

Impuls Project

A Regional Sdi-Project about Cooperation, Coordination, Transparency and Data Sharing in the Western Balkan Region

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Key words: Cooperation; Coordination; Transparency; Data sharing

SUMMARY

In the region of Western Balkan the institutions that are in charge of implementation of the spatial data infrastructure are making significant efforts in implementing the INSPIRE directive. Due to certain similarities and the fact that the establishment of Spatial Data Infrastructure in the region is generally under the responsibility of the National Mapping and Cadastral Agencies (NMCA). Any problems in the implementation of the INSPIRE directive are trying to be solved in common ways for the region, through the implementation of regional projects as the IMPULS project managed by the Lantmäteriet with the State Geodetic Administration in Croatia as a junior partner. Sida, the Swedish International Development Cooperation Agency are financing the project through Swedish Development money.

Inspired by the excellent results of a first regional project, called INSPIRATION, which was implemented during 2012-2013, Sida in June 2014, signed the Agreement with eight institutions in the Western Balkan region regarding implementation of a new four year project named IMPULS. The beneficiary organisations, NMCA's, in the region are:

- Immovable Property Central Registration Office of the Republic of Albania (IPRO)
- National Authority for Geospatial Information in Albania (ASIG)
- Federal Administration for Geodetic and Real Property Affairs of FBiH (FGA)
- Republic Authority for Geodetic and Property Affairs of the Republic of Srpska (GARS)
- Kosovo Cadastral Agency (KCA)
- Agency for the Real Estate Cadastre of the Republic of Macedonia (AREC)
- Real Estate Administration of Montenegro (REA)
- Republic Geodetic Authority of the Republic of Serbia (RGA)

It is expected that the IMPULS project will have significant impact in the implementation of the INSPIRE directive. This will enable the beneficiaries to meet the EU-requirements, as well as developing interoperability and e-government in each country. The “best practice” developed during the very fruitful Nordic Inspire cooperation (NOSIN) will be used as a “raw model” and the experiences, ways of working and lessons learned are being transferred to the cooperation within the region.

The project will involve several external stakeholders from the beneficiary countries (Albania, Bosnia Hercegovina, Kosovo, Macedonia, Montenegro and Serbia) and especially the crises management authorities.

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Lantmäteriet – The Swedish Mapping, Cadastral and Land Registration Authority

1. IMPULS PROJECT

The Project is aiming at supporting the Agencies in their work to adjust to the EU directive INSPIRE, which specifies how a country should organize the National Spatial Data Infrastructure (NSDI). The Project will provide the basis for how technical interoperability can be achieved, how authorities should disseminate geodata in an electronic format via services and how they should share geodata with other public authorities and also other countries.

In the region of Western Balkan the institutions that are in charge of implementation of the spatial data infrastructure are making significant efforts in implementing the INSPIRE directive. Due to certain similarities and the fact that the establishment of Spatial Data Infrastructure in the region is generally under the responsibility of the National Mapping and Cadastral Agencies (NMCA). Any problems in the implementation of the INSPIRE directive are trying to be solved in common ways for the region, through the implementation of regional projects as the IMPULS project managed by the Lantmäteriet with the State Geodetic Administration in Croatia as a junior partner. Sida, the Swedish International Development Cooperation Agency are financing the project through Swedish Development money.

Generally the IMPULS project, involving so many different organisations, is a very complex project. To ensure the most efficient support possible for each beneficiary organisation the coordination between IMPULS and other ongoing initiatives is the responsibility of each organisation. This is due to the fact that the different organisations have different initiatives and project that need to be coordinated with the IMPULS activities.

2. A REGIONAL SDI-PROJECT IN THE WESTERN BALKAN REGION

The establishment of NSDI's in the region is generally under the responsibility of National Mapping and Cadastral Agencies (NMCA) or their respective ministries. Many governments in the region already have a legal instrument or other framework document determining the strategy and development of NSDI.

The background is that Western Balkan is a region of similarities and differences and these things has to be taken in to the consideration on the IMPULS project.

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The similarities are:

- change of economic and social system;
- heavy transition and devastation and relatively new countries;
- booming real-estate market;
- growing political stability, EU processes and reform activities in Land Administration;
- Land Administration registers more or less neglected in the past;
- focus on reorganization of institutions, human and ICT capacity building, digitalization, projects of resurveying;
- implementation of well proven international concepts and solutions;
- usage of additional funding sources beside the state budget (donations, WB, EU);
- fast, slightly shifted, development;
- high expectation from the government and citizens;
- lack of staff and capacities;
- insufficient knowledge in some areas;
- organisational problems.

The differences are:

- national, historical, political;
- legislative framework;
- different registration systems (integrated and dual);
- responsibilities and status inside administration;
- relations with the private sector.

The beneficiary organisations, NMCA's, in the region are:

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2.1 Organisation of the project

Lantmäteriet leads the IMPULS project with the State Geodetic Administration of the Republic of Croatia as a junior partner.

The results, experiences and lessons learned from earlier projects in the region will be used as a basis for the IMPULS project which will further develop the cooperation and involve more stakeholders and issues. The first phase will place increased focus on hands on workshops, joint

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development and sharing of experiences etc. The IMPULS project is moving from more general activities for raising awareness, making analyses and transferal of high level knowledge to increasing practical knowledge, capacity and supporting actual implementation of the INSPIRE directive – all focusing on cooperation, hands on work and sustainability.

