



# XXVII FIG CONGRESS

11-15 SEPTEMBER 2022  
Warsaw, Poland

Volunteering  
for the future –  
Geospatial excellence  
for a better living

## Example of Cooperation in EU Funded Project on Improving Spatial Data Services in the Republic of Moldova

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ORGANISED BY

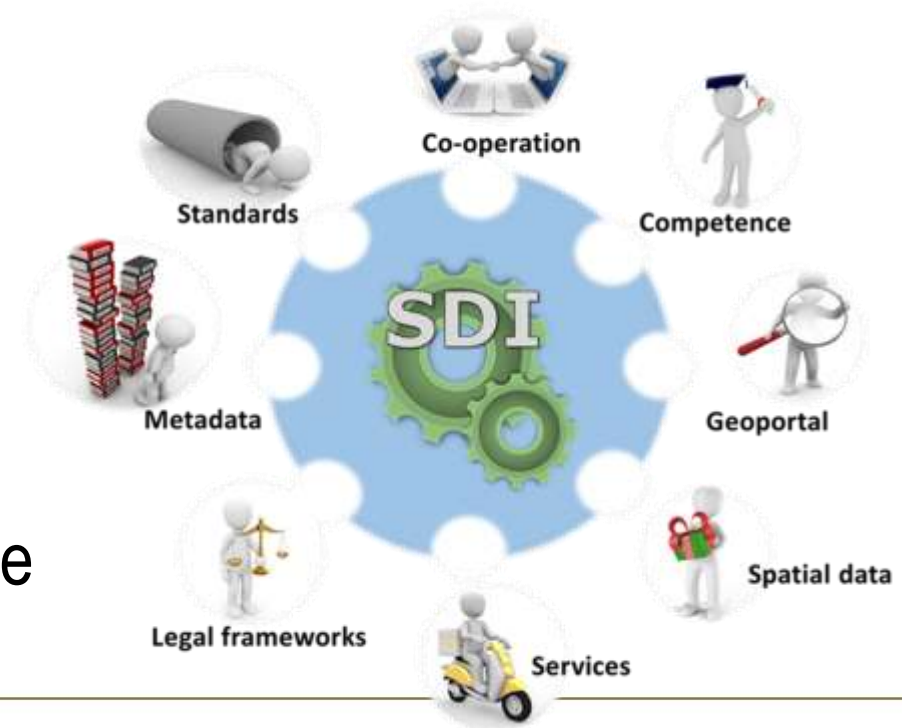


PLATINUM SPONSORS



## Twinning project: Improving Spatial Data Services in the Republic of Moldova following EU standards

- Project objective:
  - to enhance e-government through improved spatial data sharing - **support in NSDI development**
- Twinning:
  - aims at upgrading the administrative capacities of the public administration





