FIRST QUARTER 2026

STATEGEOCADASTRE
DIGITALIZATION • DEREGULATION • DE-SHADOWIZATION

JICA

INFORMATION DIGEST
OF THE CAPACITY DEVELOPMENT PROJECT FOR UTILIZING THE NATIONAL GEOSPATIAL DATA INFRASTRUCTURE IN UKRAINE

INTERNATIONAL COOPERATION

STATEGEOCADASTRE & JICA: STUDY TOUR

In June of this year, an international Study Tour will be held, during which specialists from the StateGeoCadaster and state enterprises belonging to its management, with the support of partners from the Japan International Cooperation Agency (JICA), will have the opportunity to learn about the best practices and experience in implementing the latest achievements, technologies and tools of the NSDI in various spheres of state and public life.

The visit program focuses on studying practical experience in the development and operation of the NSDI based on the best Japanese practices, in particular, on modern geoinformation systems, technologies, interaction methods to increase the interoperability of geospatial data, as well as reviewing measures to disseminate information and raise awareness of the NSDI in Japan. Participants will also have the opportunity to learn about practical examples of implementation and use of NSDI at different levels: state and local governments, private sector and academia.

Among the institutions and organizations at various levels with which meetings are planned during the visit: Japan Geospatial Information Agency, National Research Institute of Earth Sciences and Disaster Resilience, Shizuoka Prefecture, GeoTechnologies Inc., Kokusai Kogyo Co., Ltd., educational institutions.

This visit will positively influence the deepening of cooperation between the StateGeoCadastre and JICA and create a basis for mutual capacity building of partner organizations.

DIRECT SPEECH

Dmytro MAKARENKO, Chairman of the State Service of Ukraine for Geodesy, Cartography and Cadastre

International cooperation of the StateGeoCadastre remains at an active level and is aimed at supporting and developing the priority areas of the Service's activities, taking into account public priorities.

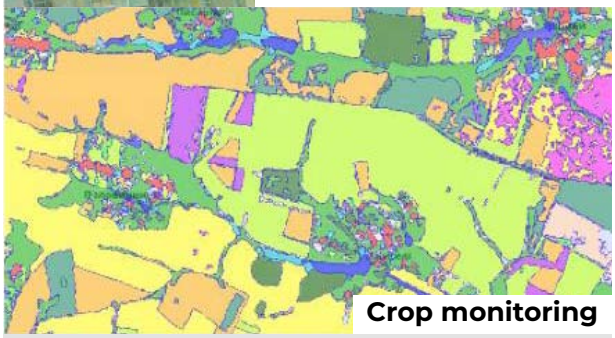
In addition to representing the StateGeoCadastre in international organizations, we are a participant and partner in important international technical assistance projects. I would especially like to highlight the project with the Japan International Cooperation Agency, JICA, with the support of which projects for the development of National Spatial Data Infrastructure in Ukraine are being implemented.

Traditional priorities of the StateGeoCadastre's activity – the development of the National Geoportal and other tools for making effective management decisions.

Despite the fact that public geoportals and services are temporarily limited due to martial law in Ukraine, we are still developing the above-mentioned tools on the basis of the NSDI. As a part of cooperation with donors, a number of important projects were implemented in 2025, in particular, an analysis of the crop structure using satellite images and the ability to search and analyze data by the name and/or the Unified State Register of Enterprises code was introduced. We also added a data layer of the Nature Reserve Fund and created profiles of oblasts and communities – this will be useful at the local level for local governments and businesses.

It is also necessary to mention the update of the basic topographic map of Ukraine at a scale of 1:10 000 – this work has both general economic and military-applied significance. The StateGeoCadastre has been fulfilling the state plan by 100% for two years in a row and plans to achieve this indicator in 2026 too.

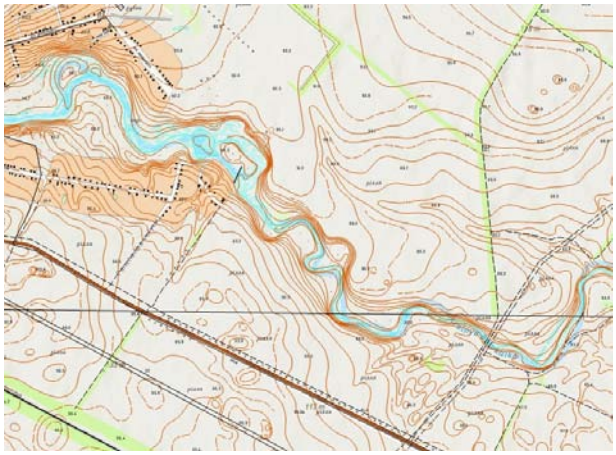
Land parcel boundaries



Crop monitoring

CARTOGRAPHY

TRANSFORMATION OF THE SYSTEM OF NATIONWIDE TOPOGRAPHIC MAPPING



The StateGeoCadastre systematically updates outdated practices and adapts them to today's realities. In particular, work is being completed on creating a reference model of the most popular topographic map format in the country – scale 1:10 000. This template will take into account the updated «Specification for sets of geospatial data for topographic maps of scale 1:10 000», current national regulatory and technical requirements and features of the sustainable practice of manufacturers of topographic products in Ukraine.

