

# INSPIRE AND NSDI IMPLEMENTATION IN REPUBLIC OF NORTH MACEDONIA

**Agency for Real Estate Cadastre**

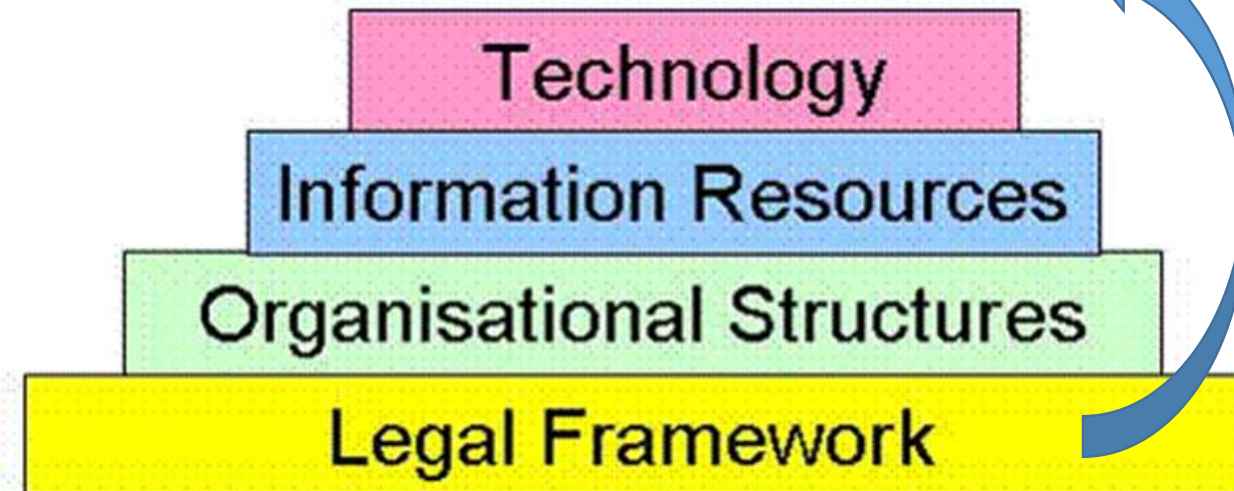
presenter: Sonja Dimova, state advisor for geomatics

*Conference "SDI Day 2024" 28 May 2024, Zagreb*



# SEGMENTS FOR NSDI DEVELOPMENT

- Law on the National Infrastructure of Spatial Data (Official Gazette no.38/2014)
  - Amendment of the law (Official Gazette no.106/2016)
  - Amendment of the law (Official Gazette no.129/2023)
- INSPIRE-directive



# NSDI LAW

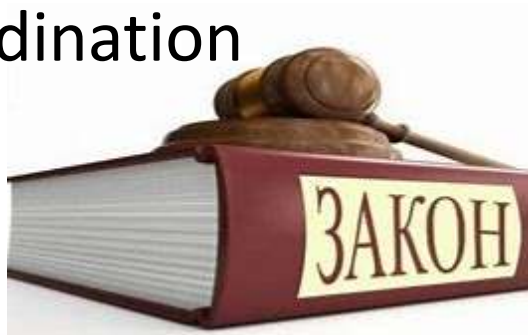
38/2014  
106/2016  
129/2023



- I. General provisions
- II. Metadata
- III. Interoperability of spatial data and services
- IV. Network services
- V. Data sharing
- VI. NSDI bodies - coordination



Current Level



72%



# REGULATION FOR METADATA

- Types of metadata
  - Metadata for dataset/series
  - Metadata for services
- Content, elements
  - compliance, quality, validity, **responsible NSDI subject** for creation maintenance and distribution of spatial data sets
  - conditions that apply to access and use of spatial data collections and services



Службен весник на РМ, бр. 123 од 18.6.2019 година

20191231710

## ВЛАДА НА РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА

Врз основа на член 7 став (2) и член 31 од Законот за националната инфраструктура на просторните податоци на Република Македонија („Службен весник на Република Македонија“ бр. 38/14 и 106/16), Владата на Република Северна Македонија, на седницата, одржана на 11 јуни 2019 година, донесе

