

Ensuring Spatial Data Harmonisation for Advancing Moldova's EU integration

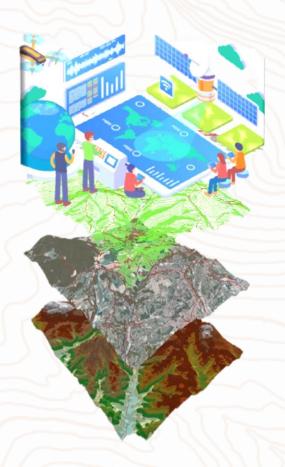
Servicii de retea

Network services



Cadrul normativ Legal Framework

Date spatiale



SÎRBU Rodica Spatial Data Infrastructure Unit



CONTENT



The responsibilities of the Agency for Geodesy, Cartography and Cadastre in the field of Spatial Data Infrastructure;



Evolution of the Spatial Data Infrastructure in Republic of Moldova;



Spatial Data Harmonisation for Advancing Moldova's EU integration;



Future prospects.











The responsibilities of AGCCin the field of Spatial Data Infrastructure

Based on the Government Decision no. 959/2023 regarding the organization and operation of the Agency for Geodesy, Cartography and Cadastre (link) AGCC:

develops policy documents and normative acts in the field of NSDI;

ensures the development and updating of NSDI in accordance with international standards;

implements projects and establishes international collaborative relationships and promotes the exchange of experience and good practices;

coordinates technical concepts and regulations regarding the establishment of state geographic information systems and thematic geoportals;

Support for public entities in the implementation national spatial data infrastructure.

monitors standards' implementation to ensure the interoperability of spatial data sets and services.



First Twinning Project:
"Organization,
Rationalization and
Computerization of the
Mapping Process in the
Republic of Moldova"



- EU Directive 2007/2/EC (INSPIRE) has been partially transposed into the Law on the National Spatial Data Infrastructure no. 254/2016

- A regional Spatial Data Infrastructure solution was developed in Mitoc village and Orhei city

2014





The first Geoportal was developed: geoportal INDS.gov.md, which included as basic functions the search and finding of spatial data through metadata, as well as an information page about the National Spal Data Infrastructure.



The regulatory framework on the responsibilities of public entities regarding spatial data was developed, the organization and functioning of the National Spatial Data Infrastructure Council was regulated through G.D. 459/2017 (link)



The method of creating network services, creating and updating metadata for spatial data sets and spatial data services, as well as the procedure for sharing spatial data sets and related services between public entities and third parties regarding interoperability and harmonization copatial data sets and services was regulated through G.Ds. 737/2017 (link), 254/2018c(link).

2016-2018



cfca

Evolution of the Spatial Data Infrastructure in Republic of Moldova



and





REGULATORY FRAMEWORK

G.D. no.458/2017 for approving the responsibilities of public entities regarding spatial data sets (<u>Link</u>)

G.D. no. 459/2017 for the approval of the Regulation on the organization and functioning of the National Spatial Data Infrastructure Council, as well as its composition (Link)

G.D. no. 737/2017 for the approval of the Regulation regarding the rules for creating network services and the deadline for their implementation (Link)

 COMMISSION REGULATION (EC) No 976/2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services (Link)

G.D. no. 738/2017 for the approval of the Regulation regarding the rules for creating and updating metadata for spatial data sets and services (Link)

 COMMISSION REGULATION (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata (Link)

G.D. no. 254/2018 for the approval of the Regulation regarding the rules for sharing spatial data sets and related services between public entities and third parties (Link)

G.D. no. 683/2018 for the approval of the Regulation on the application rules establishing the technical modalities for interoperability and harmonization of spatial data sets and services, as well as the implementation deadline (Link)

G.D. no. 212/ 2022 – Thematic Geoportal of AGCC (GEODATA) (<u>Link</u>) **G.D. no. 36/2024** –SIGSNL (<u>Link</u>)

The Order of the General
Director 61/2023 regarding the
creation of Working Groups in the
field of national spatial data
infrastructure (Link)

The Order of the General
Director 23/2020 regarding the
approval of the mechanism for
monitoring the implementation of
the national spatial data
infrastructure (Link)

The Order of the General
Director 79/2020 cu privire la
aprobarea Ghidurilor în domeniul
infrastructurii naționale de date
spațiale (Link)

The guidelines:

- Georeferencing of spatial data;
- Technical specifications;
- Spatial data models;
- Harmonization of spatial data.

