Peter BURIAN
Programme Manager,
ISA² Programme of the European Commission
ACCESS TO BASE REGISTRIES

Base Registries Data Management, the importance of semantics and the challenges ahead of us

Peter Burian <Peter.BURIAN@ec.europa.eu>
Miguel Álvarez <Miguel.ALVAREZ-RODRIGUEZ@ec.europa.eu>
Rome, 12th May 2016
TABLE OF CONTENT

1. Base Registries: cornerstones of public services

2. Semantics: a critical aspect for the Base Registries interoperability and access

3. Challenges and barriers ahead of us

4. Bringing solutions to solve the challenges: MDM, semantics

5. Ongoing work and next steps

6. Some references
1- BASE REGISTRIES: CORNERSTONES OF PUBLIC SERVICES

Role of Base Registries in Public Services

**Base Registry**: trusted and authoritative source of information which can and should be digitally reused by others and in which one organisation is responsible and accountable for the collection, usage, updating and preservation of information.

![Conceptual model for integrated public services](source: 3rd intermediary EIF version)
2- **SEMANTICS**: A CRITICAL ASPECT FOR THE INTEROPERABILITY OF BASE REGISTRIES

**EIF Information Interoperability layer**

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

Information interoperability encompasses:

- **Semantic interoperability**: data are understood in the same way;
- **Syntactic interoperability**: shared description in terms of grammar and format.

Information interoperability is improved when data are perceived as a valuable public asset.

The interoperability layers
(source: 3rd intermediary EIF version)
2- **SEMANTICS**: A CRITICAL ASPECT FOR THE INTEROPERABILITY OF BASE REGISTRIES

EIF Recommendations

- **Recommendation 20.**
  Public administrations should 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 21.**
  Public administrations, when working to establish European Public Services, should develop interfaces to base registries and authoritative sources of information, and expose the semantic and technical data needed for others to connect and reuse the information. These data should be aligned whenever possible.

- **Recommendation 22.**
  Each base registry should be accompanied by description of its content, service assurance and responsibilities, type of master data it keeps, conditions of access, terminology, glossary, as well as which master data it consumes from other Base Registries (if any).

- **Recommendation 23.**
  Public administrations should create data quality assurance plans for base registries and related master data, execute them regularly and keep them updated.
3- **CHALLENGES AHEAD OF US**

- Reaching common unambiguous understanding of the key concepts, at national & European level.

- Ensuring that data is authentic, accurate, and up-to-date.

- Granting the timely availability and accessibility to the data (OOP).

- Aligning Base Registries to the PSI and Open Government Data legislation and practices.

- Eliminating duplications and redundancy (OOP).

- Providing consistency in highly fragmented or distributed ecosystems (OOP).

- Protecting the privacy and personal data whilst ensuring the principle of publicity of the Base Registries.
4- BRINGING SOLUTIONS TO SOLVE THE CHALLENGES

Public Administrations should put in place an information management strategy applying to all public data.

A strategy and solutions for the management of the master data, metadata and reference data should be in place.

Governance and assurance of the uniformity, quality, stewardship, semantic consistency for the master data should be put in place (EIF Governance alignment).

Sound Master Data Management approaches and solutions should be assessed and integrated as a fundamental part of the horizontal Public Administration information management framework and system.

More specific recommendations will be available in the Guidelines to be published on JoinUp
• Cross-sector semantic interoperability depends on the definition and availability of highly reusable semantic assets and reference data.

• Reuse data models and vocabularies, specifications and standards to structure the master data and e-documents based on common methodologies and building blocks.

The Core Data Models and Vocabularies developed by ISA are a good starting point to develop the information interoperability layer of the National and European Interoperability Frameworks.
5- ON-GOING WORK AND NEXT STEPS

ABR deliverables

ISA Work on Base Registries

Research to describe the state of affairs on data sharing and access to Base Registries in 32 States (28 EU MS + EFTA).

Cartography of reusable solutions for the interconnection and access to Base Registries at the EU and MS levels.

Guidelines, recommendations, examples and links to the Cartography of Solutions to assist MS an EU initiatives on the development of interoperable Base Registries for the delivery of integrated public services.

Booklet on 17 Good Practices for Base Registries

17 Good Practices for Base Registry Access
5- ON-GOING WORK AND NEXT STEPS

Join Us on JoinUp!

Joinup community where the ABR deliverables are shared with the community. Online tool to access ABR-related events, news, and updates and to participate in the content improvement.

Future organisation of discussion forums for the improvement and consolidation of the Cartography of solutions and Guidelines for the building of successful interconnections of Base Registries.
6- SOME REFERENCES

ISA web site
http://ec.europa.eu/isa/

Joinup platform
https://joinup.ec.europa.eu/

ISA Action 1.2: improving cross-border access to government data
http://ec.europa.eu/isa/actions/01-trusted-information-exchange/1-2action_en.htm

Current Community “Access to Base Registries” on Joinup
https://joinup.ec.europa.eu/node/138458

Third intermediary EIF version – https://ec.europa.eu/eusurvey/files/57b2ecd5-effa-4594-9ef2-47e7ecc67047
Thank you.

Questions?