium (interconnect national and regional base registers with address data) Greece (Tax Authorities published linked open data about several thousands of companies)
Core Person	**e-CODEX, Public Documents** Flanders (OSLO based on Core Person and others)
Core Public Organisation	'Informatie Vlaanderen' (e-government portal)
Core Public Service	Standards based on or inspired by CPSV in Belgium, Estonia, Finland, Ireland and Portugal, Italy, Slovakia, Netherlands
DCAT-AP	**European Union Open Data Portal** Joint Research Center's Data Catalogue

Use cases for ISA² specifications

- **Open data** publishing (foundation of a common export format for data in base registries like cadastres, business registers and service portals);

- **Data integration** (integration of data coming from different sources);

- Publication of **Linked Data** (publication of structured data to allow interlinking of data and facilitate semantic queries from multiple sources);

- **Information exchange** between systems (context-specific data model used to exchange data among existing information systems);

- Development of new systems (conceptual and logical **data models** in newly developed information systems).

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QUESTIONS?

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