Law no. 254/2016 on the national spatial data infrastructure (<u>Link</u>)

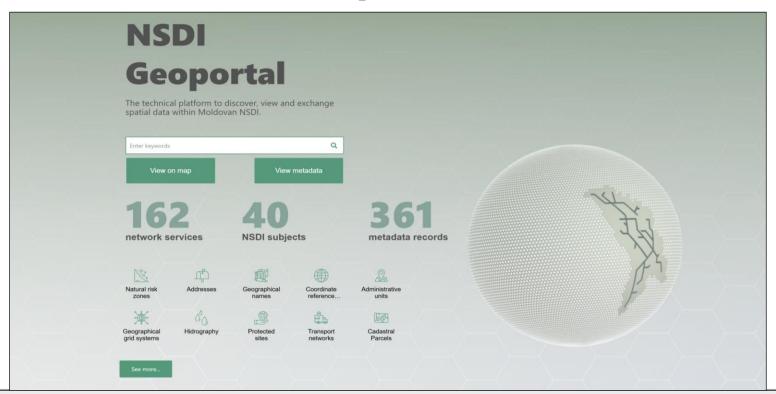
THE EUROPEAN
PARLIAMENT AND OF THE
COUNCIL establishing an
Infrastructure for Spatial
Information in the European
Community (INSPIRE) (Link)

G.D. no. 663/2023

regarding the State Geographical Information System "National Spatial Data Infrastructure Geoportal"



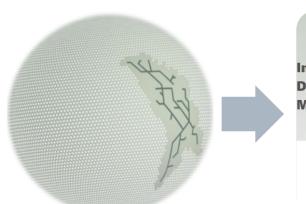
NSDI Geoportal (Link)



Within the World Bank Land Registration and Evaluation Project (2022-2023), the INDS Geoportal development activity was carried out. This activity aimed to improve access and interoperability of spatial data, thereby facilitating compliance with European standards and supporting more efficient management of geospatial information.







Infrastructura Națională de Date Spațiale în Republica Moldova









NSDI Geoportal

The single point for searching and accessing spatial data described by metadata in the Republic of Moldova.

INDS Web Page

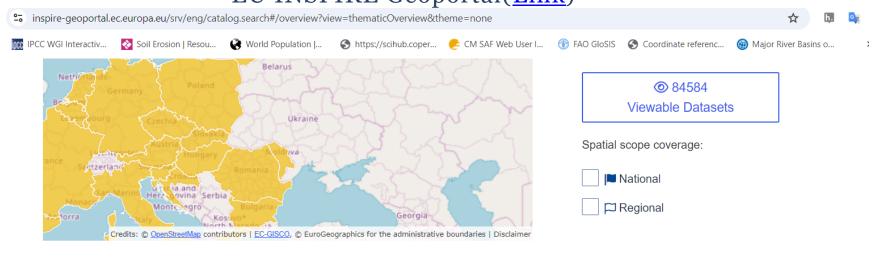
Informative page on NSDI initiatives, activities and news.

Collaboration Platform

The collaboration channel between the members of the Technical Working Groups, Capacity Building and Sharing, of which the responsible public entities are part.



