Agency for Land Relations and Cadastre of Moldova

Integrated Geospatial Information Framework in Moldova: State of play 2019

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Executive summary

√ Introduction
√ Integration Geospatial Information Framework in Moldova:
   state of play 2019
√ Moldova: NSDI Diagnostic Tool Uses
√ Strategic Partners
√ Main challenges
√ Conclusions

IGIF Spatial Data Diagnostic Tool

IGIF Diagnostic Tool: A questionnaire with scores and set of 9 indicators

- Policy and Strategy
- Governance arrangements
- Legal Framework
- Accessibility and Technical Infrastructure
- Socio-economic impact
- Capacity Development
- Use of NSDI / Applications
- Core Datasets
- Thematic datasets

Country Assessment

- Existing NSDI components
- Missing NSDI components
- Improvements
- Necessary investments.

IGIF: Spatial Data Diagnostic Tool of Moldova

Launched in May 2019
Conducted in 22 Key Organizations / Stakeholders

1	Ministry of Agriculture, Regional Development and Environment
2	Ministry of Health, Labour and Social Protection
3	Agency for Land Relations and Cadastre
4	The State Road Administration
5	Military topographic service
6	National Bureau of Statistics
7	Agency "MOLDSILVA"
8	Energy Efficiency Agency
9	Agency "Waters of Moldova"
10	Agency for Public Services
11	Agency for Geology and Mineral Resources
12	S.E. Moldavian Air Traffic Services Authority
13	S.E."The State Planning Institute for Land Management"
14	S.E. "INGEOCAD"
15	S.E. "Forest Research and Development Institute"
16	General Inspectorate for Emergency Situations
17	Institute of Ecology and Geography
18	Municipality of Chisinau
19	Orhei city Hall
20	Technical Univercity of Moldova
21	Agency for Public Property
22	Union of geodesists, geologists and cadastral engineers of Republic of Moldova

Outputs

- **Outputs:**
  - Completed questionnaire based on interviews
  - Scores for 9 categories
  - Draft Assessment Report
  - List of priority sectors and datasets for socio-econ assessment

Governance and Institutions

	1. Governance and Institutions		Current
1.1	Is there a NSDI "champion" in Government?		75
1.2	Is there a NSDI Coordinating body?		81
1.3	Is the NSDI Coordinating body represented at senior / top level in government?		50
1.4	Is the coordinating body supported by an active secretariat?		59
1.5	Are there clear Terms of Reference (ToR) for the Coordinating Body?		51
1.6	Does the coordinating body actively reach out to all levels of government (including local government) and other stakeholders (private sector, NGOs, volunteering sector)?		31
1.7	Are there Working Groups supporting SDI development? e.g. technical, standards, legal, service development)?		58
1.8	Is there a user group / forum available for consultation and providing user feedback / requests?		31
1.9	Does the national "champion" actively interact with the global and regional geospatial community?		64
1.10	Are there linkages between the coodinating body and those developing the e-Government agenda?		29
		Pathway Score	53

Policy and Legal

	2. Policy and Legal		Current
2.1	Does a NSDI policy and/or strategy exist, and is it "signed off" by government		52
2.2	Is there a Geospatial Information or SDI Law, regulation or directive?		93
2.3	Is there a Geospatial Information Engagement Strategy?		29
2.4	Is there an established link between the SDI and the UN Sustainable Development goals?		65
2.5	Is there an established link between the national geospatial policy and national planning policy and strategy?		32
2.6	Has the SDI policy been discussed and validated by all government and non government stakeholders that are involved in geospatial information management?		38
2.7	Is there a law / regulation /directive for sharing data between public institutions?		64
2.8	Is there a policy to make geospatial (and other) data accessible through "open data"		62
2.9	Is there an active data licensing regime?		28
2.10	Is there Privacy / data protection legislation?		15
2.11	Does Cyber security legislation / regulations include NSDI?		53
2.12	Is there a policy in place regarding the use and support of open source software?		20
2.13	Is there a standards policy in place that promotes the use of geospatial standards?		19
		Pathway Score	43

