



NATIONAL
SPATIAL DATA
INFRASTRUCTURE

Laying Ground for a Sustainable Business Model for the Georgian NSDI

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GEORGIA

Area: **69,700 km²**

Population: **3.9 million**

Registered
Land/immovable
property: **> 4 600 000**

Immovable Property
Market: **>70% - Tbilisi**



National Agency of Public Registry

A Legal Entity of Public Law under the Ministry of Justice of Georgia, established in 2004



Registry of Immovable Property Rights



Registry of Entrepreneurs and Non-Entrepreneurial (Non-Commercial) Legal Entities



Registry of Economic Activities



Registry of Movable and Intangible Property Rights



Registry of Public Legal Restrictions



Address Registry



Geodesy, Cartography and Cadastre



National Spatial Data Infrastructure



Registry of Municipalities

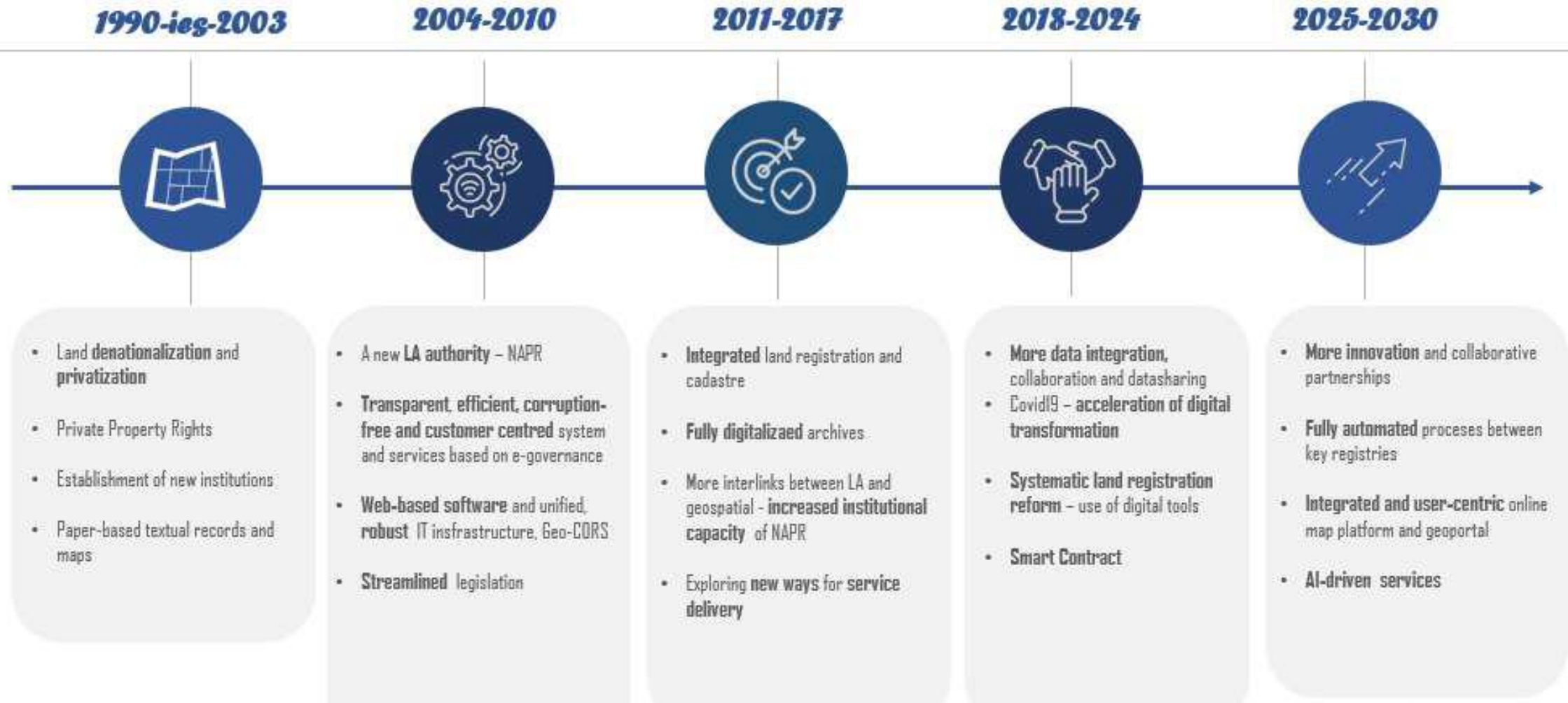


Registry of Political Parties



Registry of Tax Lien / Mortgage

Institutional Evolution and Digital Transformation



Decentralized Service Delivery



331 Services ⇒ 321 E-Services



Public Service Halls (PSHs) & Mobile PSHs



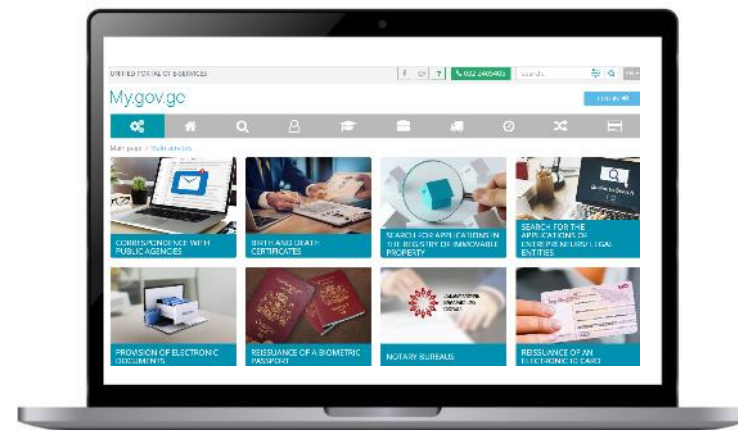
Banks, Notaries & other Authorized Users

World Bank Business Ready 2024 - Business Location Indicator:

