



Trusted data- geospatial data



Armenia's Journey Towards National Spatial Data Infrastructure

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What makes geospatial data truly trustworthy?

- Standardized according to clear specifications
- validated through rigorous quality control,
- properly documented with comprehensive metadata,
- made accessible to appropriate stakeholders,
- designed to be interoperable with other systems,
- regularly updated to reflect real-world changes.



From Vision to System: Armenia's NSDI Development



In 2019

Armenia launched its geospatial reform with the Integrated Cadastre Development Concept.

- Adopted Integrated Cadastre Development Concept
- Unified various sectoral data into a cohesive national framework

In 2021

Armenia established its National Spatial Data Infrastructure (NSDI)

- Ensures standardized and accessible spatial data
- Built on legal, technical, and methodological foundations

In 2022

Cadastral Committee launched a national geoportal.

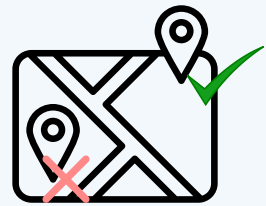
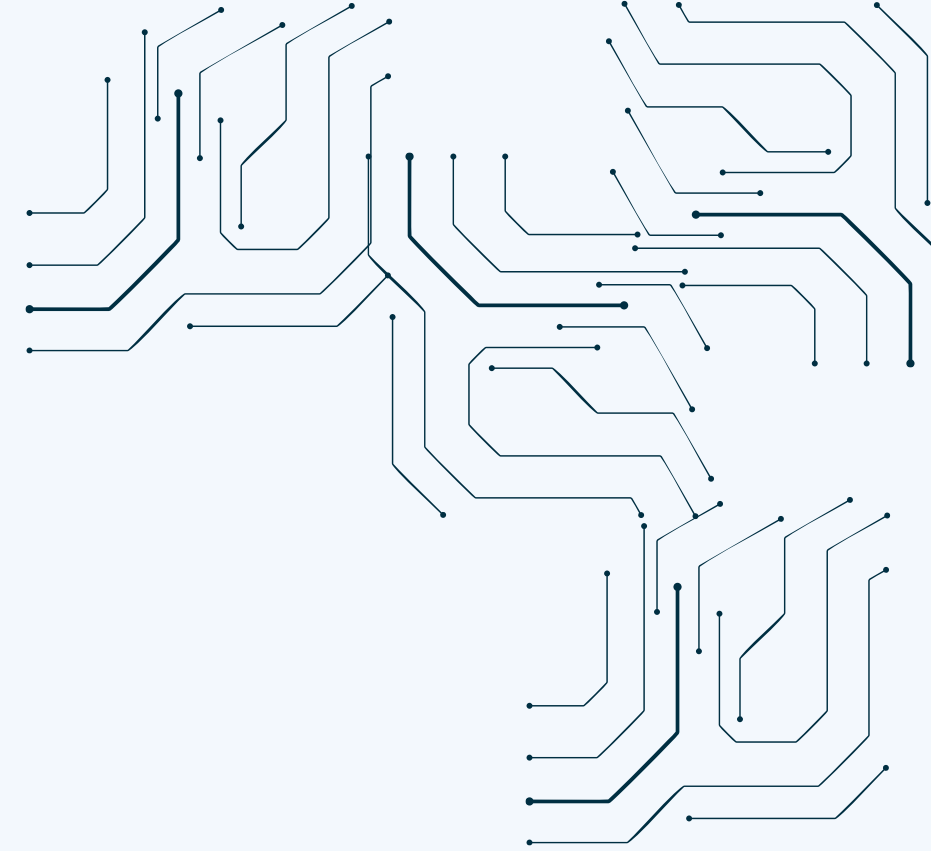
- Cadastral maps
- Land information
- Property ownership data
 - Addresses
- Geographic names
 - Orthophotos
 - Relief layers

In 2023

Armenia adopted spatial data legislation and updated related regulations.

- Defined roles for all responsible authorities
- Codified principles of spatial data management

Quality Improvement Initiatives



Rectified cadastral maps in nearly 50% of settlements



Verified and standardized over 1 million addresses



Created GIS database with ~36,000 geographic features



Developed and approved 12 national spatial data standards

National standards for basic layers approved in December 2024

Aligned with international standards

AST 435-2024
"Cadastre. Geospatial data. Data specification on Orthophoto"

AST 436-2024
"Cadastre. Geospatial data. Data specification on Addresses"

AST 437-2024
"Cadastre. Geospatial data. Data specification on Administrative unit"

