



# **What has been taken from INSPIRE to Ukrainian SDI?**

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LAND.GOV.UA

- StateGeoCadastre in brief
- NSDI in Ukraine: good start but...
- Did INSPIRE influence Ukrainian progress in SDI?
- Further actions to be taken

## KEY FUNCTIONS & RESPONSIBILITY:



**Topography, geodesy, mapping**



**State Land Cadastre**



**Spatial Data Infrastructure**



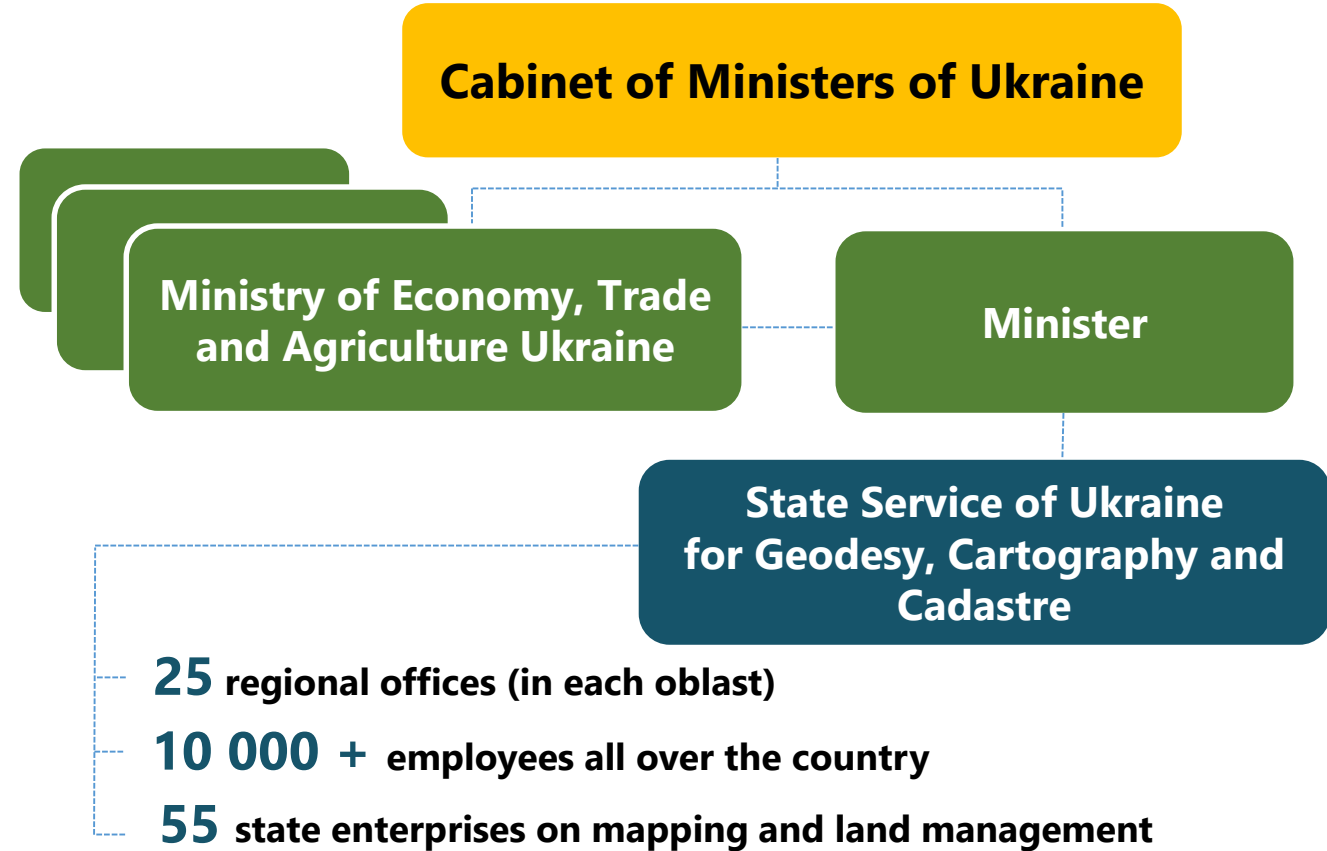
**Land use & protection**



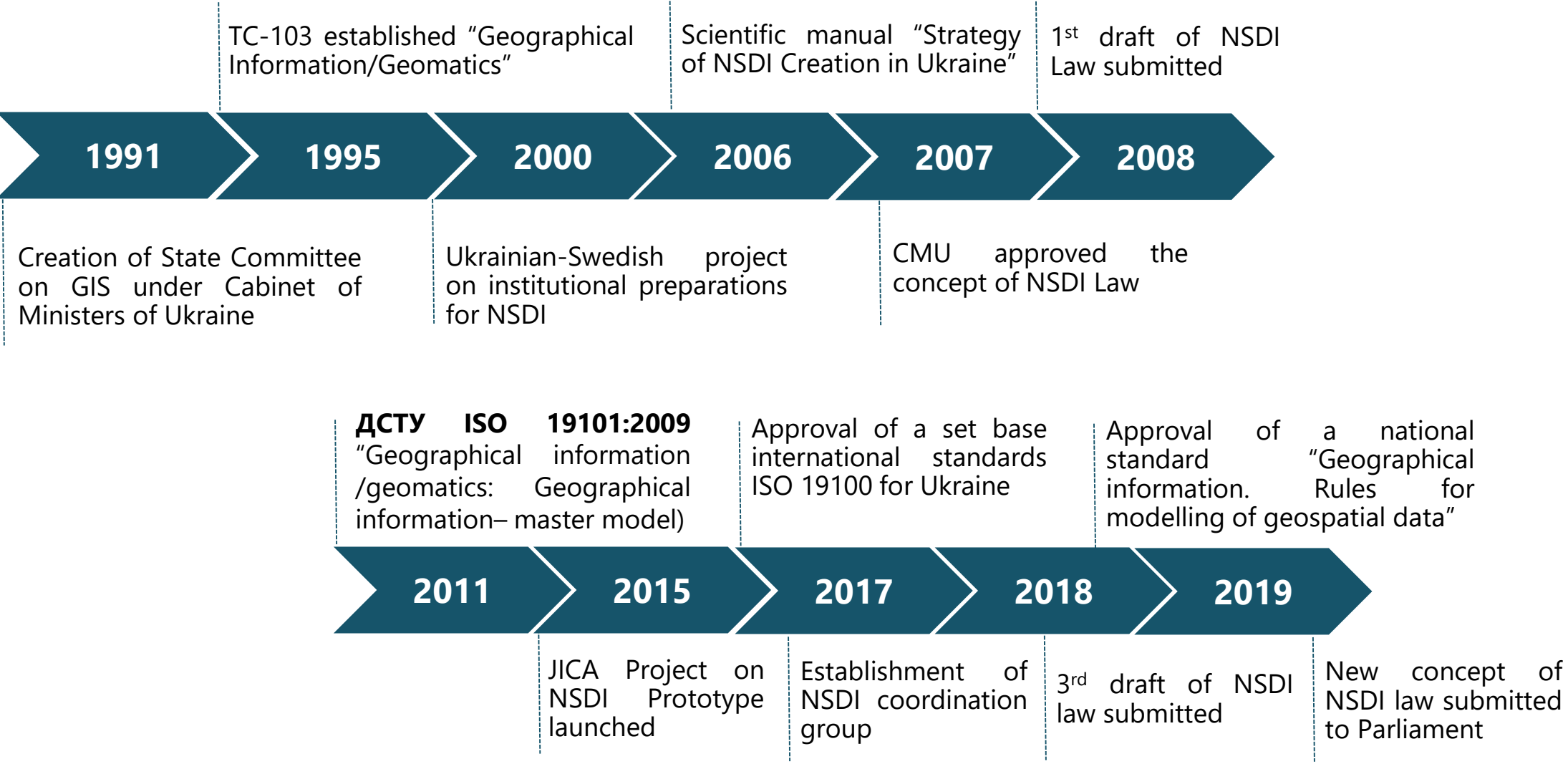
**Control for land use**

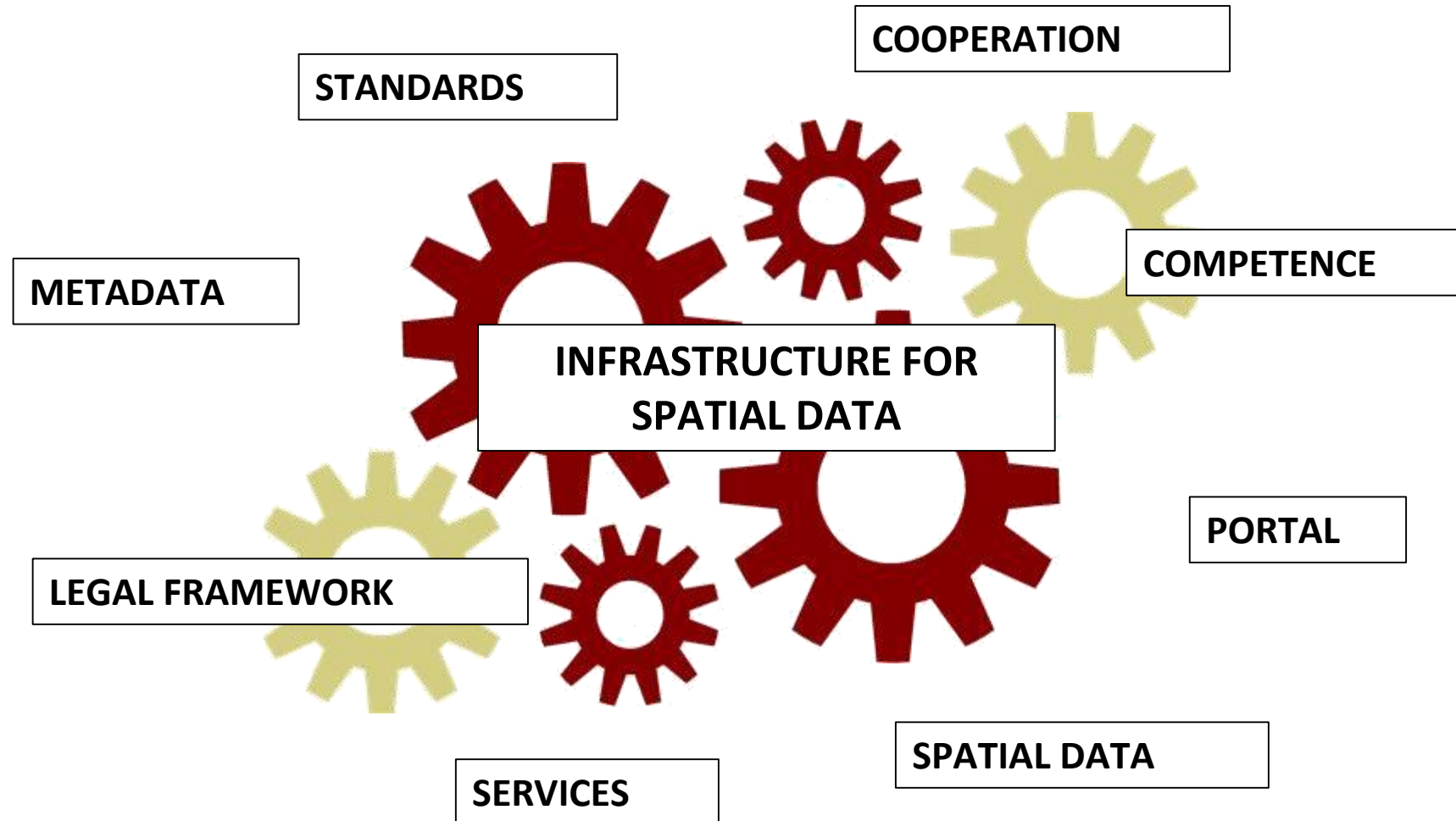


**Administrative services**



# History of “NSDI Attempts” in Ukraine



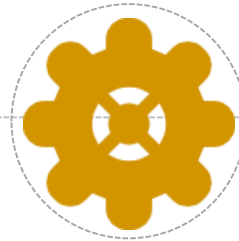


## National Spatial Data Infrastructure



### National NSDI Strategy

- Principles of work with geospatial data
- Harmonization of action plans and strategies in different spheres
- Establishment of NSDI Coordination committee
- Harmonization of cooperation with different data holders



### Order of NSDI administrating

- Administrator of NSDI
- Data integration rules
- Access to geospatial data
- Cooperation between data holders, producers, users and administrator
- Geospatial data that are produced by municipalities



### Law of Ukraine on NSDI

- Concept
- Data holders
- Data themes
- Management and authority
- Coordination and responsibility

- **National Standardization Body of Ukraine** is checking and approving the standards from different spheres. **The standards are not mandatory** for being used and have only recommendation character.
- The standards are mandatory **if they are referenced from the law or regulation**
- These standards are distributed **not free of charge** for the interested parties.
- SE “Research Institute for Geodesy and Cartography” (supervised by StateGeoCadastr) is a member of TC-103