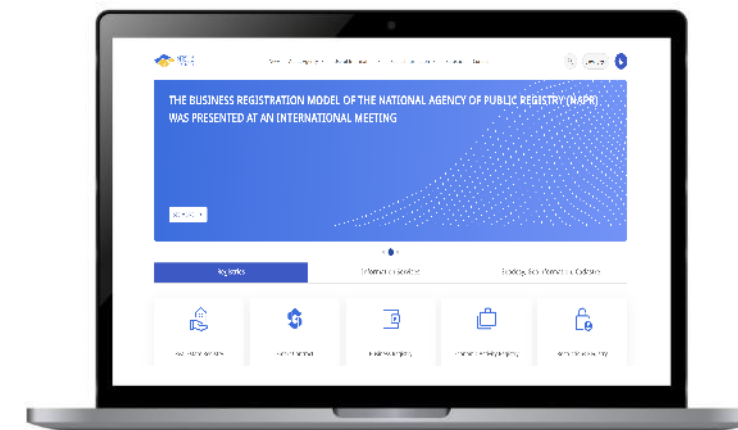
Georgia ranked 1st globally in the Immovable Property component, evaluating immovable property registration standards, information transparency, and digital service accessibility & reliability.




Unified Portal of E-Services
my.gov.ge



Agency Website
napr.gov.ge



Registration Terms and Fees

Registration Terms and Fees		At same day	1 business day	4 business days
		<i>GEL / Euro</i>	<i>GEL / Euro</i>	<i>GEL / Euro</i>
Immovable Property Right		350 / 112	270 / 86.3	150 / 48
Extract from Registry	In person	75 / 24	20 / 6.4	
	Online	52 / 16.6	13 / 4.2	

Free NAPR Services




Government

Municipality

National Bank of Georgia

Immovable Property Registry Extract



Land (Immovable Property) Cadastre Code: **N 01.13.08.003.027.01.01.021**

Extract from Public Registry

Application Registration: **N 882024220930 - 23/02/2024 18:40:13** Preparation Date: **26/02/2024 11:51:49**

Property Section

Zone	Sector	Block	Plot	Case	Land Plot's Ownership Type: Co-ownership
01	13	08	003/027	01/01/021	Land Plot's Designation: Non-Agricultural Specified Area: 207.00 sq.m. Land Plot's Previous Number: 01.13.08.003.022, 01.13.08.003.020 Buildings: N1, N2, N3, N4, N5. Total area: 9230.40 sq.m.

