**2024-06-12**

Interfederal Collaboration for E-overnment (ICEG) proposal:

Data standard for Person

Dear colleague,

**Management Summary**

In collaboration with the National Register , the Belgian Crossroads Bank for Social Security (CBSS) is leading a crucial initiative to modernise its person data services. As the primary sources of person data in Belgium, these institutions have traditionally provided data through uniform service protocols. The new approach aims to transition to more modern web service protocols.

With this note, prepared by members of the Interfederal Collaboration for E-Government (ICEG), we propose a pathway to establish a comprehensive data standard for natural persons. ICEG provides funding for this initiative, which has already been financed by the federal government, the regions, and the communities, ensuring support at all administrative levels.

The goal is to develop a formalised person data model that can serve as a common foundation across these services and those to be created by other service integrators. By standardising the structure of person data, both current and historical, ICEG ensures interoperability across various government platforms, facilitating improved service delivery and decision-making.

It is essential for all ICEG partners that the National Register and the Belgian Crossroads Bank for Social Security (CBSS) commit to shaping and implementing this data standard in the future.

All involved partners firmly believe this will contribute to implementing the Interoperable Europe Act, a strategic cooperation mechanism focused on interoperability across the European Union.

Kind regards,

François Du Mortier, chairman ICEG

# objectives Interfederal Collaboration for E-Government (ICEG)

The Interfederal Working Group on Data Standards is part of the Interfederal Collaboration for E-Government (ICEG). ICEG is a collaborative agreement between the federal government, the regions, and the communities to harmonize and coordinate efforts for an integrated e-government. This collaborative agreement was ratified in 2013[[1]](#footnote-2).

This working group, part of the ICEG collaboration, primarily aims to develop data standards. It was established in 2019. Since then, the working group has successfully agreed on the method for joint development of data standards, the development of thematic data standards, and the unique identification of information within and between various administrations. These standards include guidelines for public service delivery, public transport schedules, and fire hydrants (not exhaustive).

Furthermore, the working group has focused its efforts on increasing knowledge about data standards among analysts at the federal, regional, and community levels and their ICT service providers. Through these efforts, the involved partners contribute to implementing the Interoperable Europe Act, a strategic cooperation mechanism that focuses on interoperability across the European Union.

# cause and context

In collaboration with the National Register, the Belgian Crossroads Bank for Social Security (CBSS) is leading a crucial initiative to modernise its person data services. As the primary sources of person data in Belgium, these institutions have traditionally provided data through older service protocols. The new approach aims to transition to more modern web service protocols.

Modern web service protocols offer a streamlined method for accessing and managing resources, such as person data, through specific endpoints (e.g., retrieving a person’s citizenship details). This transition requires a deep and stable understanding of the personal data domain to ensure effective and reliable services.

Several EU member states, including The Netherlands, already use these advanced protocols for their person data registries, often accompanied by comprehensive documentation (OpenAPI specifications). These specifications are user-friendly for developers, facilitating easier integration and utilisation of the services.

The ICEG Person project is central to this initiative, focusing on the semantic formalisation of person data. Building on the Interoperable Europe’s ISA core person vocabulary[[2]](#footnote-3) and the Open Standards for Linked Organisations (OSLO) persoon[[3]](#footnote-4) vocabulary from 2019, the project aims to adapt and enhance the model to accommodate evolving data needs and refine the legal interpretations of specific data points, such as residency status.

A key aspect of the ICEG Person project is its inclusive approach, involving all relevant federal, regional, provider, and consumer stakeholders. Broad support is essential for successfully adopting and implementing the new standard.

When successful, the ICEG Person project will lead to the development of mappings and transformations aligned with the new data model. While physical data migrations may not be necessary, the model's primary use will be to facilitate interoperability between authentic data sources and their consumers. A second benefit of interoperable services lies at the level of the entire ecosystem, where point-to-point adapters are no longer needed, and all connections are interoperable. This reduces integration costs and avoids the need for specific connectors that can introduce data errors.The project will provide data examples in these modern formats (JSON) to ensure practical implementation and stakeholder engagement. These examples demonstrate the model's operation and illustrate the data exchange process.

This initiative represents a significant step towards modernising Belgium’s person data services, enhancing efficiency, and ensuring compatibility with contemporary technological standards.

The goal is to develop a formalised person data model that can serve as a common foundation across these services and those to be created by other service integrators. By standardising the structure of person data, both current and historical, ICEG ensures interoperability across various government platforms, facilitating improved service delivery and decision-making.

All involved partners firmly believe this will contribute to implementing the Interoperable Europe Act, a strategic cooperation mechanism focused on interoperability across the European Union.

# proposal for decision

The National Register and the Belgian Crossroads Bank for Social Security (CBSS) commit to shaping and implementing this data standard in the future.

# detailed roadmap

* The [Belgian Crossroads Bank for Social Security](https://www.ksz-bcss.fgov.be) (CBSS) is spearheading an initiative to redesign its person services. CBSS is – together with the [National Register](https://dofi.ibz.be/en/national-register) – the authentic source of person data in the Belgian jurisdiction. Historically, data has been exposed under the form of [SOAP](https://en.wikipedia.org/wiki/SOAP) services. The redesign aims to expose data under the form of [REST](https://en.wikipedia.org/wiki/REST) JSON APIs.
* REST JSON APIs identify resources which are accessed and managed under certain endpoints (e.g.: hitting <https://api.bcss.be/person/123e4567/citizenship> with a HTTP GET request would return a list of citizenships of that person). A precondition to give form to such an API is a strong and stable understanding of the underlying domain, in this case person data.
* Some EU member states already offer a base registry of person data as a REST JSON API. See, for example, [The Netherlands](https://github.com/BRP-API/Haal-Centraal-BRP-bevragen). Such API often goes hand in hand with a [description](https://brp-api.github.io/Haal-Centraal-BRP-bevragen/v2/redoc) in line with the OpenAPI specification. This format is well-known to developers and allows them to integrate with the service with minimal friction.
* The ICEG Person traject aims to contribute the semantic formalization of the person domain. The formalization will be designed to address present use cases, while offering sufficient flexibility for future extensions. A starting point of this effort is the [OSLO Persoon](https://data.vlaanderen.be/doc/applicatieprofiel/persoon-basis/) data model published in 2019. Starting from this work, we will have a.o. to adapt the model to support evolution of the recorded data over time and sharpen the legal perspective on certain data points (e.g. residency is one of multiple statuses of a legal subject under public law).
* The ICEG Person traject aims to be a full-blown thematic traject which involves all the relevant stakeholders. Only with maximal buy-in from federal, regional, provider and consumer constituencies does the standard have a chance to be adopted and implemented.
* In the event that the ICEG Person traject is successful, the impact will materialize with mappings / transformations being developed to align with the new data model. The data model may - but need not - involve migrations of physical data. Our understanding is that the model will be first and foremost used within the scope of an interoperability logical layer between authentic sources and consumers.
* In order to mitigate the above impact, the ICEG traject aims to be as practical as possible, with data examples in JSON format made available to stakeholders. These data examples are useful resources to demonstrate the operation of the model and illustrate the shape of the actual data exchange.
* The tentative schedule is to organize working groups in the 2nd semester of 2024 and publish the specification in early 2025.

1. <http://reflex.raadvst-consetat.be/reflex/pdf/Mbbs/2013/10/08/125379.pdf> [↑](#footnote-ref-2)
2. https://semiceu.github.io/Core-Person-Vocabulary/releases/2.1.1/ [↑](#footnote-ref-3)
3. https://data.vlaanderen.be/ns/persoon/ [↑](#footnote-ref-4)