### УРЕДБА ЗА СТАНДАРДИТЕ НА МЕТАПОДАТОЦИТЕ (\*)

#### Член 1

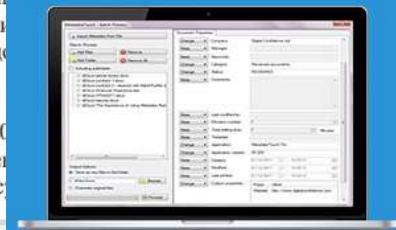
Со оваа уредба се утврдуваат стандардите за креирање и одржување на метаподатоци за: збирките на просторни податоци, серии на збирките на просторни податоци и услуги за просторните податоци.

#### Член 2

Останките од член 3 од Законот за националната инфраструктура на просторните податоци на Република Македонија, одделни поими употребени во оваа уредба го имаат следново значење:

1. „Низа од знаци“ е вредност на збирка од карактеристики кои се смислени и се користат за опис на предметот.
2. „Слободен текст“ е вредност на збирка од слободни или повеќе говорни јазици, преку кои се описуваат на збирките на просторни податоци.
3. „Елемент на метаподаток“ е вредност на збирка од стандарди според стандардот МКС EN ISO 19115-1:2015;
4. „Елемент на метаподаток“ е вредност на збирка од стандарди според стандардот МКС EN ISO 19115-1:2015;
5. „Простор за наслов“ е колекција од стандарди според стандардот МКС EN ISO 19115-1:2015;