Address: N1, Ili Vekua Street, Tbilisi

Owners

Application Registration Number: **88201608002**, Date: **18/02/2016 10:17:14**
Registration of Right: Date: **18/02/2016**

Titling Document:
Contract of Sale of Immovable Property, Date of Conclusion: **18/02/2016** LEPL National Agency of Public Registry under the Ministry of Justice of Georgia.

Owner	Ownership Type	Property	Area	Parties
Mari Khachatiani, TIN: 0100100003	Ownership	Residence 1, Floor 7, Apt. N21	89.70 sq.m.	

Mortgage

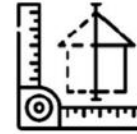
Tax Lien:
Not Registered

Obligation

Seizure/Attachment:
Not Registered

Registry of Debts:
Not Registered

- If an individual receives surplus income through non-entrepreneurial activities by transferring property or assets owned for a period of up to 2 years, they are required to file an income tax declaration with the tax authority no later than the 15th day of the month following the reporting month. The due income tax declaration must also be paid within the same period.
- If, during the tax year, an individual receives property valued at 1,000 GEL or more as a gift without tax being withheld at the source of payment, the income tax is due by April 1 of the year following the reporting year and the individual shall submit the due income tax declaration to the tax authority within the same timeframe.
- Failure to fulfill these obligations constitutes a tax violation and entails liability in accordance with Chapter XI of the Tax Code.
- The authenticity of the document can be verified through the official web-page of the National Agency of Public Registry www.napr.gov.ge.
- The extract can be obtained through the web-page www.napr.gov.ge, at any territorial registration office, Public Service Hall and Authorized Person of the National Agency of Public Registry.
- In case of technical discrepancy in the extract, contact us at 2 405405 or personally fill out an application on the web-page.
- Consultations are available through the hotline of the Public Service Hall at 2 405405.
- In case of unlawful action by an employee of the National Agency of Public Registry, contact us at 08 009 009 09.
- Email us at info@napr.gov.ge regarding any issue.



> 1 994 000

Applications per year



> 890 000

Transactions &
Title Updates
per year



Digitalization of Systematic Land Registration



Systematic Land registration - Full Land Registration and Cadastral Coverage – 2022-2025

3000 surveyed and registered land plots per day

EMA, Drones, Orthophotos, Geo-CORS

>2,089,000 surveyed and >1,470,000 registered land plots
>95% cadastral coverage

49% registered owners – women

Electronic Minutes Application

- ✓ In-house development
- ✓ Digitalized SLR Process
- ✓ Optimization of Processes
- ✓ Live registration feature



Georgia's systematic land registration methodology and technological solutions recognized by the World Bank experts as exemplary globally.

Smart Contract by NAPR



Fast and Secure Service – Registration of Immovable Property and Subsequent Payment of a Purchase Price completed in under 15 minutes