Funded by the European Union

# Project partners



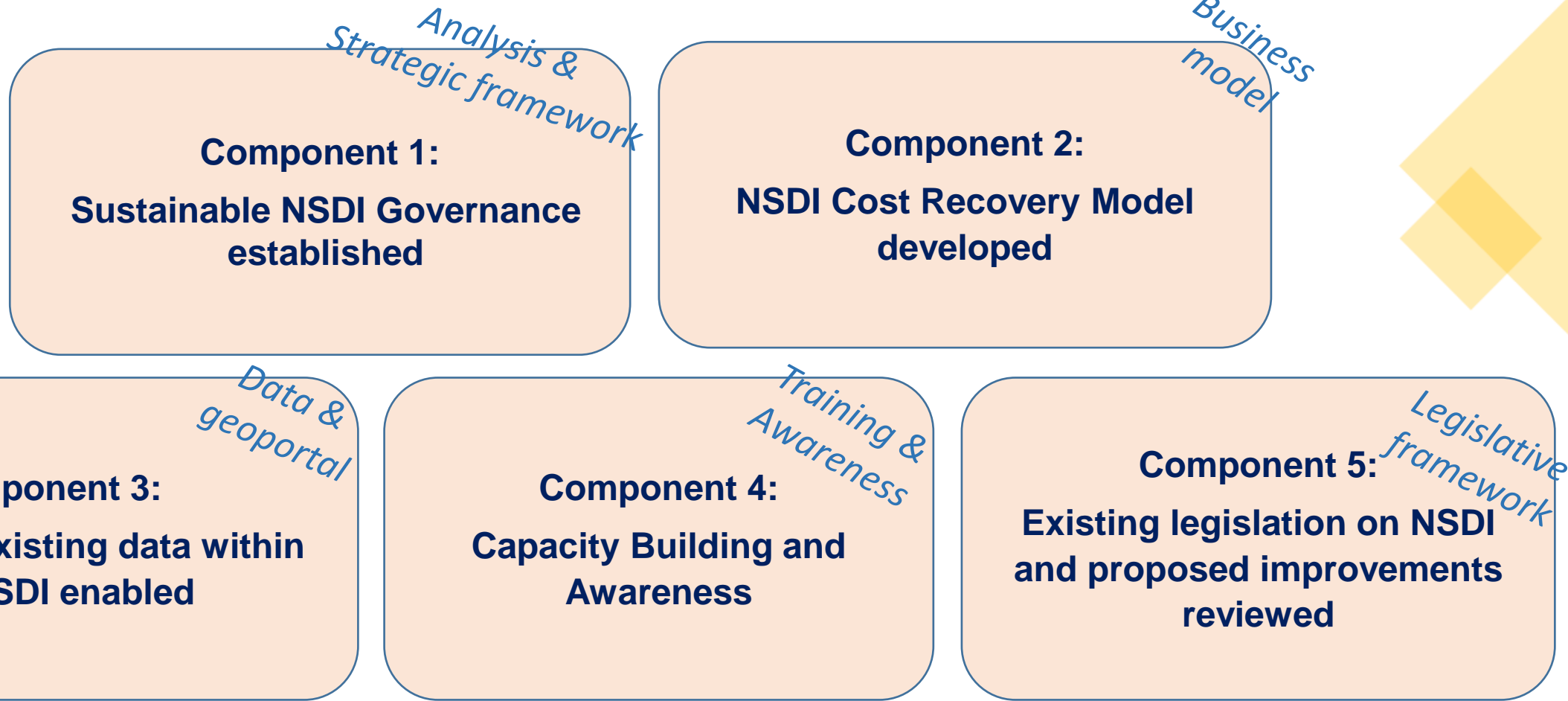
Implementation:  
1/9/2020 - 30/4/2023

EU ENI 2020 Twinning project: MD 16 ENI OT 01 19  
"Improving Spatial Data Services in the Republic of Moldova following EU standards"





# Project components



Results of twinning project 2014-2016:  
Organization, Streamlining and Computerization Process in Mapping in the Republic of Moldova



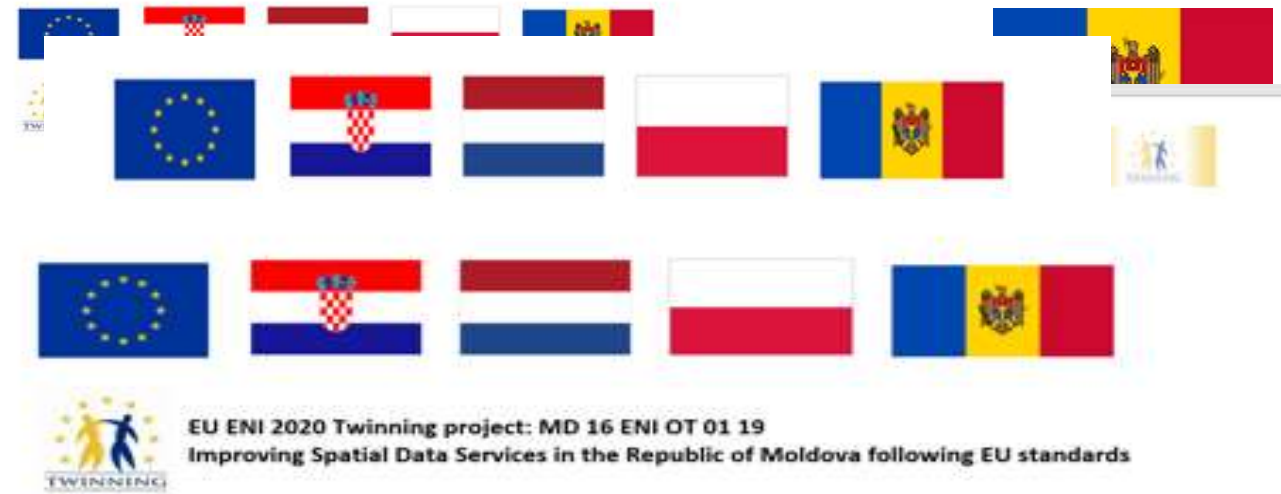


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# Achieved results

Analysis & Strategic framework

- Situation Report
- 5-year NSDI Program;
  - Action Plan 2022-2024;
- Recommendation on
  - Data sharing
  - Licensing
  - Institutional framework (NSDI Council/working groups)



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TWMD-1-131-02



## 2 EXISTING LEG

The existing framework... important from... below in Figure

- Law No. 254
- Govt Decis 254
- Law on data and inter No. 14

# Recommendations on NSDI Institutional framework in the Republic of Moldova



Document No. TWMD-1-122-04

PROGRAM FOR THE DEVELOPMENT OF NATIONAL SPATIAL DATA INFRASTRUCTURE (2022-2026) FOR THE REPUBLIC OF MOLDOVA - ver.

