Digital Convergence
USP2030

Talking Interoperability

A dialogue series for advancing interoperability in the social protection sector

Belgium: Towards frictionless social security in the digital age

This brief summarizes key learnings from the dialogue on interoperability in the Belgian social sector held on 26 April 2022.

*The keynote was presented by **Frank Robben** – General Manager, Crossroads Bank for Social Security & e-Health platform. The discussants were **Ernesto Brodersohn** – Senior Officer in Social Security, Coordinator of the Technical Commission on Information and Communication Technology, ISSA, and **Anita Mittal** – Senior Advisor, Digital Convergence Initiative, GIZ. The session was moderated by **Valentina Barca** – Independent Social Protection Expert.*

Please click here to access the recording and presentation slides.

Overview

The Crossroads Bank for Social Security (CBSS) in Belgium was created in 1990 to enable effective information management and coordinated service delivery by social security institutions. The Belgian social security system consists of three insurance schemes (workers, self-employed workers and civil servants) that cover seven social risks[1], and four social assistance schemes for those living below the subsistence minimum.[2] About 3,000 institutions are responsible for social security implementation. Prior to 1990, these schemes had evolved without well-coordinated information systems or service delivery processes. This in turn created huge yet avoidable administrative burden and costs for all parties, leading to poor user satisfaction, inadequate uptake and sub-optimal policymaking.

The CBSS has been instrumental to improving the efficiency, effectiveness and inclusiveness of the Belgian social security system. Institutions do not have to re-enter the same data into their systems over and over again as they now reuse data collected, in accordance with the 'Once-Only' principle. Conversely, individuals and companies do not have to provide the same information to different institutions.[3] With vastly reduced administrative burden, service delivery is faster and cost-effective, and service quality is better. Most importantly, the CBSS is used to automatically grant benefits based on information already available with the government; therefore, scheme uptake is no longer reliant on individuals' awareness or ability to apply, as it is proactively done for them.

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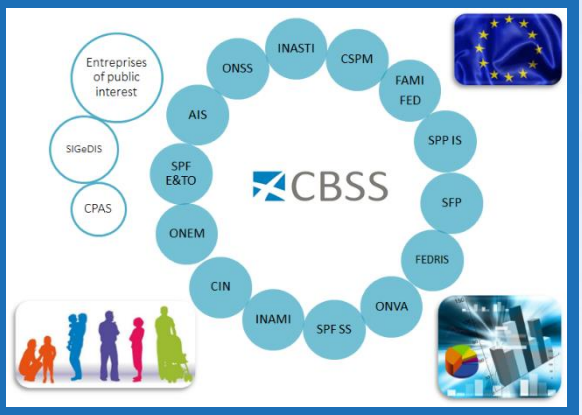
[1] These include incapacity for work, industrial accident, occupational disease, unemployment, old age, child care and holiday pay.

[2] These include subsidies for the handicapped, guaranteed family allowance, minimum income and income guarantee for the elderly.

[3] It is explicitly forbidden by law for administrations that are connected to the CBSS to ask citizens or companies for information that is already available through the CBSS.

CBSS – Facts and Figures



- The CBSS facilitates information exchange across 3,000 public and private institutions dealing with contribution collection; delivery of contributory social security benefits; and non-contributory social protection & supplementary benefits across federal, regional, local levels.
- In 2021, the reference directory held nearly 25.5 million records. On average, every person is known in 14 sectors.
- 220 electronic services are available for mutual information exchange amongst institutions. In 2021, more than 1.5 billion electronic messages were exchanged amongst actors in the social sector.
- More than 50 electronic services are available for employers, which have replaced 50 social security declaration forms and two-thirds of the number of headings in the remaining 30 (electronic) declaration forms from the pre-CBSS era. In 2021, more than 35 million electronic declarations were made by all 230,000 employers, 98 % of which were made from application to application.
- An estimated €1.7 billion a year is saved for the companies as a result of consolidated information management.