## Metadata Editor



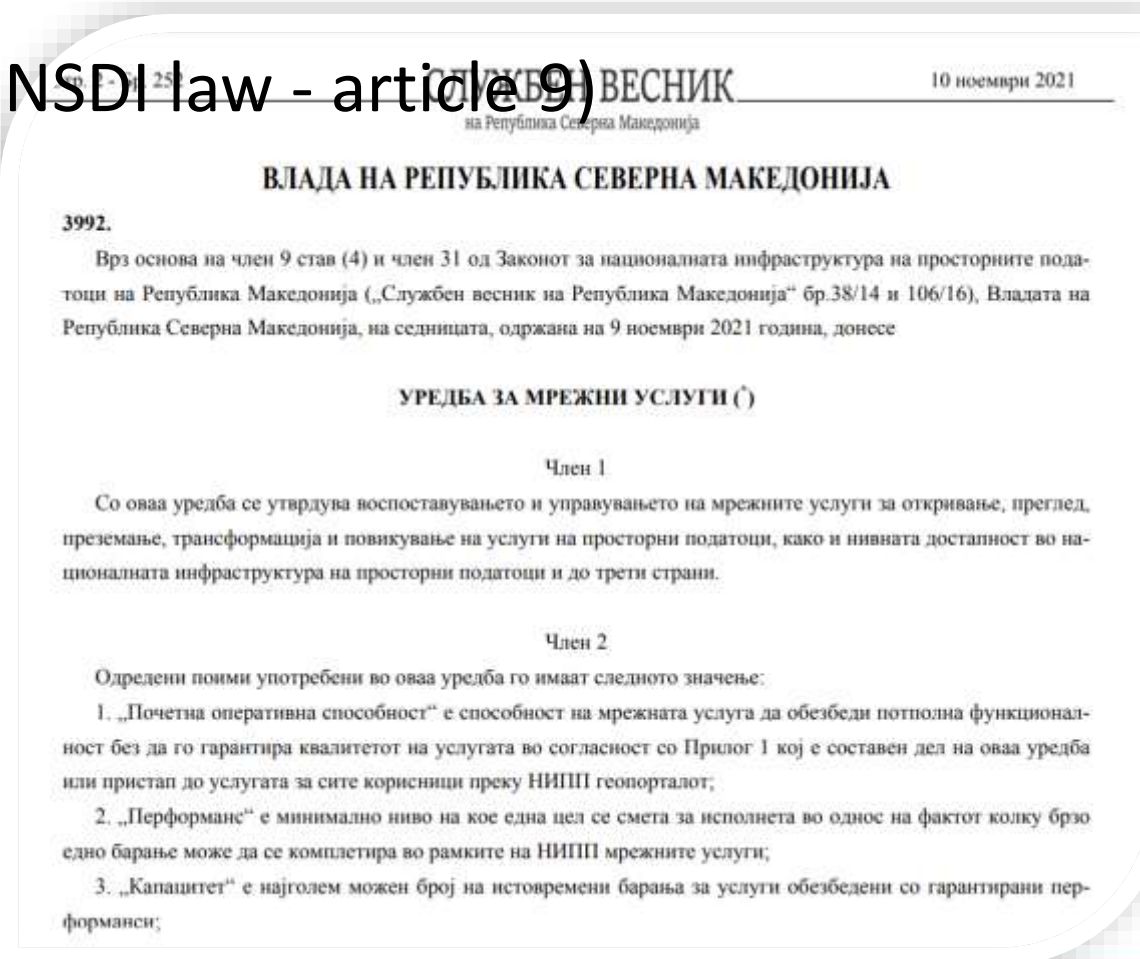
# REGULATION FOR NETWORK SERVICES

- Types of web services (NSDI law - article 9)

- discovery
- view
- download
- transformation
- invoke

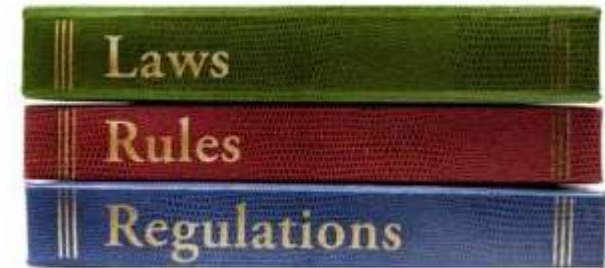
- Quality indicators

- performance
- capacity
- availability



# REGULATION FOR REGISTER OF SPATIAL DATA SETS

- Adoption of the Regulation
- Data preparation (inventory, register)
- Publish of the Register