Financial

	3. Financial		Current
3.1	Does a business model for the creation of an SDI exist?		4
3.2	Has an economic sector or national project (such as census) been identified that could act as a target (or anchor) sector / project to spearhead economic development, based upon the existence of reliable geospatial information?		22
3.3	Has finance been secured for development and implimentation of the SDI?		22
3.4	Has finance been secured for ongoing maintenance, and exploitation, of the SDI?		19
3.5	Is the business model underpinned by a business case / economic justification that has been accepted at the top level in government?		4
3.6	Has a coherent and sustainable pricing and licensing structure for SDI datasets/services been established?		10
3.7	Is the private sector building services based upon SDI?		19
		Pathway Score	14

Data

	4. Data		Current
4.1	Has a set of core datasets been defined, with data custodians allocated, to be responsible for each one?		59
4.2	Have all critical geospatial datasets been created?		49
4.3	Are all critical geospatial datsets being maintained?		52
4.4	Is there an ICT infrastructure in place that supports the capture, management and maintenance of national geospatial data?		53
4.5	Is there an ICT infrastructure in place that supports the sharing and distribution of national geospatial data?		49
4.6	Is there access to geospatial data and services through a single access portal (e.g. geoportal)		19
4.7	Is there a common single national geodetic datum reference, projection and co-ordinate system?		72
4.8	Is there a Continually Operating Reference System (CORS)? in place and being used?		95
		Pathway Score	64

Innovation

	5. Innovation		Current
5.1	Does the government have an organisation responsible for innovation? Is geospatial data and technology included in the government's innovation efforts?		20
5.2	To what extent is the private sector involved in national geospatial information management?		21
5.3	Are there any incentives provided for innovation - using government geospatial information?		14
5.4	Are the academic and private sectors involved in research programmes reated to geospatial information?		20
5.5	Is output from crowd-sourced data being used in the national geospatial infrasturcture?		23
		Pathway Score	20

Standards

	6. Standards		Current
6.1	Is there a standards policy in place that promotes the use of geospatial standards?		39
6.2	Are there standards in place and mandated for geospatial data, metadata and services?		26
6.3	Is there a mandated organisation responsible for the localisation, adoption, publication and compliance monitoring of these standards?		76
6.4	Does a national law or regulation exist that mandates the use of geospatial standards?		65
6.5			28
	Is the use of geospatial standards mandated in procurement of geospatial software and services?		
6.6	Is there national representation in the international standards organisation?		39
		Pathway Score	46

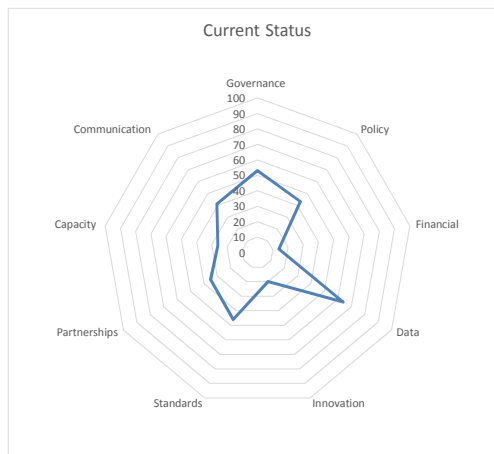# Partnership

	7. Partnerships		Current
7.1	Are government agencies collaborating to create geospatial data?		29
7.2	Are there competing datasets or competencies that lead to duplication of effort inside government?		36
7.3	Are the academic sector and the private sector involved (policy) development related to geospatial information?		42
7.4	Is the private sector building end-user services or applications based on government geospatial information?		29
7.5	Is the international donor community actively involved in the delivery of the SDI strategy?		41
		Pathway Score	35

Capacity & Education

	8. Capacity and Education		Current
8.1	Is there a clear indication, such as an inventory, of the status and availability of geospatial skills nationally?		26
8.2	Is capacity development and geospatial information education being addressed by the SDI coordination or steering group?		28
8.3	Are SDI needs being met by Research & Development (e.g. by the Universities)?		27
8.4	Are SDI needs being met by education (post school level courses)?		30
8.5	Are SDI needs being met by training? (including Continuous Professional Development programs)?		24
8.6	Is there an active approach to knowledge and best practice sharing across government and the private sector?		15
8.7	Is there an active approach to knowledge and best practice sharing between countries in the region or through other capacity building partnerships between countries?		30
		Pathway Score	26