Action Plan of NSDI State Programme 2022-2024

1. Law on National Spatial Data Infrastructure No. 254/2016

Discovery and view services shall be made available free of charge to the public.

Modify/merge	State changes	Commerce	GPL	Licensor's law
Sublicense	Disclose source	Modify	Other copyleft	Other law
Commercial use	Copyleft/Share a.	Ethical clauses	Linking freedom	Not fixed/local
Use patents	Lesser copyleft	Pub sector only	Multilingual	Venue fixed
		Sublicense		



# Achieved results

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Business model

## Component 2:

- Report on NSDI cost assessment
- NSDI benefits identification



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## Cost Report of NSDI implementation, maintenance and development in Moldova

- ver. 1.0 -



Agency for Land Relations and Cadastre of the Republic of Moldova

48 Serghei Lazo str MD-2005 Chisinau  
[www.arlc.gov.md](http://www.arlc.gov.md)

Subject: Questionnaire Cost Assessment NSDI Moldova

Dear .....

Moldova is embarking on the development of a National Spatial Data Infrastructure (NSDI). A NSDI Cost Recovery Model will be developed. This requires identification of all costs and benefits of NSDI. For this purpose this questionnaire has been developed. The focus of this questionnaire is on costs as being made by stakeholders and spatial data providers.

Your answers are needed for the creation of a NSDI Strategy for Moldova.

The questions concern general questions and questions on spatial data sets, metadata, services & portal, applications, legal & finance and on coordination & management.

We would be please to find your reply before.....

Yours sincerely,



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## Methodology for NSDI Benefits identification in Moldova



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TWMD-2-223-01

## Benefits Report



# Achieved results

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Data &

- Catalogue A-D conversion
- Guidelines:
  - ✓ on analogue to digital conversion,
  - ✓ on geo-referencing,
  - ✓ for data specifications,
  - ✓ on data modelling,
  - ✓ for harmonisation,
  - ✓ for creation and maintenance of metadata.
- TS for NSDI Metadata Geoportal + Support in development
- Planning of the pilot project
- Technological Framework Report

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## Technological and Infrastructure report with recommendations for spatial data sets and network services

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Moldova. In other words, the portal shall be the gate into searching and viewing spatial data from various sources of the Republic of Moldova, clearly showing which spatial data and services are available and where, and making them available to the persons entitled and allowed to access them.



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# Achieved result

Training & Awareness

- Training script
- 35-hour online training “Introduction to Spatial Data Infrastructure and QGIS”, over 100 participants
- Communication Plan in the NSDI sector
- Report on educational programs regarding NSDI topics
- Study visits in Croatia and Poland

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TWMD-4-415-02

## Report on educational programs at Moldovan academic institutions offering courses in the



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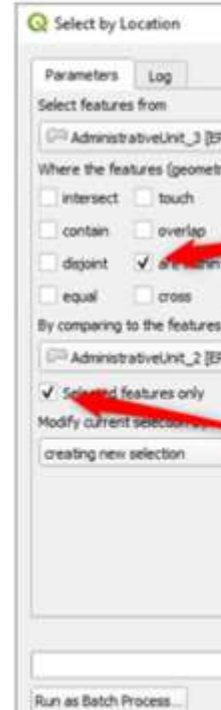


### 5 REQUIREMENTS FOR THE DEVELOPMENT OF THE APPROPRIATE SDI CURRICULA AND THEIR CONTENT

This chapter contains a description of the experiences and existing literature in MS country (Croatia). This experience was shared during the remote meetings with ALRC and the representatives of the Moldovan academic institutions. It brings the selection of other Capacity Building projects within the Erasmus+ program, Horizon 2020 Twinning, and other EU-funded programs (like European Social Fond) that could be relevant to the subject of capacity building in the field of geoinformation and spatial data infrastructure.

Today’s challenges faced by the geoinformation ecosystem are external and internal, highlighting the lagging behind of the academic sector in introducing new technologies into the teaching process, which results in new professionals not having the knowledge and skills needed by the business sector. The problem has a global character and numerous projects are underway in search of solutions that will enable the modernisation of the geoinformation curricula that will accompany rapid changes in technology and user needs.