amendment of  
the NSDI law

Meetings and  
consultations

Preparation of  
the Regulation

Adoption of  
the  
Regulation



# GOVERNANCE

- NSDI bodies
  - Council
  - Committee
  - Working groups



**IMPORTANT**



Legal

Technical

Economic

PR

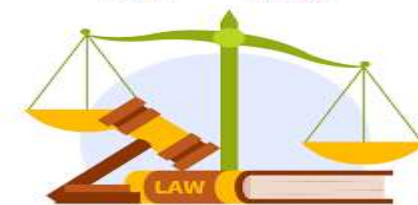
RSD



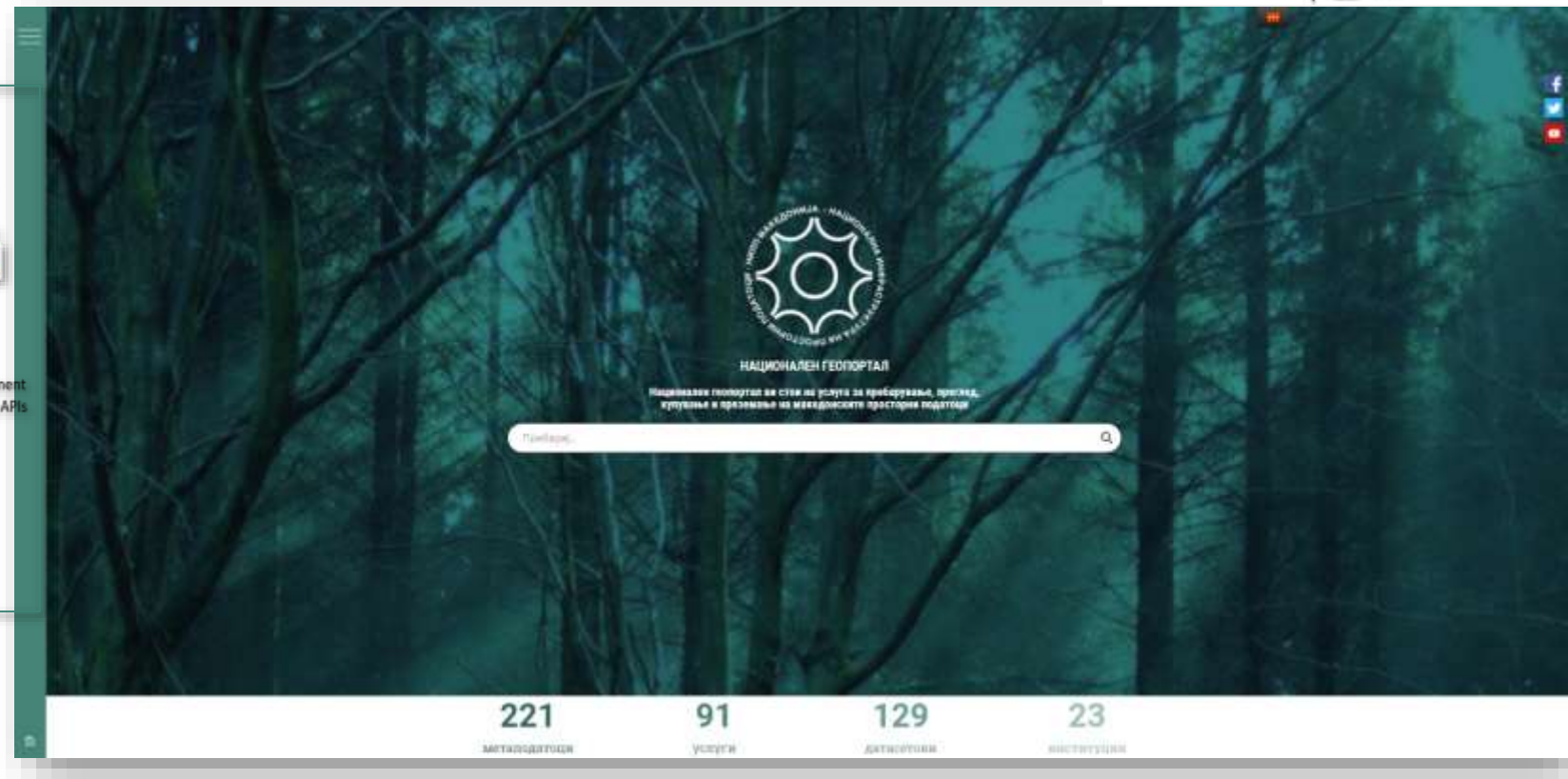
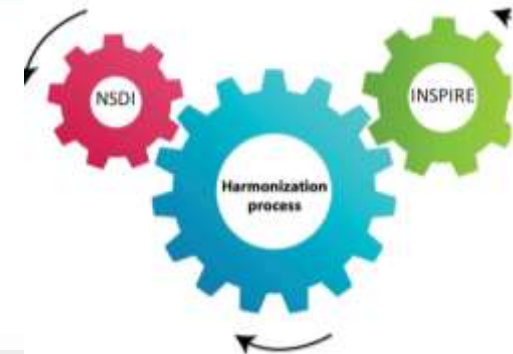
# ROLE OF THE AGENCY FOR REAL ESTATE CADASTRE