The Republic of Moldova is officially present on the EU INSPIRE Geoportal(<u>Link</u>)

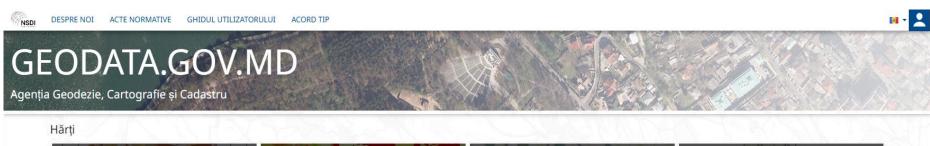


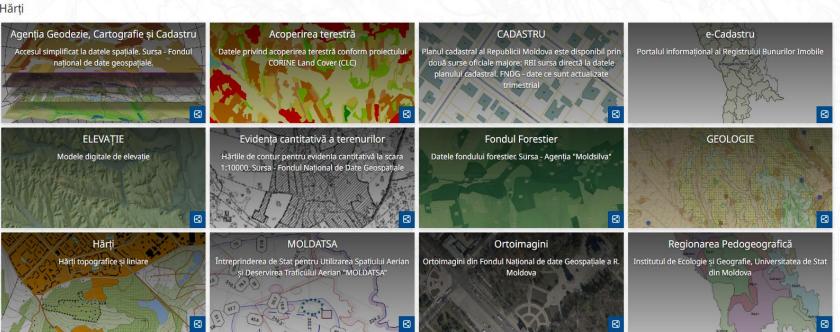
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■ Bulgaria	167 🖺 38 🚣 20 🔘	⊞ Iceland	104 🖺 0 🚣 0 🚳	Poland	177 🖺 119 🚣 118 💿
Croatia	145 🖺 89 🚣 120 💿	II Ireland	87 🖺 72 🚣 57 🚳	Portugal	352 🖺 119 🚣 105 💿
 Cyprus 	42 🖺 5 🚣 27 💿	II Italy	8382 🖺 546 🚣 839 💿	II Romania	117 🖺 48 🚣 47 💿
Czech Republic	92 🖺 64 🚣 74 💿	■ Latvia	158 🖺 89 🚣 88 💿	Slovakia	139 🖺 42 🚣 84 💿
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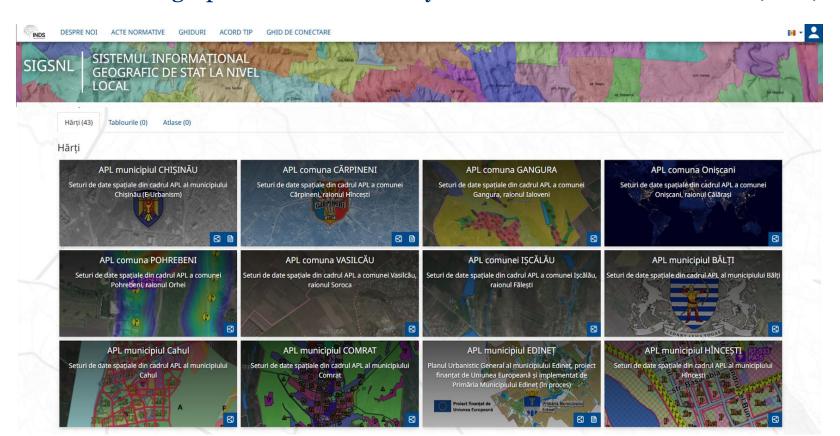
Geodata (Link)