The most recent standards **that were published in 2019:**

**ДСТУ 8774 «Rules of geospatial data modelling»**

**ДСТУ 19115 «Metadata»**

**ДСТУ 19131 «Specification of geo-informational product»**

**ДСТУ 19157 «Quality of geospatial data»**



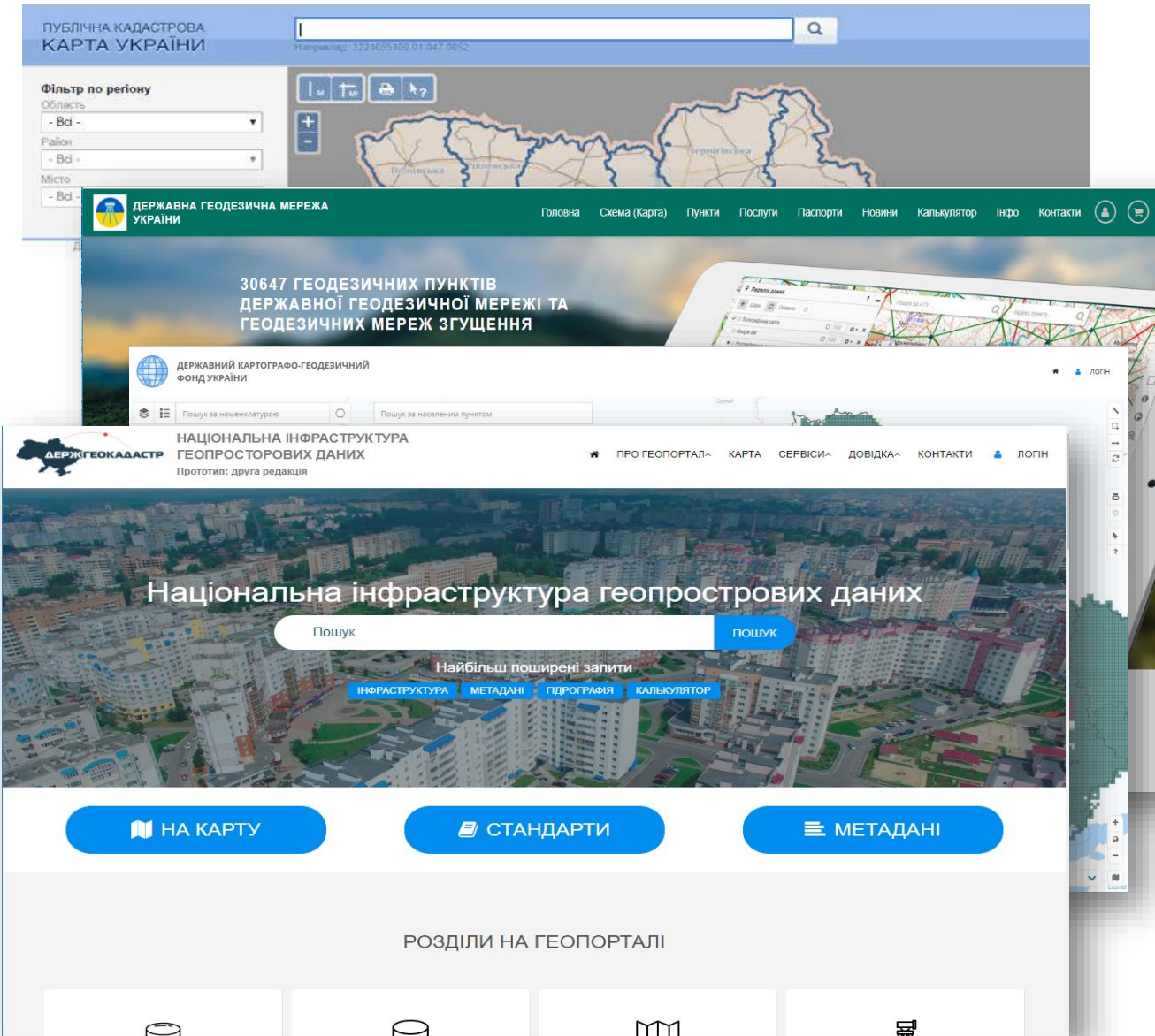
Informative seminars for the data holders on standards' application to be organized by StateGeoCadastr in early 2020