Process done remotely from the Comfort of your home



AI Based facial recognition and identification features



Ecosystem evolving beyond just mortgage and purchase registrations



Next stage: *Tokenization of Assets, Blockchain Integration*

Interactive Portal - maps.gov.ge



Precursor to NSDI Geoportal



Cadastral data, land titles



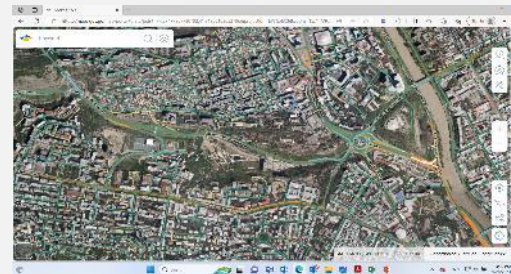
Transport Network



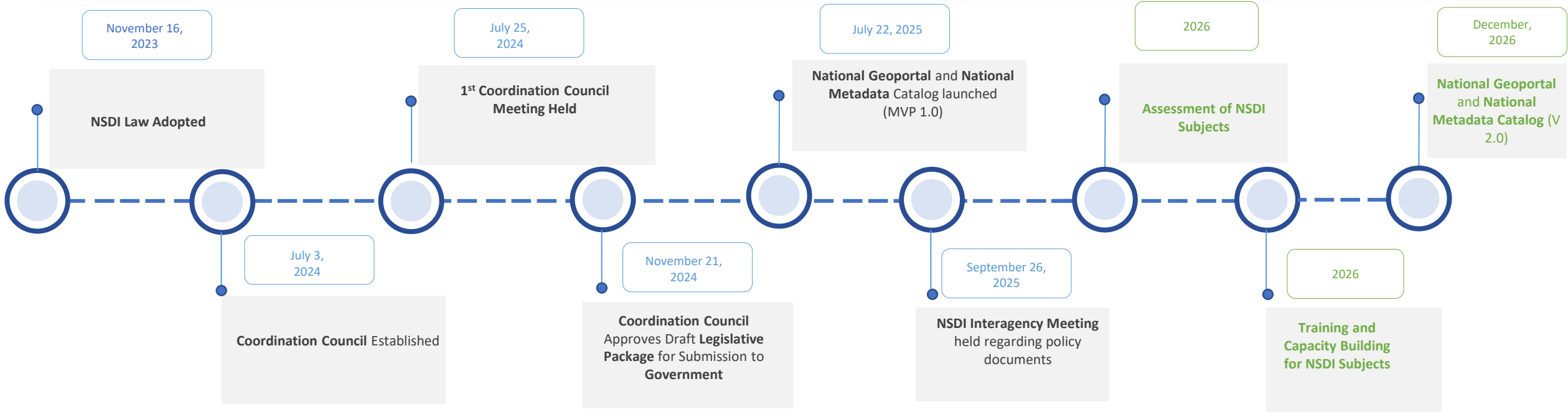
Orthophotos and Satellite data



Topographic maps etc...



National Spatial Data Infrastructure – NSDI 2023-2026



NSDI logo and brand book created

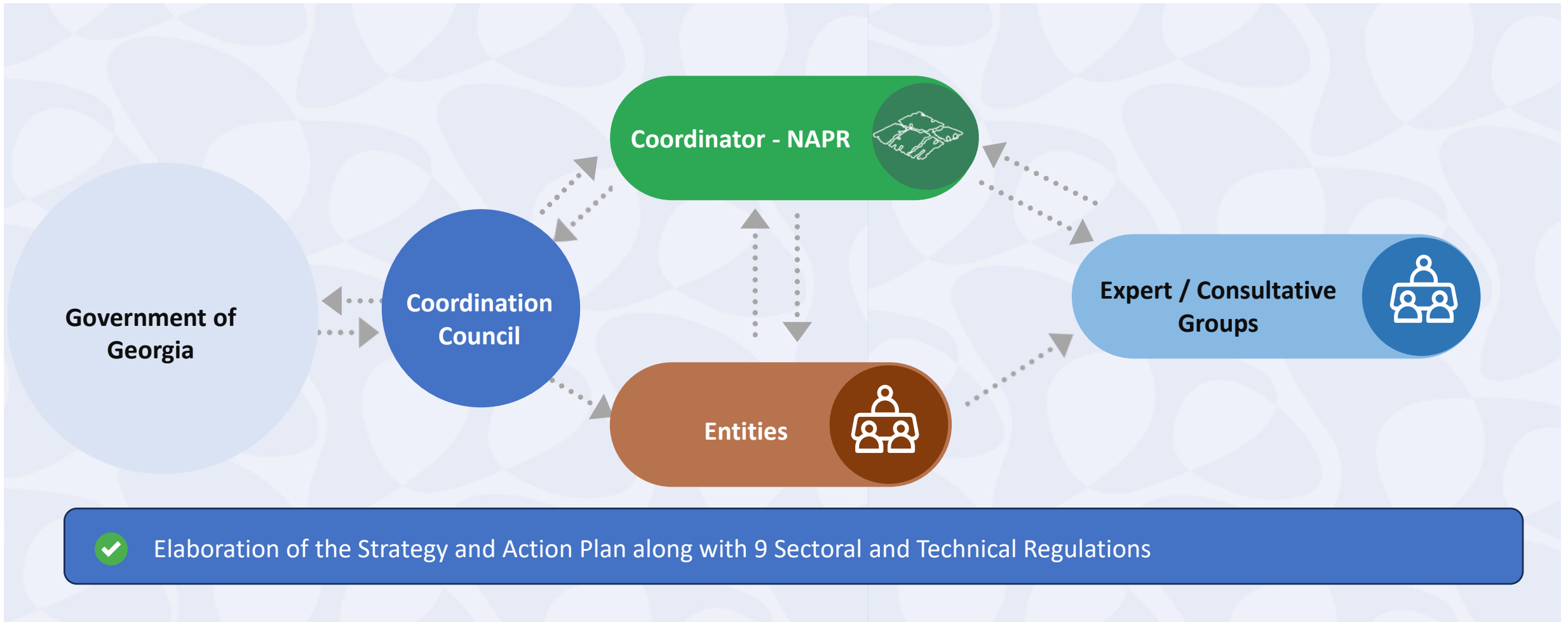
A solution architecture document for the National Geoportal has been created.