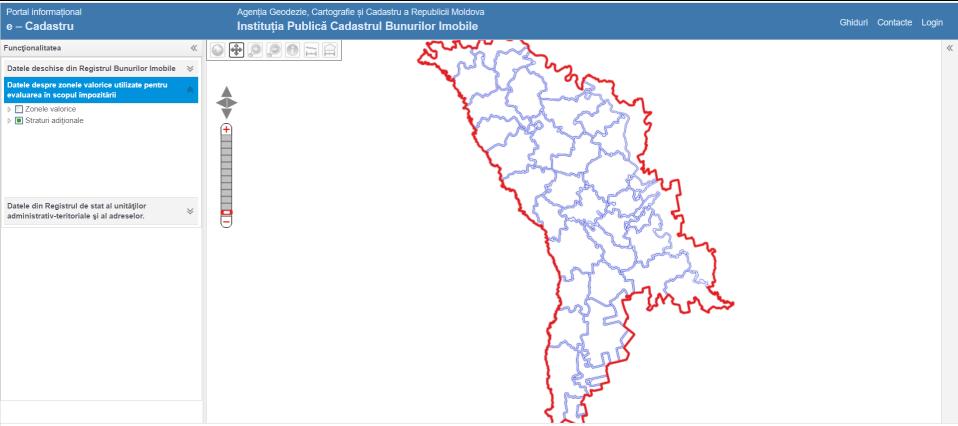


State Geographical Information System at Local Level-SIGSNL (Link)



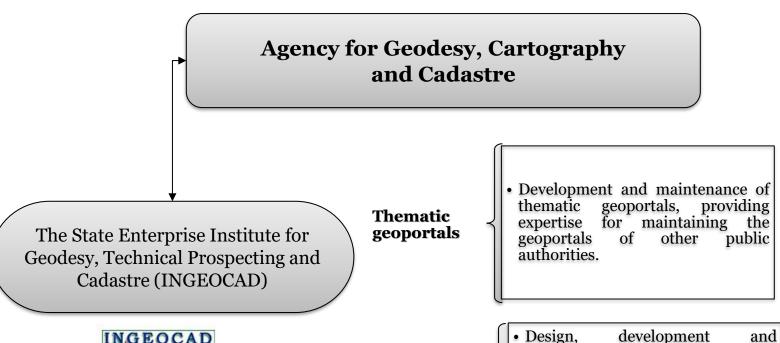


e-Cadastre Informational Portal (Link)





Implementation of SDI policies in Republic of Moldova





Specialized geographic information systems • Design, development and implementation of specialized geographic information systems: creation and maintenance of the "Electronic catalog of coordinates of national geodetic networks" information system, development of the Register of Geographical Names.

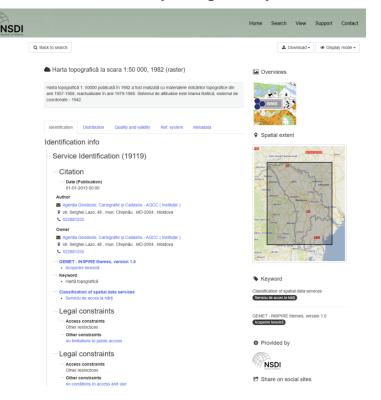


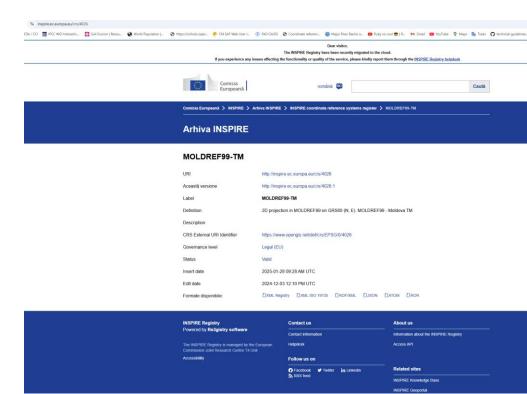
Spatial Data Harmonisation for Advancing Moldova's EU integration



In recent years, the Agency for Geodesy, Cartography and Cadastre has focused on

- ✓ harmonizing metadata (2023-2025),
- ✓ during the update of the NSDI Geoportal, in 2023 the INSPIRE metadata profile was implemented,
- ✓ integrating the CRS of the Republic of Moldova into the INSPURE repository (February, 2025),
- ✓ and currently the primary focus is on data harmonization.