## Portals launched by StateGeoCaastre:

1. Public Cadastral Map
2. Portal of State Geodetic Network
3. State Cartographic and Geodetic Fund of Ukraine
4. Prototype of National Spatial Data Infrastructure

## SERVICES:

- Search service
- Data sets viewer
- Access service
- Transformation service
- Metadata editor





## FUNDAMENTAL DATA SETS (NSDI DRAFT LAW)

- 1) Coordinate-spatial base of geospatial data
- 2) State border of Ukraine, borders of admin units;
- 3) Hydrography objects and hydrotechnical constructions
- 4) Settlements and road-street network
- 5) Industrial, agricultural and socio-cultural objects
- 6) Buildings and construction
- 7) Automobile roads
- 8) Railways
- 9) Engineer communications
- 10) Airports, sea and river ports
- 11) Vegetation and soils
- 12) Boundaries of land parcels
- 13) Territories and objects of natural-reserve fund and other objects of eco-network
- 14) Boundaries of settlements planning elements and zoning plans' objects
- 15) Street registries and objects' addresses in and out of settlements
- 16) Geographical names
- 17) Digital terrain model
- 18) Orthophotoplans, orthophotomaps, aero- and space images and results of remote sensing

## CORE REFERENCE DATA (INSPIRE WG)

- 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



## FUNDAMENTAL DATA SETS (UN:GGIM)

- 1) Global Geodetic Reference Frame
- 2) Addresses
- 3) Buildings and Settlements
- 4) Elevation and depth
- 5) Functional zones
- 6) Geographical names
- 7) Geology and soils
- 8) Land cover and land use
- 9) Land parcels
- 10) Infrastructure
- 11) Population distribution
- 12) Orthophoto
- 13) Transport network
- 14) Water



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Sets of Geospatial Data are indicated according to INSPIRE

14

Core Reference Data Set



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

- 8) Land cover
- 9) Orthophoto and imagery
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**09 November 2017 – the 1<sup>st</sup> meeting was held**