Communication and Engagement

	9. Communication and Engagement		Current
9.1	Is there an overview of stakeholders, partners, and users of the geospatial infrastructure?		38
9.2	Is there an engagement strategy or a communication plan?		28
9.3	Are there Working Groups or committees that support the development and operation of the geospatial infrastructures?		55
9.4	Is engagement with the various end-user groups arranged?		25
9.5	Are the various end user groups supported in the use of geospatial information?		44
9.6	Do case studies exist to show the use of geospatial information in society (government, private sector, citizens)?		22
9.7	Do users have a simple means of accessing information about geospatial information and services?		47
		Pathway Score	41

Current status and conclusion

	Current Status
Governance	53
Policy	43
Financial	14
Data	64
Innovation	20
Standards	46
Partnerships	35
Capacity	26
Communication	41
Overall Score	38

Current Status

IGIF Moldova: Strategic Partners
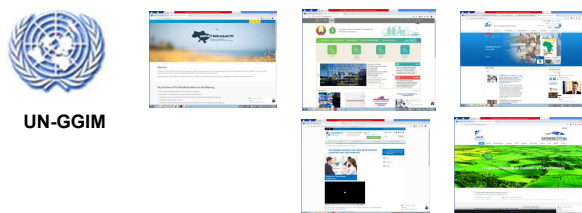
Member

Agreements

Cooperation/MoU

Other Cooperation

UN-GGIM
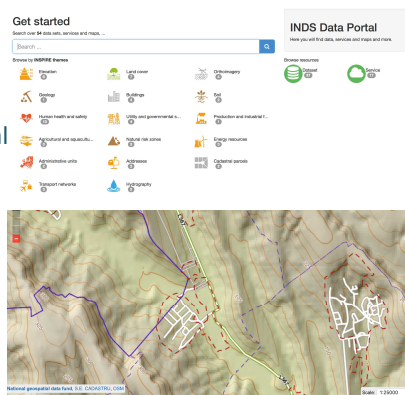
IGIF Moldova: Strategic Partners

Moldova: WB Project for $35 million 2018-2024
C3. Support to the National Spatial Data Infrastructure (EUR 1.4 million)

- A Business Plan for NSDI
- Expansion of the current pilot project
- Datasets
- Integration with EU INSPIRE Geoportal
- Capacity building
- Standards
- CORS network support
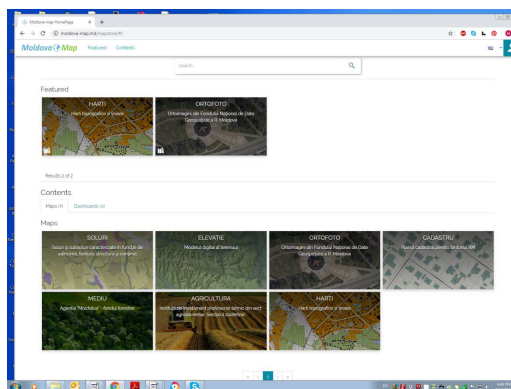

http://www.geoportalinds.gov.md/

IGIF Moldova: Strategic Partners

Moldova: Norwegian Technical Support for NSDI 2006-2019

- Orthophoto images 2007
- Digital Terrain Model 2007
- GNSS MoldPOS Net
- Digital Maps for risk area
- MoldLIS in Cadastre
- Orthophoto images 2016
- Digital Terrain Model 2016
- Base Maps for NSDI (60 %)

https://moldova-map.md/mapstore/#/

IGIF Moldova: Strategic Partners

Moldova: EU Twinning for NSDI 2020-2022 (Euro 1.8 mil.)

Improved Spatial Data Services in the Republic of Moldova
following EU standards

Objectives: To enhance e-government through improved spatial data sharing and cooperation among authorities in line with EU standards and best international practices.

- Update NSDI Legal framework
- Support on harmonization of spatial data based on common standards
- Support in development of standardized network services for sharing of spatial data
- Capacity building in the field of NSDI

Thank you for your attention!