

## The IMPULS project

– building an infrastructure for exchange of digital data

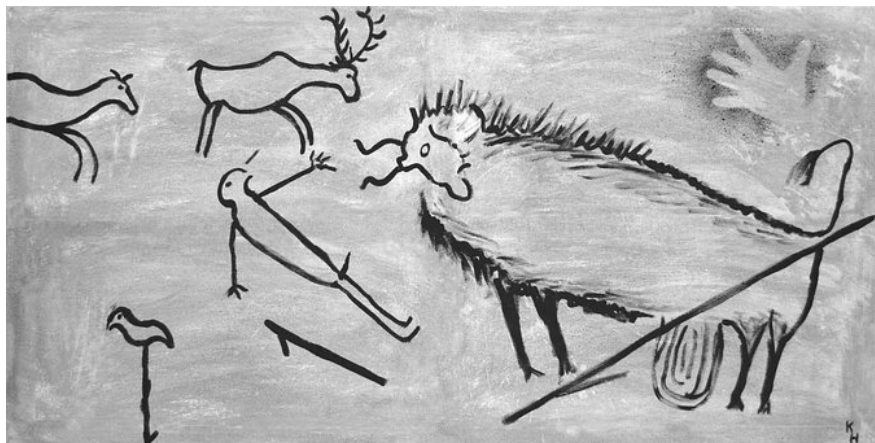
*"Digitally Enabled Development for a Sustainable Future in Eastern Europe"*

Anders Rydén – Lantmäteriet, Sweden

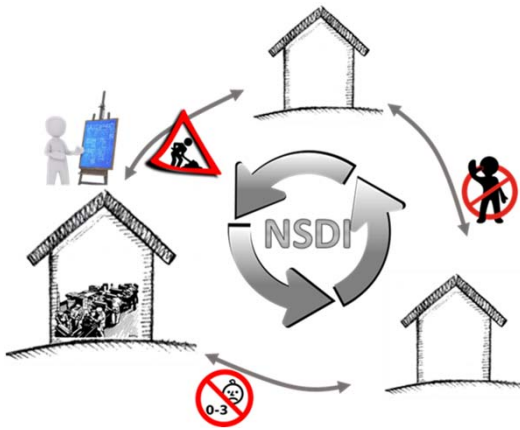


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## What are we talking about?



## Sharing data over the Internet

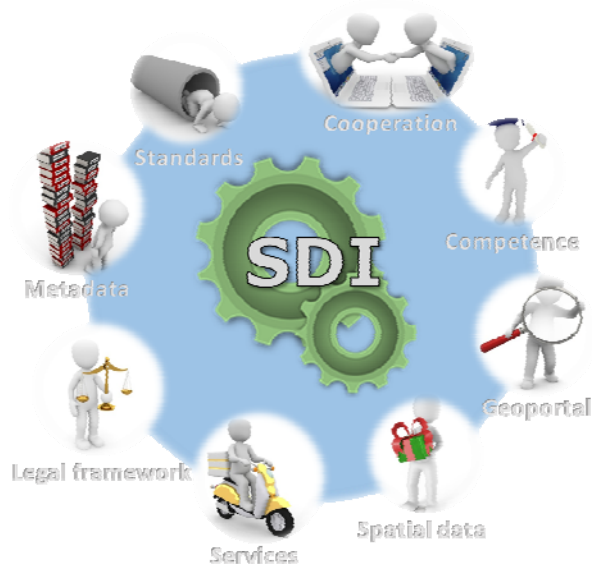


### Overcoming barriers for data sharing

- **legal issues and frameworks** that prevents data sharing between organisations,
- **charging and licensing** issues not allowing efficient reuse of data,
- or **technical issues** such as data are not complete, standards are not applied, poor documentation, etc.

## SDI components

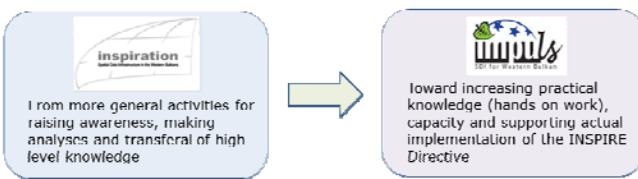
Different components making up a NSDI. Depending on the starting point, different focus may be put on different components to achieve the desired results.



