



Digital Government Strategies: Good Practices

 **Slovenia: Interoperable Building Blocks for Electronic Data Gathering, Implementation for e-Social Security**

The OECD Council adopted on 15 July 2014 the Recommendation on Digital Government Strategies. The Recommendation provides a set of 12 principles structured around 3 pillars. The OECD Secretariat is developing a Digital Government Policy Toolkit to support OECD member countries and non-member adhering countries with the implementation of the Recommendation. This practice was submitted by the government of Slovenia to be considered as a good practice in the implementation of one or more of the principles contained in the Recommendation.

Description of the practice:

Organisation:	Ministry of Public Administration
Name of the practice:	Interoperable Building Blocks for Electronic Data Gathering, Implementation for e-Social Security
Principles implemented:	<u>Principle 3</u> – Create a data-driven culture in the public sector
Description:	The project has enabled efficient interoperable electronic data collecting from 50+ data sources within public sector and wider (from the banks also) - for the specific purposes of the e-Social Security. The decisions on social support and other social benefits are performed based on the income and property of the applicants and their family members. These data on the income and property are being collected electronically, with a great respect to the personal data protection. The costs for such an extensive data gathering would be enormous if that process would be carried out in the classical way (paper questions, paper answers, scanning, postal costs...) but the operating costs for the new IT-supported and automated data gathering were now lowered to the marginal minimum. The reusable components that support these data gathering processes (Tray, IO-module, Asynchronous module and Security platform) and were primarily developed for e-Social Security will also be used in other similar projects where data is requested from numerous diverse and scattered data sources.

A business case was prepared according to our "Decree on the uniform methodology for the preparation and treatment of investment documentation in the field of public finance", special investment documentation must be prepared for all projects above 300.000 EUR and that documentation also includes business case.



The project was approved by the ministry for public administration and by the ministry for social affairs and also by the government.

In the development phase, the ministers for the public administration and for the social affairs were the supervisory board and the project team, which was led by the ministry for public administration, had 64 members from all major institutions with relevant data sources.

Ministry for social affairs was/is responsible for the aspects of data processing and interpretation and for legal aspect; Ministry for public administration is/was responsible for programme coordination and for developing powerful reusable building blocks which can be reused in other systems.

The system is in operation since 26 January 2012. Focus of the ministry of public administration is now on maximizing the reuse of the reusable building blocks.

http://www.mnz.gov.si/nc/en/media_room/news/article//7939/

<http://www.southsouthnews.com/civil-society/civil-society-videos/player/71/1381>

Results

The system enables decisions on social rights, benefits, subsidies and payments (Exercise of Rights to Public Funds Act ERPFA or ZUPJS, Articles 5-6): child benefits, cash social assistance, income support, state scholarships, reduced kindergarten fee, snack subsidy for elementary and high school students, lunch subsidy for elementary school students, transport subsidy for high school students and students, exemption of payment of social security services, contribution to the payment of a family assistant, rent subsidy, right to covering the difference to full value of health care services, right to the payment of contribution for compulsory health insurance.

Enquiries for 10.000 - 20.000 persons, automatically processed every day, with 50+ data sources (0,5% -1% of total population).

Enabling fair decisions (more efficient distribution of social support budget)

Reduced costs for data gathering (IT enabled enquiries are vastly cheaper than the Classic paper enquiries)

Broad possibilities for reuse of existing building blocks in other systems, either as the existing solution or as a concept (more re-use, higher savings with development and operations costs).

There was no specific evaluation regarding this system, but the system was financed by the European social fund and thus it was evaluated in this context using the standard processes and measures.

Development

Design: 2010

The overall supervision was conducted by Minister of public administration and Minister of labour, family and social affairs as the process owner for the social support decisions. Through a large project team, we involved all major institutions with relevant data sources. Our Information



Commissioner was also participating in all stages of the project, for ensuring the data-protection compliance.

Testing: 2011

We didn't have much time for extensive testing of the very idea and to produce some special pilots, prototypes and implement some parallel operating environment etc.

As the primary basis, we have used all the experience that we have gained on similar projects, regarding the data exchange and the social support decisions.

We have built the system in an agile and flexible way, so we were always able to quickly adapt to new challenges that we were facing with every new data source.