The publication of spatial data and metadata on the National Geoportal is underway.

A basic diagnostic tool has been developed to assess the readiness of NSDI subjects
Recommendations from international consultants are being taken into account

Informational meetings are underway with NSDI Subjects.

Creation of Policy and Coordination Mechanisms



NSDI DEVELOPMENT STRATEGY AND ACTION PLAN

STRATEGIC GOALS

Creation of a National Spatial Data Infrastructure compatible with the EU INSPIRE Directive

Strengthening the institutional capacity of public institutions through research and continuous education mechanisms

NSDI PRINCIPLES



EFFICIENCY – spatial data is created only once



ACCESSIBILITY – spatial data is transparent and accessible



COMPATIBILITY – decisions are made by combining spatial data from different entities



COORDINATION – to ensure the stability and efficient functioning of the system, processes are managed in a decentralized and coordinated manner



Version 1.0



Main Page

01



Map

02



Metadata Catalogue

03



Knowledge Centre

04

Development Process - DPMS

Sprints every 2 Weeks

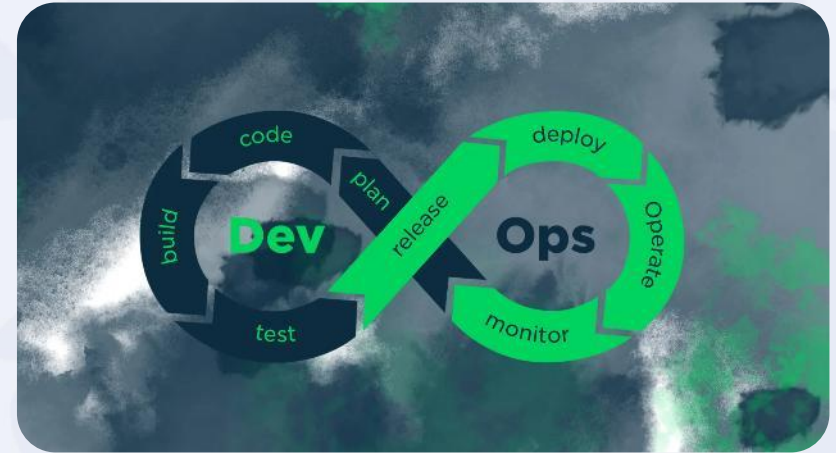
- Bi-weekly meetings and task allocation
- Logging assigned tasks in the DPMS
- Grooming sessions held every two weeks to review tasks for the upcoming sprint

Backlog

- Two months Backlog for development purposes

Daily Stand-Ups

- Daily 15 Minute Meetings
- Review of the work completed on the previous day and plan for the day ahead



- All tasks are logged and managed within the DPMS software environment.

