

# Concept of NSDI Creation in Ukraine: results, challenges and future plans

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#### **Content of the Presentation**



- Triggers for geospatial information development in Ukraine
- Topographic & mapping activities: background for NSDI
- NSDI of Ukraine: what we have now?
- International support for NSDI and its components
- How we will proceed further?







#### Institutional coordination of the activities in Ukraine



Forms the policy in the matter of topographic, geodetic and cartographic activities, land relations, land management and the State Land Cadastre administration

Implements the policy in the matter of topographic, geodetic and cartographic activities, land relations, land management and the State Land Cadastre administration, assures the creation and development of National Spatial Data Infrastructure



for Geodesy, Cartography

and Cadastre





# StateGeoCadastre as regulator and a "bridge"



- European Association of National Mapping and Cadaster Authorities
- UN Committee of Experts on Global Geospatial Information Management
- UN Group of Experts on Geographical Names
- International Cartographic Association
- Joint Research Centre of the European Commission











## State Service of Ukraine for Geodesy, Cartography and Cadastre







National Representation,
Source of authoritative data

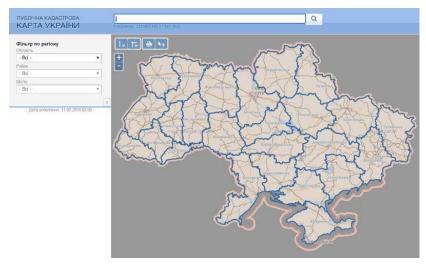
**Ensures international policies are applicable for Ukrainian reality** 

Compliance with International standards



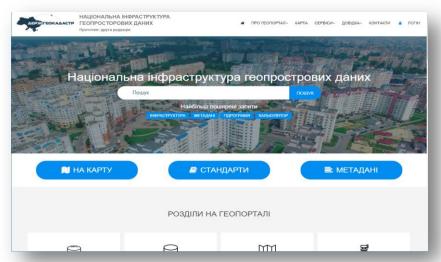
#### **Already created Geoportals**





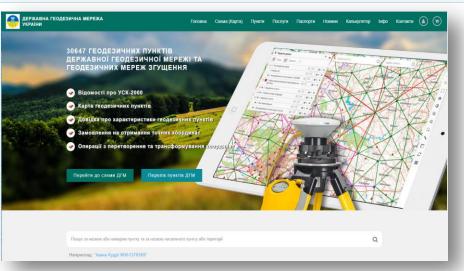
#### http://map.land.gov.ua

#### **Public Cadastral Map of Ukraine**

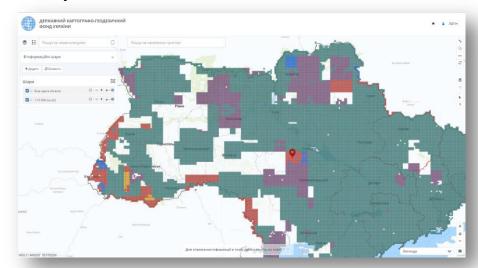


http://nsdi.land.gov.ua

**GIS National Spatial Data Infrastructure** 



#### http://dgm.gki.com.ua/ua/home Geoportal of State Geodetic Network of Ukraine



http://geodata.land.gov.ua/ua/map/main

Geoportal of State cartographic and Geodetic Fund of Ukraine



# **Preparation for the NSDI development**





Developed and is implemented State coordinate system USC 2000

Geo-informational systems for city management, geoportals for city-building documentation are being developed



**Launched the Registry of Geographical Names** 

Standards for Geographical Information are created for Ukraine

Created and submitted to EuroGeographics sets of topographical geospatial data for the territory of Ukraine according to the specifications of EuroGlobalMap and EuroRegionalMap



**Created the SubGroup for Coordination of NSDI Creation in Ukraine** 

Draft Strategy for NSDI development 2020-2023 approved by the SubGroup





# Ukraine in European levelling system



# Ukraine joined to the European levelling network / European vertical reference system 2000



2019

- appropriate decisions were published





18 300 points - were examined during the works



29 countries

- from Europe are members of the European levelling system

# **Positive effect:**

- Integration of Ukraine to the European levelling system
- Compliance to the EU Standards
- Improvement of data quality





## Strategy for NSDI creation for 2020-2023





Joint World Bank and UN-GGIM Document "Integrated geospatial Information Framework" as an "inspiration" for strategy development



Part 2 «National implementation guide»

Part 3 «National or Regional Action Plans»



A STRATEGIC GUIDE TO DEVELOP AND STRENGTHEN NATIONAL GEOSPATIAL INFORMATION MANAGEMENT

# **BENEFITS**





PILOT-BASED PRINCIPLES FOR NSDI CREATION



the Government



CREATION OF THE INTEROPERABLE NETWORK OF GEOPORTALS

CREATION OF TYPICAL COMPONENTS OF NSDI IN THE REGIONS



OPENESS AND ACCESSIBILTY OF FUNDAMENTAL DATA



INTEROPERABLE BANKS OF GEOSPATIAL DATA IN DIFFERENT SPHERES



# **Core Reference Data – INSPIRE Working Group**





#### Sets of Geospatial Data are indicated according to INSPIRE



#### **Core Reference Data Set**



- 1) Geographical names
- 2) Administrative units
- 3) Addresses
- 4) Land parcels
- 5) Transport network
- 6) Hydrography
- 7) Elevation

- 8) Land cover
- 9) Orthophoto and imagery
- 10) Statistical units
- 11) Buildings
- 12) Land use
- 13) Communal (infrastructure) networks and services
- 14) Management of the territories



# "Maps for good land governance in Ukraine" from Norway



#### **General Objective:**

To launch the state GNSS network in Ukraine and create digital base map in scale 1:50 000 for whole country.

#### **Partners from Ukraine:**

StateGeoCadastre

#### **Partners from Norway**:

**Donor:** Norwegian Ministry of Foreign Affairs

**Implementing Organizations:** Norwegian Mapping Authority





## As a result of the project Ukraine will receive:













**Modern GNSS Equipment** 

Digital topographic base map
1: 50 000

**Geoportal for access and services** 







- Cooperation with state authorities and geospatial data holders in Ukraine in terms of data integration
- We invite to join our geospatial community and to get involved into the NSDI development



StateGeoCadastre is working to share the digital base map

1: 100 000 that will be available for free access and use





# Thank you!