The INSPIRE directive came into force during 2007 and full implementation is required by 2020. The INSPIRE directive aims to create a European Union (EU) spatial data infrastructure that will enable sharing of environmental spatial information among public sector organisations and better facilitate public access to spatial information across Europe. Some of the benefits already achieved in countries that have implemented at least part of the INSPIRE directive are:

- Increased efficiency in data collection and accuracy in collected data – e.g. using the building and address register requires that citizens only provide information once and this given information is re-used by different public authorities.
- Improved basis for reduced air pollution – establishment of efficient transportation schemes for cross-border and national public transport using shared data helps to reduce air pollution.
- Sharing information (data) between government agencies raises tax revenues, increases transparency and prevents fraud.

The beneficiaries are generally responsible as coordinators as well as primary data producers/providers. Currently each country also has a basic geoportal or some kind of rudimentary e-service and the overall level of interoperability between them is still very low. Cross border services are complicated by incompatibility and inconsistency of data, for example, by the different coordinate reference systems used in the countries.

Funding National Spatial Data Infrastructure (NSDI) appears to be a great challenge in all countries and most frequently the financial support is provided by the state budget. The countries of the Western Balkan region are relatively small and have limitations in available resources which is why the regional cooperation is a key factor for better synergies and mutual benefits. One major problem in the region is the lack of qualified personnel, not only in the aspect of knowledge and experience but also in the aspect of numbers of individuals available to do the work required. Support is needed from the project to solve this situation.

A key success factor for the project is cooperation at different levels – sharing data and working together to increase the benefits of this data, as well as working together to collect a potentially higher quality of data. Therefore cooperation is crucial in the project. The Nordic countries have a very well established and successful way of working together in this field and this will be used as an input model for this project.

The project is divided into the following work packages:

- WP1 – Project Management and Administration
- WP2 – Data Sharing Policy and Regulations

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- WP3 – Data Harmonisation
- WP4 – Metadata and Quality Evaluation
- WP5 – Dissemination:
 - Services
 - Portal (s)
- WP6 – Benefits:
 - Demonstrations
 - Pilot implementations

2.2 Scope of the IMPULS project

Since the IMPULS project is a wide and complex project several outputs will contribute to several outcomes and the main connections are described.

1. Sufficient level of knowledge, achieved by hands on work with actual implementation of the infrastructure needed, based on INSPIRE, enabling efficient maintenance, support and coordination of the infrastructure:
 - Established ways of working with regional and national cooperation.
 - Experience in all countries in the region increased by transferring knowledge to each other. This shall apply for the employees of the participating organisations as well as for employees of other institutions being important stakeholders for the implementation of the INSPIRE directive.
2. Efficient organisations and business processes using the developed infrastructure, enabling new possibilities to earn and save money:
 - Communication strategy developed (stakeholders involved).
 - Increased awareness and involvement among key stakeholders through project events.
3. Interoperable technical solutions (e.g. software, services etc.) enabling sharing technical solutions within each country, the western Balkan region as well as with EU:
 - Established common data specifications to facilitate data sharing.
 - Master data are available through the infrastructure.
4. Suggested strategy for way forward in this area (NSDI strategy):
 - Existing examples of NSDI strategies discussed during workshops.
 - NSDI strategies for the beneficiaries reviewed by project experts.
5. Agreed plan, including organisation, ways of working etc. for maintaining, including additional datasets and developing the regional specification:
 - Routines for quality validation are implemented in accordance with common agreed standards.
 - Ensured quality of data (including a strategy how to improve data).
6. All necessary competences needed to maintain the results achieved in the project are in place for each country:
 - Analysis of competences needed.
 - Analysis of existing competence and means for training (facilities, institutions, programs etc.).

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- Trained staff.
- On-line trainings (specific courses and/or programs) in place.

2.3 Expected results of the IMPULS project

The project will provide the basis for how technical interoperability can be achieved, how authorities should disseminate geodata in an electronic format via services and how they should share geodata with other public authorities and also other countries.

The Expected Project Impacts (the long term ultimate result – change - which the project shall contribute to) are:

- INSPIRE directive is implemented in the region, enabling the beneficiary countries to meet the EU-requirements in this area.
- Interoperable content and services are delivered efficiently, supporting the development of e-government in each country as well as adding value to government and local administration, all in accordance with the Public Sector Information (PSI) directive.
- Implementation of the INSPIRE directive, supported through this project, has contributed to the economic development, transparency of ownership and anticorruption processes, in accordance with SEE 2020 (specifically in the dimensions ‘*Competitiveness*’, ‘*Effective public services*’ and ‘*Anti-corruption*’).

The expected project impact above will be further elaborated during the project, based on the benefits the beneficiaries want to achieve supported by the project.

The IMPULS project will also provide the basis for:

- how technical interoperability can be achieved;
- how authorities should disseminate spatial data in an electronic format via services;
- how they should share geodata with other public authorities and also other countries.

REFERENCES

- Project agreements for the IMPULS project
- Inception report for the IMPULS project

BIOGRAPHICAL NOTES

Peter Wasström has a Master of Science in Land Surveying and over 20 years of experience in land and geographic information systems and register, business and strategic planning, project management and international relations at Lantmäteriet, the Swedish mapping, cadastral and land registration authority. Peter Wasström is now the Head of International Services Department at Lantmäteriet.

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