International Cooperation



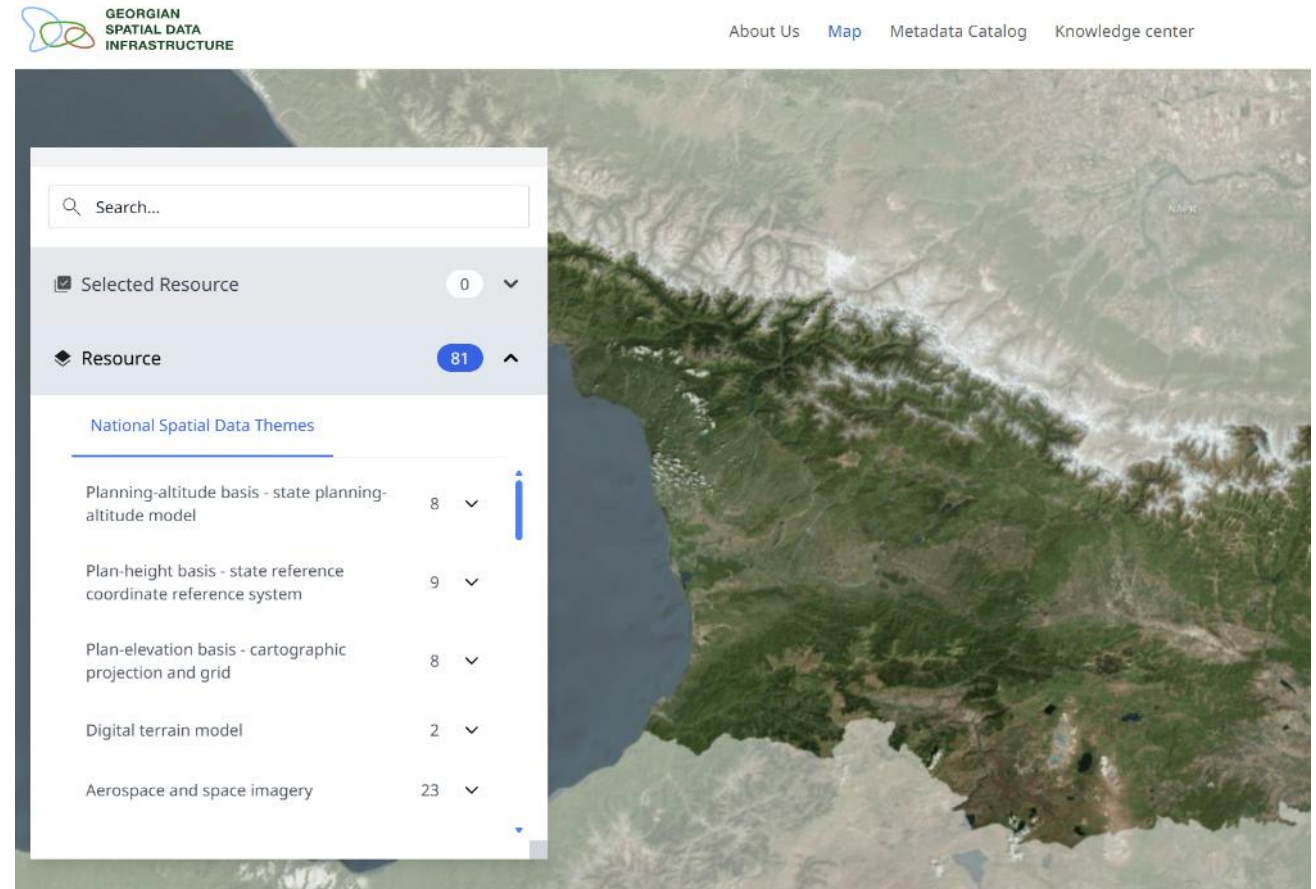
Norwegian Ministry of Foreign Affairs



Support to the Development of NSDI Policy Documents (2024-2025)

Supporting the NAPR in the preparation of three NSDI policy documents:

1. The Terms and Conditions of Access, Use and Sharing of the Spatial Data Resources Published on the National Geoportal (*Licensing Model*)
2. The National Profile of the Data Exchange and Joint Use Model (*Business Model*)
3. The NSDI Strategy