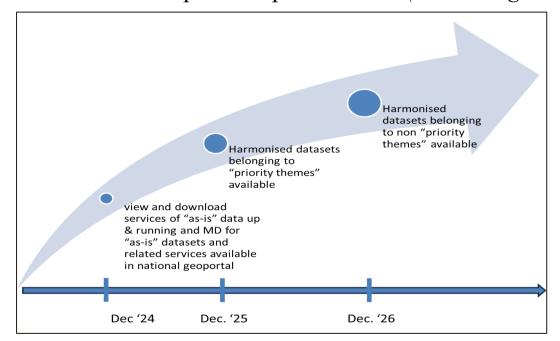






Spatial Data Harmonisation for Advancing Moldova's EU integration

Data harmonisation - Providing access to spatial data through network services in a representation that allows for combining it with other harmonised data in a coherent way by using a common set of data product specifications. (INSPIRE glossary)



Implementation roadmap of data harmonisation plan

Source: Consulting Services to support NSDI Action Plan and Business Model Implementation MD-PSA-282238-CS-CQS (Project ID No. P161238)



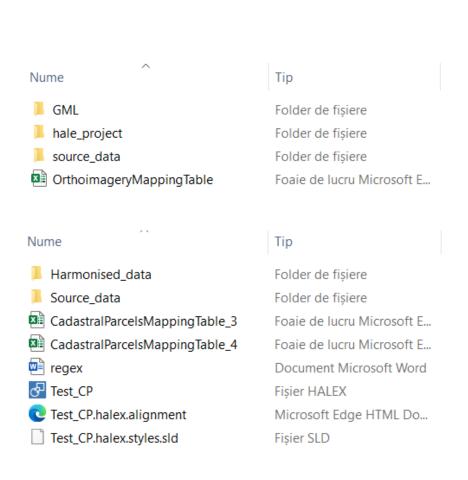
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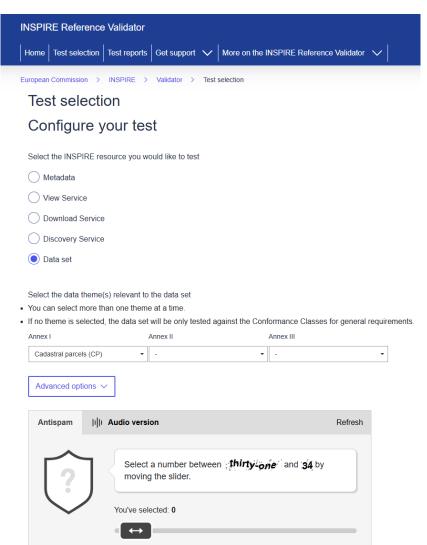
The harmonization process was initiated within the World Bank project. Currently, the emphasis is on harmonizing spatial data held by the AGCC, a process that has actually proven to be more difficult than expected:

- ✓ understand the UML model;
- ✓ complete the maching table;
- ✓ differences between national datasets and the target schema;
- ✓ lack of qualified personnel;
- ✓ in some situations the lack of datasets at the national level;
- ✓ new software (such as Hale Sudio);
- ✓ harmonization plan for each separate theme, including specific ones for vector data and raster data;
- ✓ validation of harmonised dataset.



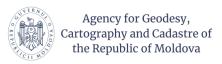
Spatial Data Harmonisation for Advancing Moldova's EU integration







Future prospects



- 1. The Republic of Moldova aims to harmonise all thematic datasets and facilitate access to them through network services;
- 2. Full transposition in the national legislation regarding spatial data (INSPIRE Directive and related Regulations) will be achieved after the country's integration into the European Union;
- 3. Active involvement of all stakeholders in the development of the National Spatial Data Infrastructure (NSDI) will continue;
- 4. Future actions will include the creation of data models for the newly generated spatial data, in order to simplify the data harmonisation process;
- 5. A government decision on monitoring and reporting on progress is planned;
- 6. Is needed external support for updating and harmonisation of spatial data and metadata, according to INSPIRE specifications;
- 7. Continuous training of staff from the responsible institutions for spatial data;
- 8. The development of the technical infrastructure necessary for the acquisition and creation spatial data.



THANK YOU FOR YOUR ATTENTION!

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