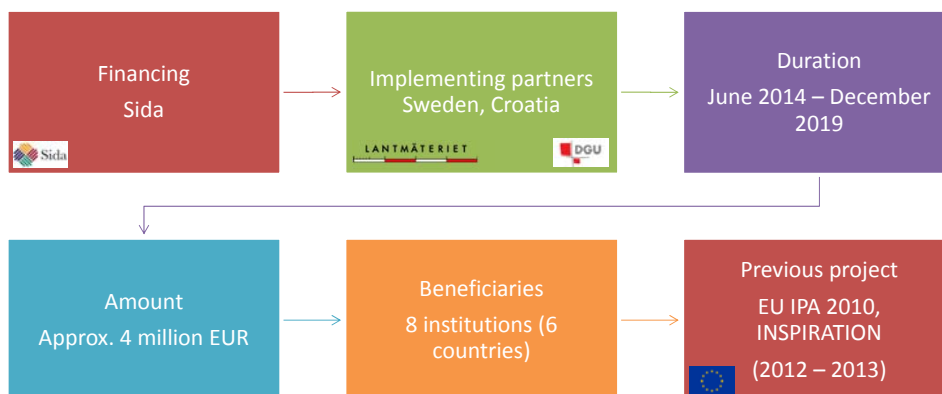
## IMPULS a regional SDI project in the Western Balkan

The aim has been to support to the implementation of NSDI in participating countries, as a base for a regional SDI and in compliance with INSPIRE

IMPULS is a continuation of the INSPIRATION project, which was a 2-year project financed through EU with IPA funding.



## Some basic facts



## Beneficiaries

- 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 North Macedonia (AREC)
- Real Estate Administration of Montenegro (REA)
- Republic Geodetic Authority of the Republic of Serbia (RGA)
- State Agency of Cadastre (prev. Immovable Property Central Registration Office of the Republic of Albania - IPRO)



## IMPULS outcome statements

1

BO's know how to contribute to an efficient SDI and have a clear view of the different SDI roles (user, producer and coordinator), including mutual respects between agencies having these roles throughout the region.

2

BO's promote usage of data from other sources, both national and regional, and actively uses the different components in a SDI (metadata, portal, services etc.) when producing, using and providing data.

3

BO's proactively drive the SDI-work, remove barriers for data sharing and actively develop and promote NSDI's by working in national and regional forums as well as using the network initiated by the IMPULS project



## Long-term impacts

- INSPIRE Directive is implemented in the region, enabling the beneficiary countries to meet the EU-requirements in this area

INSPIRE



- Interoperable content and services are delivered efficiently, supporting the development of e-government in each country - in accordance with the PSI Directive

Interoperability



- Contribution to the economic development, transparency of ownership and anticorruption processes, in accordance with SEE 2020

Transparency & Economic development



## IMPULS work packages

### IMPULS

#### Education

WP2 - Data Sharing Policy and Regulations

WP3 - Data Harmonization

WP4 - Metadata and Quality Evaluation

WP5 - Dissemination  
✓ Services  
✓ Portal(s)

WP6 - Benefits  
✓ Demonstrations  
✓ Pilot Impl.

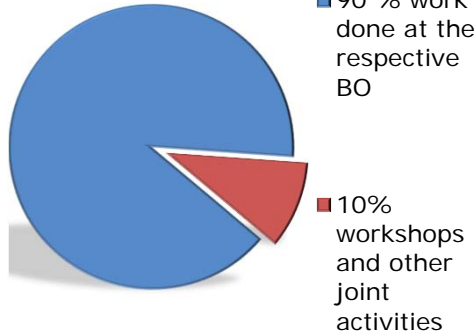
WP1 - Project Management & Administration

#### INSPIRATION

Spatial Data Infrastructure in the Western Balkans



## Approach and methodology



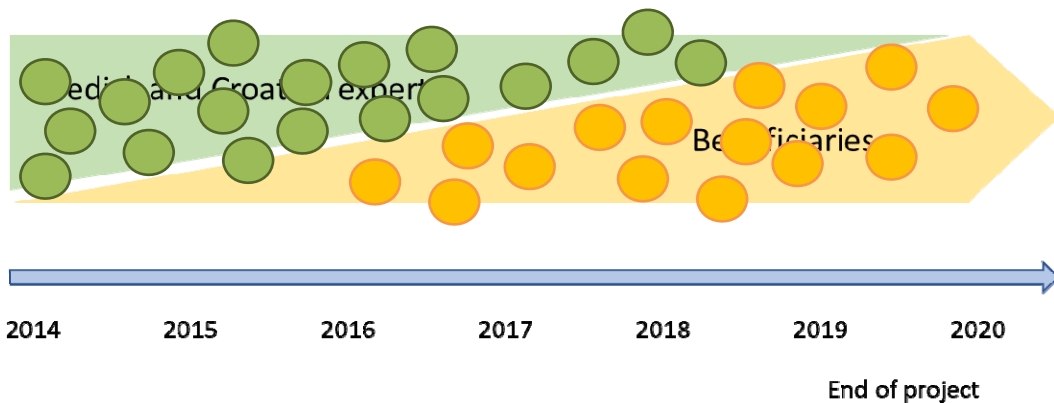
**Seminars** – information activities, presentations, discussions => increasing knowledge by setting knowledge exchange network among BO's, presenting best practices, preparing for tasks to be implemented, setting a base for next step

**Workshops** – learning by doing, hands on work => giving tangible results, e.g. specification, technical framework, draft law, first meta data profile, doing action plans, data sharing models, etc.