Access, Use and Sharing of Spatial Data in Georgia

Vision

Users can quickly discover what data exists

They can instantly access the data they need

Users can easily integrate data from different data providers

They can use the data for the purposes they have in mind



Access, Use and Sharing of Spatial Data in Georgia

Vision

Users can quickly discover where data exists

They can easily find what they need

Users can access data in different ways

They can use data for the purposes they have in mind

Current state

Access and usage conditions are unclear and not harmonized

Users must “negotiate” and setup arrangements to obtain data

Data access is restricted without clear justification

As a result, decisions and services become slower and less effective

Solution

Strengthen the 'partnership-based' approach of the NSDI of Georgia

- **Business model:** strong collaboration in collecting, exchanging and using geospatial data
- **Funding model:** partners contribute to financing the implementation and funding of the SDI
- **Pricing model:** by adding their own data to the NSDI, partners have (free) access to data from other providers



Challenges

- **Taking into consideration** the current situation and stakeholders' needs
- **In the absence of binding EU rules and requirements**
- **Aligning** with international standards and best practices
- **Considering** different models, mechanisms and instruments
- **Balancing** short-term gains with sustainable, long-term solutions



Taking into consideration the current situation and stakeholders' needs

Stakeholders' consultation on current and future business models (1)

- The **mostly adopted models** for sharing geospatial data are 1) open data; 2) open data for non-commercial use and 3) mixed (freemium) models, in which only basic versions are made available for free.
- **Data sharing within the public sector** usually is for free, but standard – open – licenses are hardly used;
- There are only a few data providers that **generate revenues** from selling geospatial data and/or services relying on these data.

Input from 14 stakeholders

1. LEPL National Agency of Public Registry;
2. LEPL Spatial and Urban Development Agency
3. LEPL National Agency for Cultural Heritage Preservation
4. LEPL National Agency for Sustainable Land Management and Land Use Monitoring
5. LEPL National Environmental Agency
6. NPDO Municipal Services Development Agency
7. SSA Roads Department
8. EPL National Statistics Office of Georgia
9. LEPL National Wine Agency
10. LEPL Scientific-Research Center of Agriculture
11. LEPL National Forestry Agency
12. LEPL Protected Areas Agency
13. LLC Georgian Melioration
14. LEPL Nuclear and Radiation Safety Agency

Taking into consideration the current situation and stakeholders' needs

Stakeholders' consultation on current and future business models (2)

- Some data providers have a **pricing mechanism** in place, which in some cases is determined in a bi-law or a decree;
- **Open data for non-commercial use** is considered by most stakeholders as the most favorable model to be applied as the standard model for the NSDI in Georgia;
- There is a strong interest to **keep track of the users of the data**, even in case of open data (e.g. through an authentication & authorization mechanism).

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Compliance with EU requirements?

INSPIRE Directive (2017)

- **Public authorities** should have access to INSPIRE datasets and services
- **Charges** must be fully compatible with the general aim of facilitating sharing
- Access may **only be limited** for reasons of justice, public security, national defense or international relations.
- Discovery services and view services are **available to the public** free of charge

Open Data Directive (2019)

- Main principle: public and publicly funded data should be **reusable for commercial or non-commercial purposes**.
- Public-sector bodies and public undertakings must **make their data available** in formats that are open, machine readable, accessible, findable and reusable, complete with their metadata

HVD Implementing Regulation

- High-value datasets, which include geospatial data, earth observation and environment data should be made available **free of charge**
- High-value datasets shall be made available for re-use **under the conditions of CC0, CC BY 4.0**, or any equivalent or less restrictive open license

Aligning with international standards and best practices

The ongoing growth and development of SDIs call for a retrospective perspective.