The real production testing was in fact performed when we started with the real production and after we saw the real performance and bottlenecks. Because we were agile and flexible we were able to stabilize the system relatively quickly and efficiently.

The method has proved to be successful, because the system is still functioning in a heavy-duty mode without any major disturbances.

Implementation: 2012/01

Due to the enormous complexity of the planned interconnected system, some special approaches had to be invented, reducing the complexity and ensuring the necessary loose-coupledness. Time frames were short, human resources were low and risks were high. The project management was agile and flexible, risk management was crucial on the project.

The project team developed a set of reusable building blocks for electronic data gathering, now forming an important part of central interoperability infrastructure of Slovenia:

- Tray (intelligent system for standardized execution of data enquiries, operating as a reliable and extremely flexible transport channel, neutralizing the technological specifics and complexity of data sources, based on the modern state-of-the-art open-source Java SOA technology)
- IO-Module (standardized platform for data distribution, enabling institutions to be able offer heavy-duty synchronous access to distribution copy of data, preserving a reliable electronic trail and all the required control mechanisms to the data owner)
- Asynchronous Module (an application component enabling asynchronous electronic data enquiries to those data sources where the synchronous access is not possible due to security, technical or other reasons)
- Security Platform (standardized system for managing users and their rights in applications, supporting all the qualified digital certificates in Slovenia).

Resources: The investment into those interoperability components was relatively small - in total it was about 2 million EUR. All daily operating costs, including all the participating human resources, are below 3000 EUR.

The core coordination staff at the ministry of public administration was performed by 3 people, together with the project team of 64 members and the supervisory board.

Diffusion and scaling: 2012+

Digital government toolkit

We share information about the solution, about its reusability, capabilities and practical experiences on various national and international conferences and meetings.

We are actively encouraging the use of reusable building blocks on the national level, ex. by the IT strategic board and its recommendations/decisions.

We are constantly improving visibility, so the potential users can learn about the existence of the reusable building blocks and evaluate the possible use.

We have primarily developed the solution for the purpose of e-social security, but we have ensured their broad reusability.

So now we have several other information systems, already using the building blocks in their own information systems.

We sign a special organizational agreement with each new client institution, so the responsibilities and expectations are very clear.

A major challenge was for example, how to offer the functionalities of the building blocks to those institutions which needed very specific adaptations that were not of use for any other client institutions. We have solved this situation so that in such case, we deliver the source code to the client institution and they then can adapt and implement it on their own, independently from the central interoperable solution.

Partnerships: Public Sector Organisations

Partners: Ministry of labour, family and social affairs

Nature of the partnership: The Ministry of social affairs is the owner of the business processes regarding the decisions on social support.

Ministry of social affairs was/is responsible for the aspects of data processing and interpretation and for legal aspect; Ministry for public administration is/was responsible for programme coordination and for developing powerful reusable building blocks which can be reused in other systems.

The partnership was very fruitful and essential, because they were the driver and provided the practical purpose for the development of this reusable system that can now also be used by other institutions.

Lessons learned

1. For such cross-cutting project, practically covering whole of the government scope, and being very sensitive in the nature, you need a strong and stable political support.
2. With so many stakeholders, you can't and shouldn't make extensive plans in advance, because there are many important facts that you can't know and incorporate in the initial planning. You have to prepare to be agile and flexible, with the project management team and with the development teams.
3. In such a project, you will spend much of time and energy for risk management, for handling the planned and new risks that materialize very frequently.
4. In such systems where personal data are processed and used for very delicate decisions, it is very useful to actively include the Information Commissioner or similar Data Protection authority so to be sufficiently data-protection and security compliant "by design".



5. The actual reuse of the reusable building blocks depends on the trust between institutions. You have to encourage trust and to act as a reliable partner if you want other institutions to rely their processes on your building blocks.
6. You have to provide stable and sustainable governance for the building blocks, including the reliable staffing and constant flexibility of the solution.

Conditions required: see above.

- political support
- flexible project management
- strong risk management
- data protection by design

Additional information: The concept of the common application building blocks can bring huge savings, for the development and for the operations of IT systems.

This concept stretches beyond just one institution, so actual effects of that approach depend on the power and efficiency of cross-sectoral coordination.

Our common building blocks for electronic data gathering are highly reusable, flexible and scalable and now that we have business processes of many institutions depending on these building blocks it is necessary that we also ensure their sustainability.