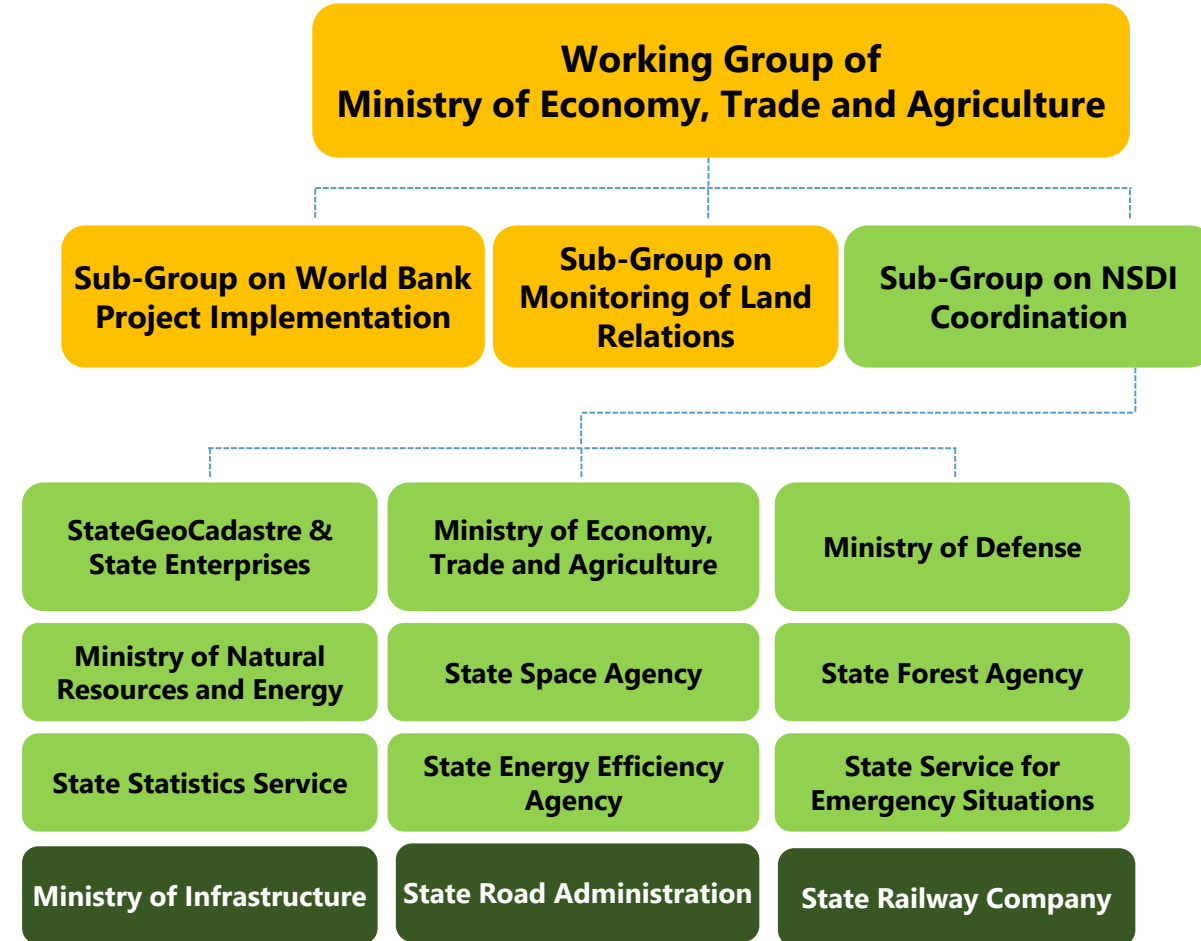
In total **4** subgroup meetings

## Tasks of the SubGroup:

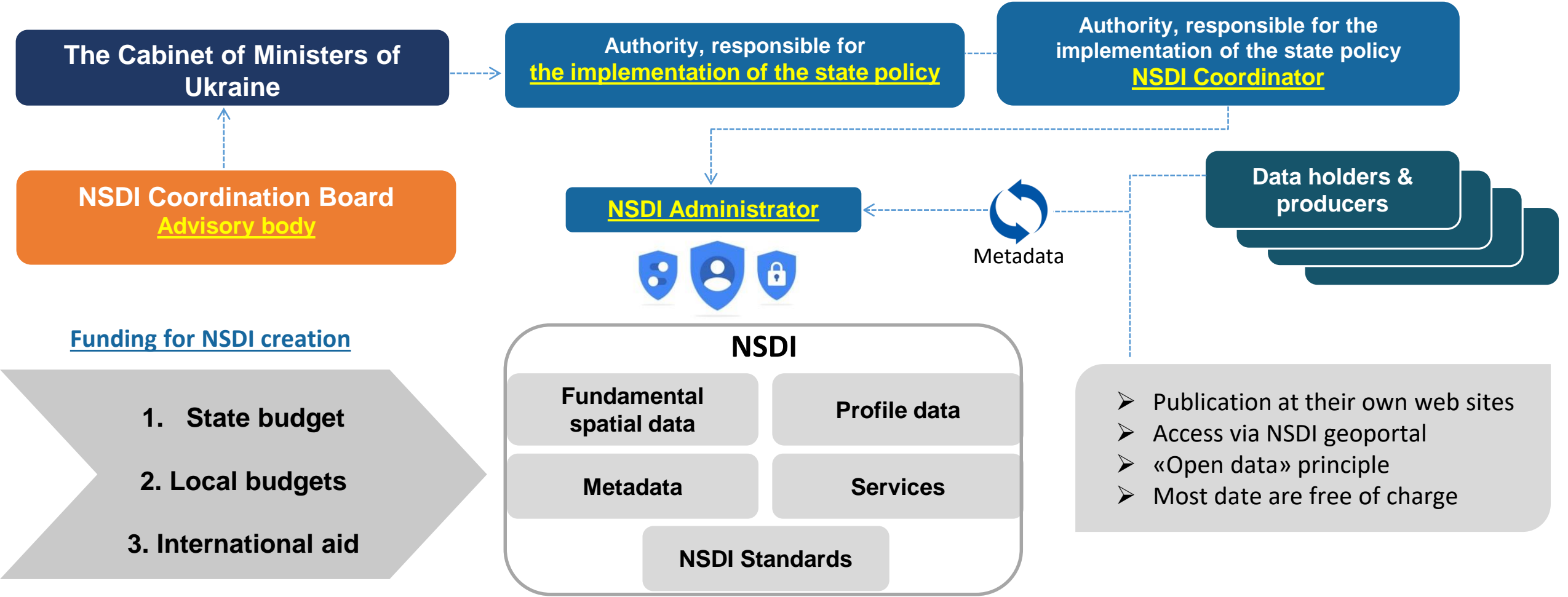
1. Coordination of NSDI development activities.
2. Negotiations on geospatial data exchange.
3. Ensuring the effective cooperation between data holders.
4. Facilitation involvement.
5. "Voice" of geospatial community

## Challenges:

1. Not enough capacity to organize and hold the meetings.
2. Not enough level of involvement from the stakeholders.
3. How to attract private sector and NGO and preserve the initial goal?