The result of the work will be the creation of a seamless, continuous Basic State Topographic Map with unified content and the unification of topographic data of scale 1:10 000, produced by enterprises of all forms of ownership. Currently, the Specification is being tested on real map sheets.

DIRECT SPEECH

YURII KARPINSKYI,
Doctor of Technical Sciences, Professor, Deputy Director for Scientific Work of the Research Institute of Geodesy and Cartography

Ensuring the development of the National Spatial Data Infrastructure largely requires the creation of a seamless continuous Basic State Topographic Map, the formation of a topographic data base, which creates conditions for achieving interoperability and coordinate-spatial consistency of basic and thematic geospatial data of the NSDI.

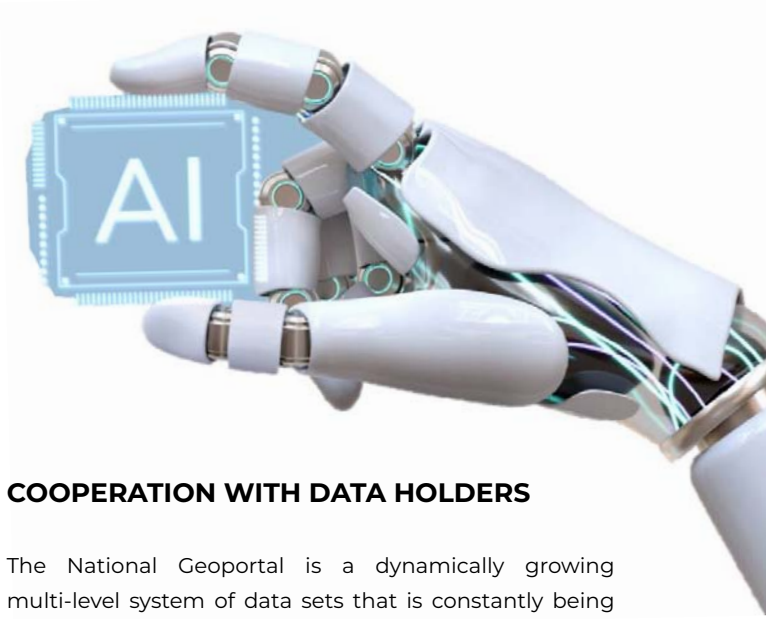
One of the main stages of the formation of the Basic State Topographic Map is the creation and supply of digital topographic maps, which are developed by various producers for use in applied geoinformation systems and for cartographic production.

In 2025, as a result of the implementation of the Ukrainian-Japanese Capacity Development Project for Utilizing the National Geospatial Data Infrastructure in Ukraine, a draft of the Complex of Specifications for Topographic Data Sets «Specification for Geospatial Data Sets of a Topographic Map at a Scale of 1:10 000», a draft of the Geospatial Database Template, which implements the specified specification in the geoinformation environment, and a Topographic Information Validator, which automatically checks the quality of the created materials were developed. This year, the work on creation of a Reference Model, which includes a digital vector topographic map at a scale of 1:10 000 – a reference data array, executed in a refined and expanded template – the structure of the geospatial database in accordance with the Specification in the *.GDB database format with a *.MXD project file in the form of 4 separate map sheets prepared for printing began.

The main goal of this project is to test and refine the Specification, Geospatial Database Template, Validator and produce a Reference Model in the form of 4 separate map sheets.

The development of such a complex of coordinated components for creating digital topographic maps: Specification, Template, Reference Model and Validator marks a new stage in the transformation of the national topographic mapping system in Ukraine, which is aimed at ensuring the unification and interoperability of digital topographic maps at a scale of 1:10 000, significantly improving their quality and creating comfortable conditions for manufacturers of topographic products.

DEVELOPMENT OF THE GEOPORTAL



COOPERATION WITH DATA HOLDERS

The National Geoportal is a dynamically growing multi-level system of data sets that is constantly being improved. For its most complete filling and distribution of geospatial data sets, the StateGeoCadastre concludes the cooperation agreements with their holders, in accordance with the list approved by the Resolution of the Cabinet of Ministers of Ukraine. About a dozen such agreements have already been concluded.

Such cooperation and interpenetration of registers will promote information interaction of geoportals and geoinformation services on the Internet and will make their use convenient for the user.

Given the constant increase in data sets, service tools are being implemented within the Geoportal itself to increase usability. Thus, specialists of the StateGeoCadastre are working on creating an intelligent search service (AI search) for geospatial data, which will provide the ability to form search queries in arbitrary text form without the need to use formalized filters.

It is also planned to create an AI chat assistant service, which should work in the format of a text dialogue and provide answers based on a pre-prepared knowledge base in real time.