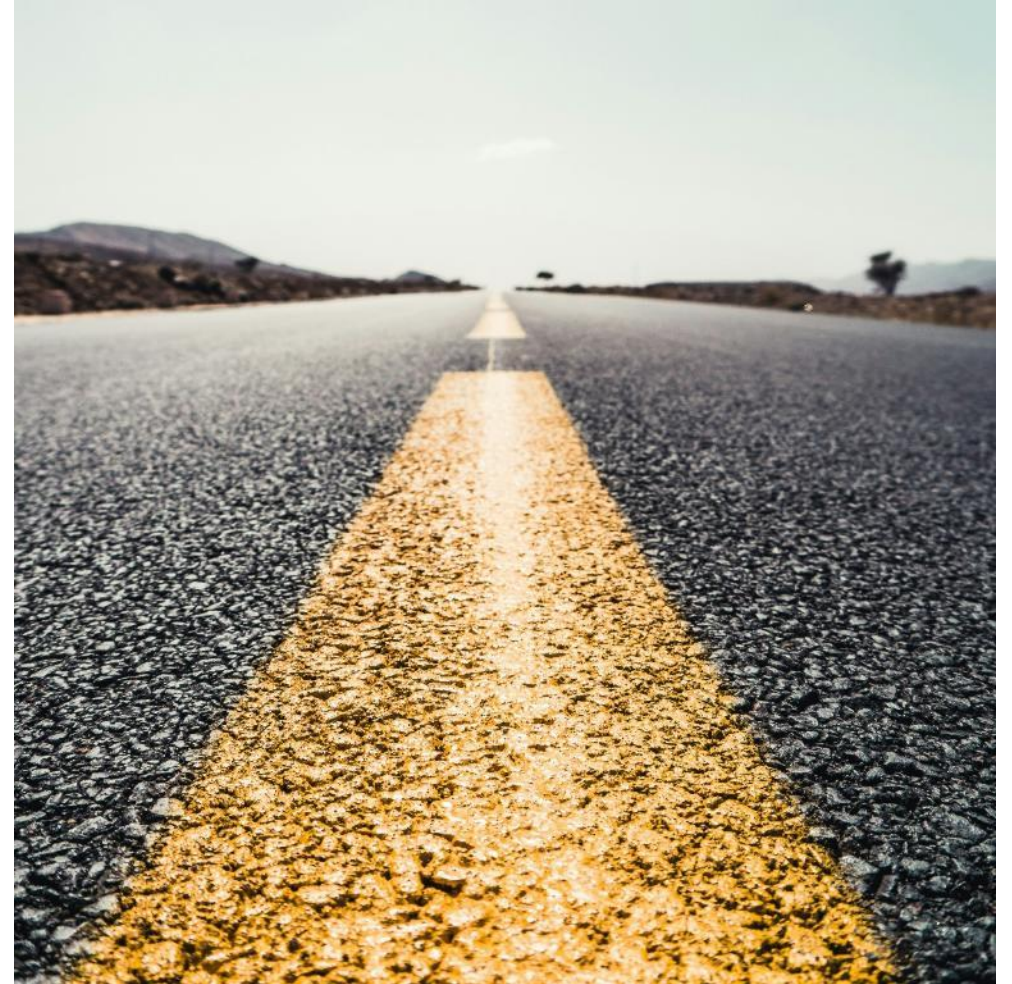
From partnership agreement to open data



From 600.000 EUR (*in 2005*) to 3.580.006 EUR (*in 2023*)



From 175 million monthly service requests to 2.4 billion



Considering different models, mechanisms and instruments

How to promote and enforce compliance with the partnership model?

- Workshops
- Training
- Guidelines
- ...

- Enforcement notices
- Escalation to central authority
- Fines
-



- Compliance dashboards
- Naming and flagging
- Support for remediation
-

- Metadata validation
- Publication gatekeeping
-

Balancing short-term gains with sustainable, long-term solutions

Roadmap for the future evolution of the NSDI Business Model

Stage 0 Current Model

Making geospatial data in Georgia **easy to find and discover** (through clear and complete licensing information)

Stage 1 Data Sharing

Providing **free access to all NSDI resources for government organizations** (through a standard license)

Stage 2a High-Value Data

Creation and delivery of **high-value datasets**, through new and improved data acquisition processes

Stage 2b Data Use

Enhancing the **use and integration** of geospatial data (through open data & location-enabled services)



Discussion



**Thank You
For Your Attention!**



MINISTRY OF JUSTICE
OF GEORGIA



NATIONAL AGENCY OF
**PUBLIC
REGISTRY**



NATIONAL
SPATIAL DATA
INFRASTRUCTURE