**On-line trainings**



## Project drivers



## Achievements

view services  
metadata  
coordination  
regulations  
agreements  
download services  
monitoring  
**HARMONIZATION**



### Legal framework

- ✓ 5 NSDI laws/regulations are in force
- ✓ + 1 NSDI law drafted and in procedure of acceptance

### Coordination structures

- ✓ 6 BO's are nominated as national coordinators
- ✓ 6 BO's have a structure for coordination in place

**In progress** continuation of proactive work on the coordinating tasks in the respective country



## Metadata

- ✓ Regional Metadata profile developed (INSPIRE compliant)
- ✓ National metadata catalogues developed (according to Regional profile)
- ✓ Metadata catalogues can be harvested by other catalogues

## Metadata entries

- ✓ Metadata produced for four datasets & services: AU, GN, EL, OI according to Regional profile
- ✓ Metadata produced for for additional dataset & services
- In progress** Continuation with development of metadata for additional datasets/services from BO's and stakeholders



## Harmonisation

- ✓ Increased knowledge in reading INSPIRE data specifications in BO's and stakeholders
- ✓ Data harmonised: AU, GN, EL, OI (in HALE and FME) - all BO's
- ✓ Some BO's harmonized additional datasets (AU, EL, GN, OI)
- In progress** Continuation of harmonization + support stakeholders in harmonisation work

## View & Download Services

- ✓ Increased knowledge in develop. services in BO's and stakeholders
- ✓ View & Download services available for AU, GN, EL, OI
- ✓ Some BO's developed view/dw services for additional data sets
- In progress** To make all services INSPIRE compliant
- In progress** To support stakeholders in services development
- In progress** To work on issues such as licensing, copyrights, security and secrecy





### Data sharing mechanisms

- ✓ The data sharing agreement between BO's for pilot signed
- ✓ Some BO established a data sharing mechanisms
- In progress Establishing of national data sharing mechanisms in all BO

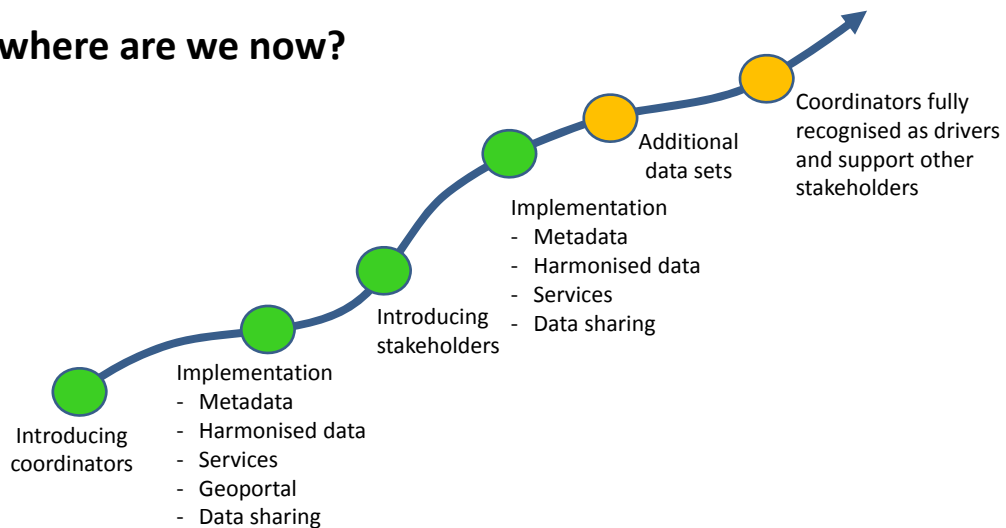


### Monitoring

- ✓ created lists of data custodians and responsibilities
- In progress To continue with the work of identifying data and data custodians for monitoring purposes
- In progress To establish monitor of NSDI development in respective country



### So, where are we now?





The development of a NSDI is an evolutionary process – it will not stop because the project ends. Continue the good work done so far and:

## The road forward

- Continue the work to become a recognized national coordinator
- Broaden the scope and encourage more stakeholders in the process
- Successively identify and remove more barriers for data sharing
- Seek usecases



## The IMPULS book



An approach to the development of a regional SDI

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