 – recently joined to the SubGroup



## Why NSDI is still not implemented?

“Wrong time and wrong place” for NSDI initiatives



4 times draft NSDI law was in Parliament and never even voted

Insufficient awareness about geospatial information benefits



The “digital solutions” were not of the highest priority

Geospatial initiatives have not highly identified “social” aspects



Unknown “NSDI topic” has not as much relation to the citizens as land reform, pension reform or medical one

Low mobility of the state authorities along with political instability

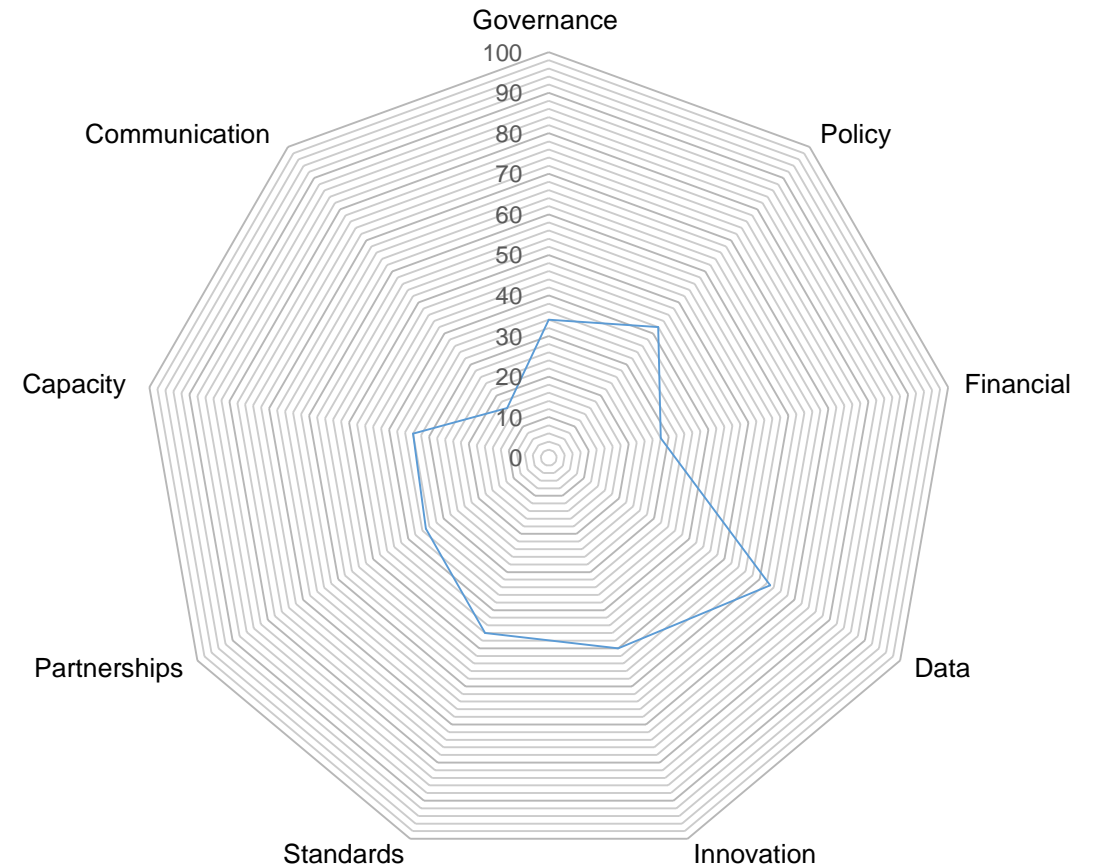


Created a “vacuum” in geospatial information management on the central level: a lot of local initiatives, NGO and donor support without final national goal

**TOTAL IGIF SCORE:**

**39**

- Capacity challenges at the “NSDI leader”
- Low level of engagement and involvement from other stakeholders
- Competitive environment between public and private sector. And even between various public institutions
- Absence of common geospatial idea that will find clear benefits for each sector of public and private activities both on national and local levels





# Thank you!

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