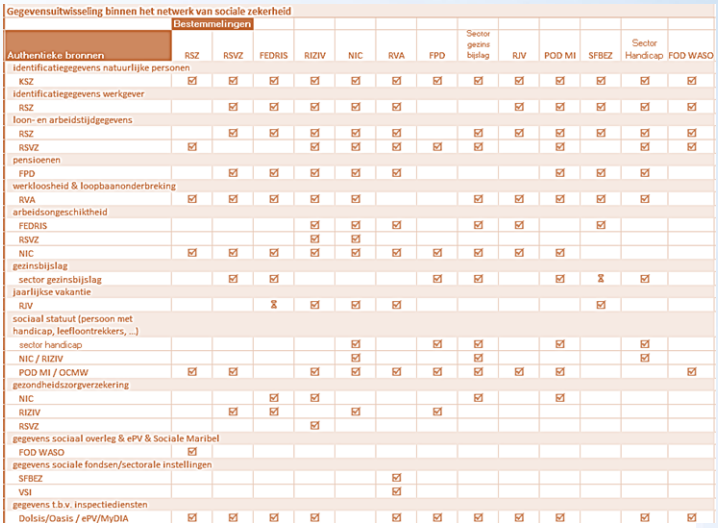
How does the CBSS facilitate data exchange?

The CBSS acts as a clearing house[4] for inter-institutional data exchange. The CBSS is not a centralized database; instead it provides mechanisms for meaningful and seamless exchange of information while existing institutions remain data controllers. Following are the key elements underpinning the information exchange:

- **Unique identification key:** A unique ID key for every citizen (based on the Belgian National Register), every company, and every establishment of a company is available.
- **Common information model:** Information requirements across institutions are standardized and modelled to closely reflect reality and to enable multi-functional use.
- **Reference directories:** The CBSS maintains four reference directories:
  - *Directory of available services/information* – which information is available on different types of entities?
  - *Directory of authorized users and applications* – different levels of authorization and which information can be accessed at different levels of authorization
  - *Directory of data subjects* – which persons/companies have data files from which institution and which period of time
  - *Subscription table* – which users/applications want to receive automatic updates for which information

[4] Snijkers, K. (2006)

- **Task-sharing model for information management:** To implement the "Once-Only" principle, the CBSS has established a task sharing model with institutions within and outside the social security sector that indicates which institution stores, manages and provides which information as the authentic source. Any errors found by authorized users have to be reported to the actors responsible for authentic source data, who are in turn required to examine and remedy errors, and communicate the resolution to users accordingly.



Gegevensuitwisseling binnen het netwerk van sociale zekerheid	Bestemmelingen												
Authentieke bronnen	RSZ	RSVZ	FEDRIS	RIZIV	NIC	RVA	FPD	Sector gezins bijslag	RJV	POD MI	SFBEZ	Sector Handicap	FOD WASO
identificatiegegevens natuurlijke personen													
KSZ	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
identificatiegegevens werkgever													
RSZ		☑	☑	☑	☑	☑			☑	☑	☑	☑	☑
loon- en arbeidstijdgegevens													
RSZ		☑	☑	☑	☑	☑		☑	☑	☑	☑	☑	☑
RSVZ	☑			☑	☑	☑	☑	☑		☑		☑	☑
pensioenen													
FPD		☑	☑	☑	☑	☑				☑	☑	☑	
werkloosheid & loopbaanonderbreking													
RVA	☑	☑	☑	☑	☑			☑	☑	☑	☑	☑	
arbeidsongeschiktheid													
FEDRIS				☑	☑	☑		☑	☑		☑		
RSVZ				☑	☑								
NIC	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑			
gezinsbijslag													
sector gezinsbijslag		☑	☑				☑	☑		☑	⧗	☑	
jaarlijkse vakantie													
RJV			⧗	☑	☑	☑					☑		
sociaal statuut (persoon met handicap, leefloontrekkers, ...)													
sector handicap					☑		☑	☑		☑		☑	
NIC / RIZIV					☑			☑				☑	
POD MI / OCMW	☑	☑		☑	☑	☑	☑	☑	☑	☑			☑
gezondheidszorgverzekering													
NIC			☑	☑				☑		☑			
RIZIV		☑	☑		☑		☑						
RSVZ				☑									
gegevens sociaal overleg & ePV & Sociale Maribel													
FOD WASO	☑												
gegevens sociale fondsen/sectorale instellingen													
SFBEZ						☑							
VSI						☑							
gegevens t.b.v. inspectiediensten													
Dolsis/Oasis / ePV/MyDIA	☑	☑	☑	☑		☑	☑	☑	☑	☑		☑	☑

The above matrix shows exchanges within the social security network. The first column is the authorized source and the remaining columns show authorized users. See here for exchanges outside the social security network (in Dutch).