2022	AST ISO 0000-
STANDARD FOR THE REPUBLIC OF ARMENIA	
Cadaastre	
Geospatial data	
Metadata	
(Draft edition)	
	
RA Cadastre Committee	
YEREVAN	

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AST 445-2024
"Cadaastre. Geospatial data. Data specification on Data quality"

AST 446-2024
"Cadaastre. Geospatial data. Data specification on geographical names"

AST 444-2024
"Cadaastre. Geospatial data. Data specification on Building"

AST 452-2024
"Cadaastre. Geospatial data. Data specification on Metadata"

AST 456-2024
"Cadaastre. Geospatial data. Data specification on Cadastral parcel"

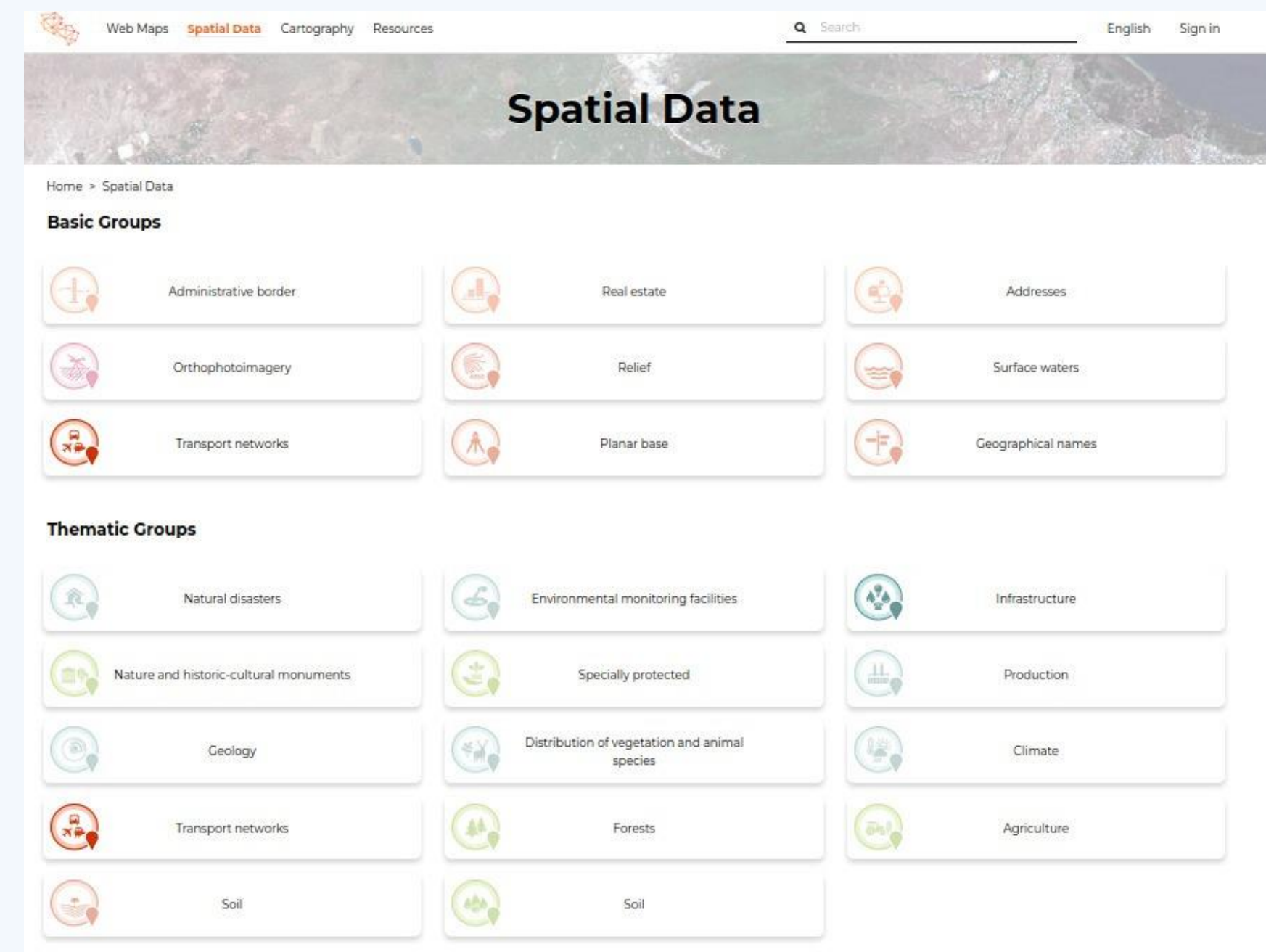
AST 453-2024
"Cadaastre. Geospatial data. Data specification on Relief"

AST 451-2024
"Cadaastre. Geospatial data. Data specification on Land cover"