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# Achieved results

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Legislative framework

## Component 5:

- Analysis of existing NSDI legislative framework;
- Amendments to the Law on NSDI and secondary legislation
- Model for Multi-agency data sharing MoU
  - Template for Tech. Operati. Data Sharing Protocols

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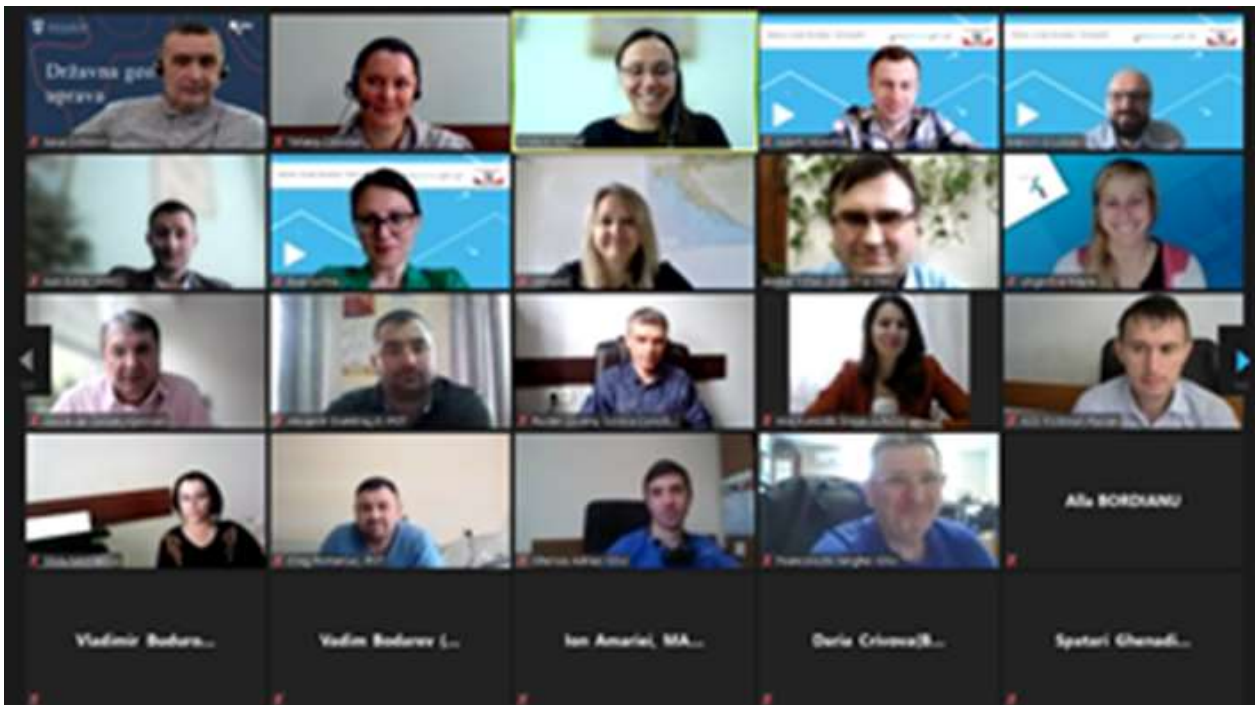
## Draft Model for multi-agency Data Sharing Agreement and template for Technical Operational Data Sharing Protocols

19.11.2021.





# Project organization & working methods



## Dutch example

- Basis Registrations (KADA)
  - MIM model
  - IMBAG
- Nature Management Plan
  - IMNAB
- Stored in database in orig

## Croatian example

Current situation and proposed progress regarding Strategic Goal per year are summarized in the table and in the figure of the spider diagram:



## Polish experience (1)

- The modelling in GUGIK was done in 2011-2015 for the following data sets
  - [Land and Building Register](#)
  - [Topographic database 250k, 10k and 50p](#)
  - [State Register of Geographic Names \(new\)](#)
  - [State Register of Boundaries](#)

Basic principle: close partnership (MS & BC experts) + detailed planning + high level of expertise





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## Cooperation with other projects in the field



- WB funded project
  - (NSDI geoportal, harmonization, licencing etc. )
- Norway technical support project
  - (standards for data sets, capacity building, UNGGIM IGIF action plan)
- USAID project
  - (GIS development for local public authorities)





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# On-going activities (till April 30,2023)



**Bussines model/plan**

**Pilot project**

**Support in development of NSDI Metadata Geoportal**

**Capacity buiding**

**Awareness raising**

**Study visits**

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**Thank you for your attention!**

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