- **Layered service-oriented architecture & application programming interfaces (APIs):** Data exchange is based on APIs following the paradigm of service-oriented architecture, thus reducing costs and complexity.

The back-office data exchange is complemented by front-office channels to deliver integrated services. An integrated web portal and mobile applications provide information and enable electronic transactions by citizens, employers and professionals. An integrated multimodal contact centre is in place for grievance redressal and customer relationship management.

Finally, the CBSS also drives evidence-based policymaking. A data warehouse serves planning and policymaking needs by providing statistical information regarding the labour market to all branches of social security.

Critical success factors and lessons learned

Given the multiplicity of actors involved, building a technology-agnostic common vision that takes into account the strategic interest of various actors was crucial. While the CBSS had policy support at the highest level, a common vision around electronic service delivery, information management and information security has been key to its implementation. Consensus was formed around positive objectives such as efficiency, better client orientation and policy support, rather than fraud detection, which could have alienated important stakeholders such as trade unions.[5]

Mutual respect for institutional mandates was key to foster cooperation. The CBSS did not entail large-scale reorganization of roles or mandates, and respected the autonomy of participating institutions. While it did require changes in task allocation, it was driven by consensus-based distribution of tasks rather than centralization of tasks.

[5] Snijkers, K. (2006)

The culture and values of the CBSS emphasized customer-centricity, participation and innovation.[6] Top-down strategies that only serve needs of specific institutions are unlikely to be effective or sustainable. The CBSS prioritized the needs of the customer, not the government or the social security institutions. In meeting this objective, it rewarded entrepreneurship and innovation by teams, emphasizing ex-post evaluation rather than ex-ante control of inputs.

Data standardization was crucial for meaningful data sharing. Pre-CBSS, different agencies had disparate definitions for the same concepts. For example, the income of an employee was defined and calculated differently by several institutions.[7] In order to share information regarding a citizen's income, it was necessary to develop and institutionalize common legally interpreted concepts and definitions, so that each agency could use the same information.

The CBSS was guided by the mantra, 'first process optimisation, then computerization', to avoid automating suboptimal processes. Information exchange ultimately had to improve the lives of clients, and therefore, was part of a broader structural reform towards integrated electronic service delivery. Therefore, an iterative and collaborative process of business process re-engineering within and across actors was foundational to the initiative. While back-office integration led to information reuse, it was coupled with front-office improvements for integrated and personalized service delivery.

Modularity and re-use are central to the design of the CBSS. The CBSS has been able to keep pace with the completely transformed technological landscape since the 1990s due to its modularity. The CBSS emphasizes reusing existing data and components, such as networks; means of electronic identification, authentication and authorisation; interoperability frameworks; portal environments; and government information systems.[8] The CBSS is among the founding partners of the Software Reuse Catalogue initiative in Belgium.

Strong data governance central to protecting privacy and building trust. Although a centralized database was considered in the 1970s to tackle the problem of fragmentation, it did not come to pass due to perceived risks to privacy.[9] The clearing house model of the CBSS was explicitly designed to overcome such resistance and build confidence in the system. Personal information is only accessible to authorized users according to business needs, legislative or policy requirements. Authorization is assessed by an independent committee of the privacy commission. Every person has right to access and correct his/her own personal data, ensuring transparency. Every actual electronic exchange of personal information is logged, providing confidence that any potential abuse can be traced and punished.

Prepared by Madhumitha Hebbar based on inputs and presentation by Frank Robben, with contributions from Anita Mittal, Melis Guven, Veronika Wodsak and Valentina Barca.

[6] CBSS (2019). A model for multi-actor collaboration for an effective and efficient social protection system. Presented at the ISSA Regional Social Security Forum for Europe.
[7] Snijkers, K. (2006). Process Innovation in the Public Sector: Two Belgian Crossroads Bank Initiatives. *In Information and communication technology and public innovation: assessing the ICT-driven modernization of public administration, (Vol. 12, p. 53).* IOS Press.
[8] https://joinup.ec.europa.eu/collection/egovernment/document/cbss-egov-program-belgian-social-sector-cbss
[9] Snijkers, K. (2006).