AST 454-2024
"Cadaastre. Geospatial data. Data specification on Surface water"

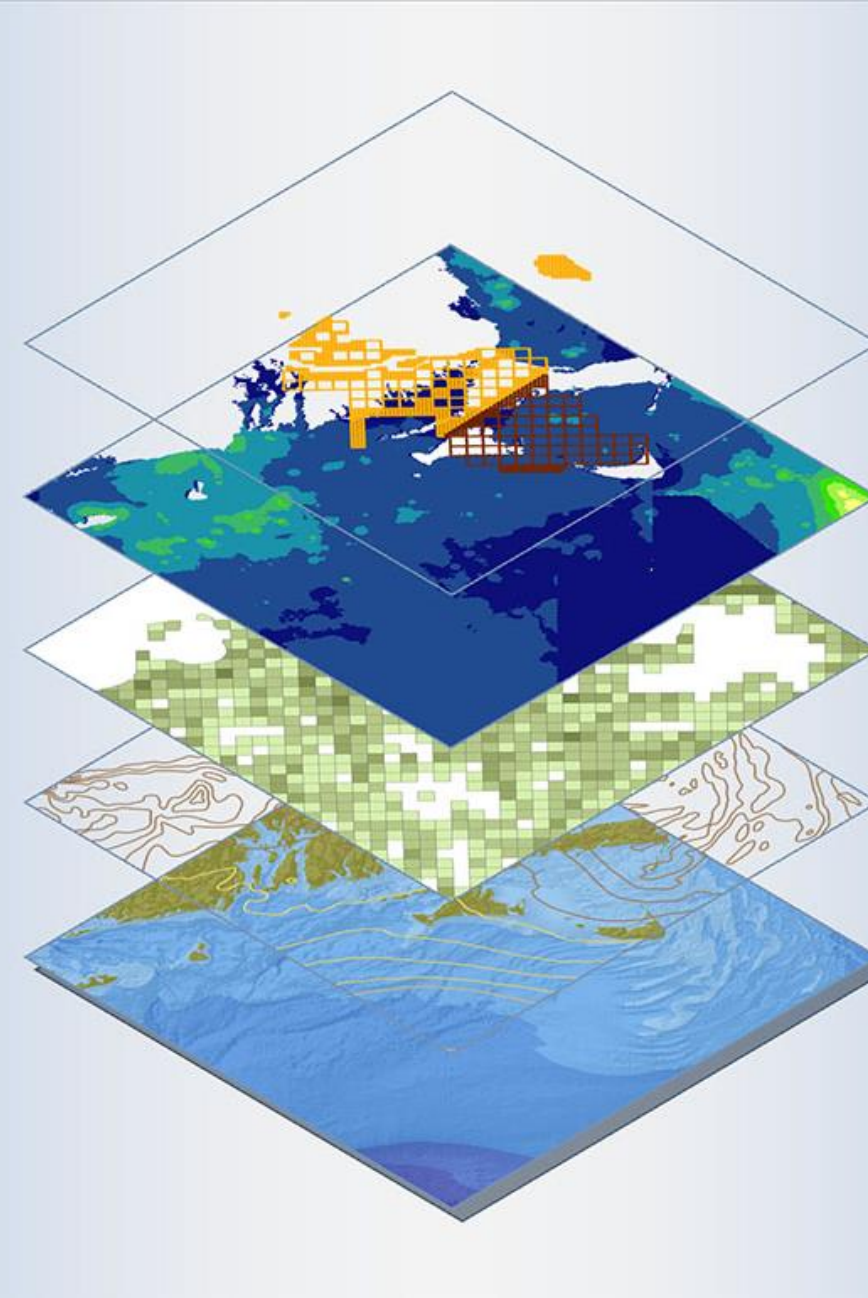
AST 455-2024
"Cadaastre. Geospatial data. Data specification on Transport network"

Design of a new national geoportal underway in 2025 – a major step in infrastructure advancement



Challenges

- *Interoperability gaps between data collected by different organizations*
- *Limited professional capacity in geospatial data management*
- *Ongoing need for stronger institutional coordination*
- *Resource constraints affecting system development*
- *Continuous need for improvement – NSDI is a long-term commitment*
- *Ensuring financial sustainability*



Benefits & Opportunities

- *More effective policies through accurate territorial insights*
- *Efficient resource allocation across regions*
- *Faster response to emergencies and natural disasters*
- *Improved environmental monitoring and precision*
- *Stronger support for infrastructure and economic development*
- *Enhanced transparency and public trust via data-driven governance*
- *Data-driven decision making*

Thank You

for your attention



www.cadastre.am
www.geoportal.am