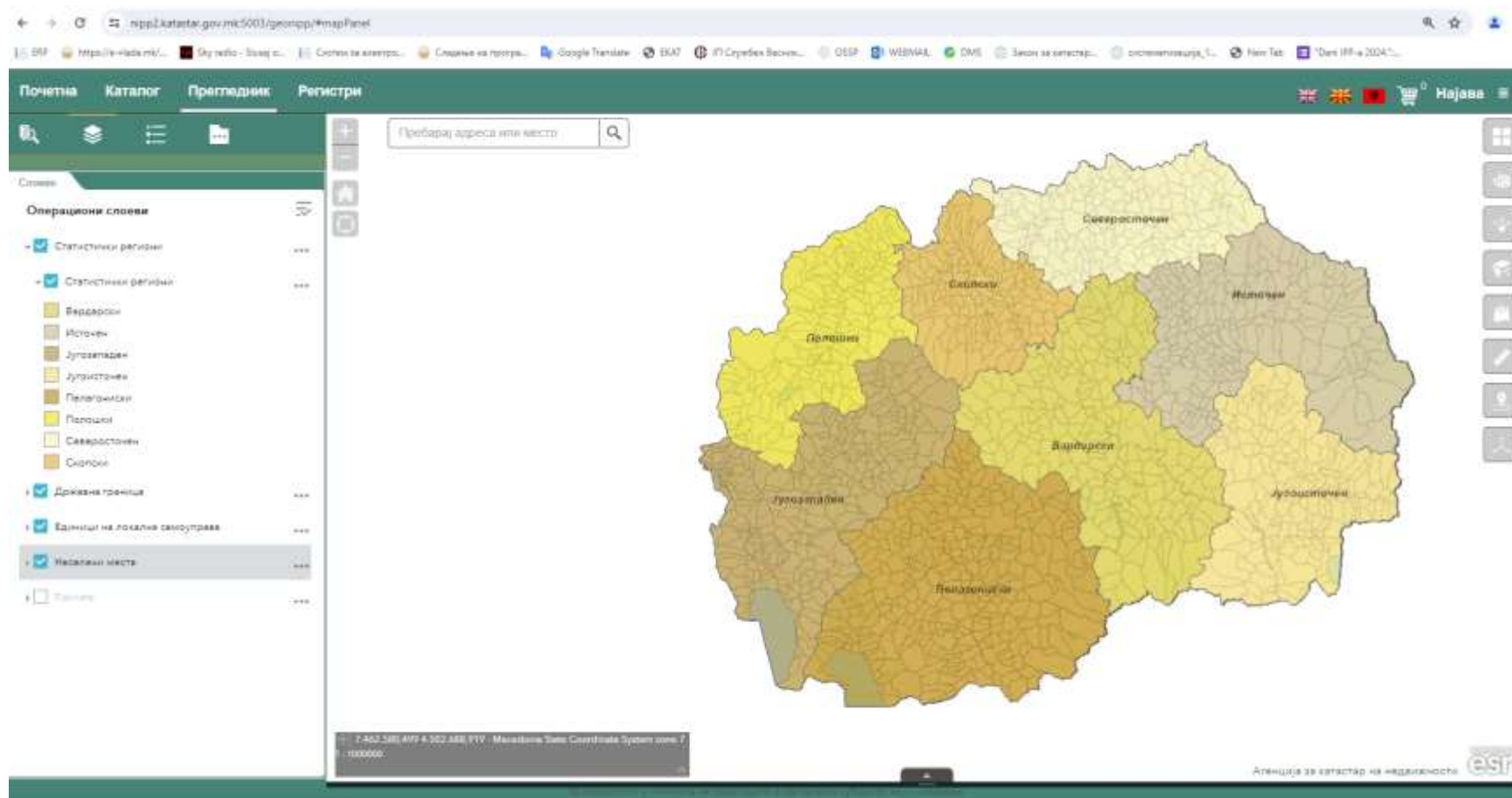
- The Agency for Real Estate Cadastre is responsible for establishing, maintaining and providing public access to the NSDI Geoportal, maintenance of metadata services, a registry of metadata and associated trainings
- The Agency for Real Estate Cadastre, on the web-page of the NSDI Geo-portal, shall publish decisions, bylaws, tariff lists, annual work plans, implementation reports and other documents and information of relevance to the NSDI
- The Agency for Real Estate Cadastre establish an organizational unit for administrative and technical support



# NSDI-GEOPORTAL



# ADMINISTRATIVE UNITS

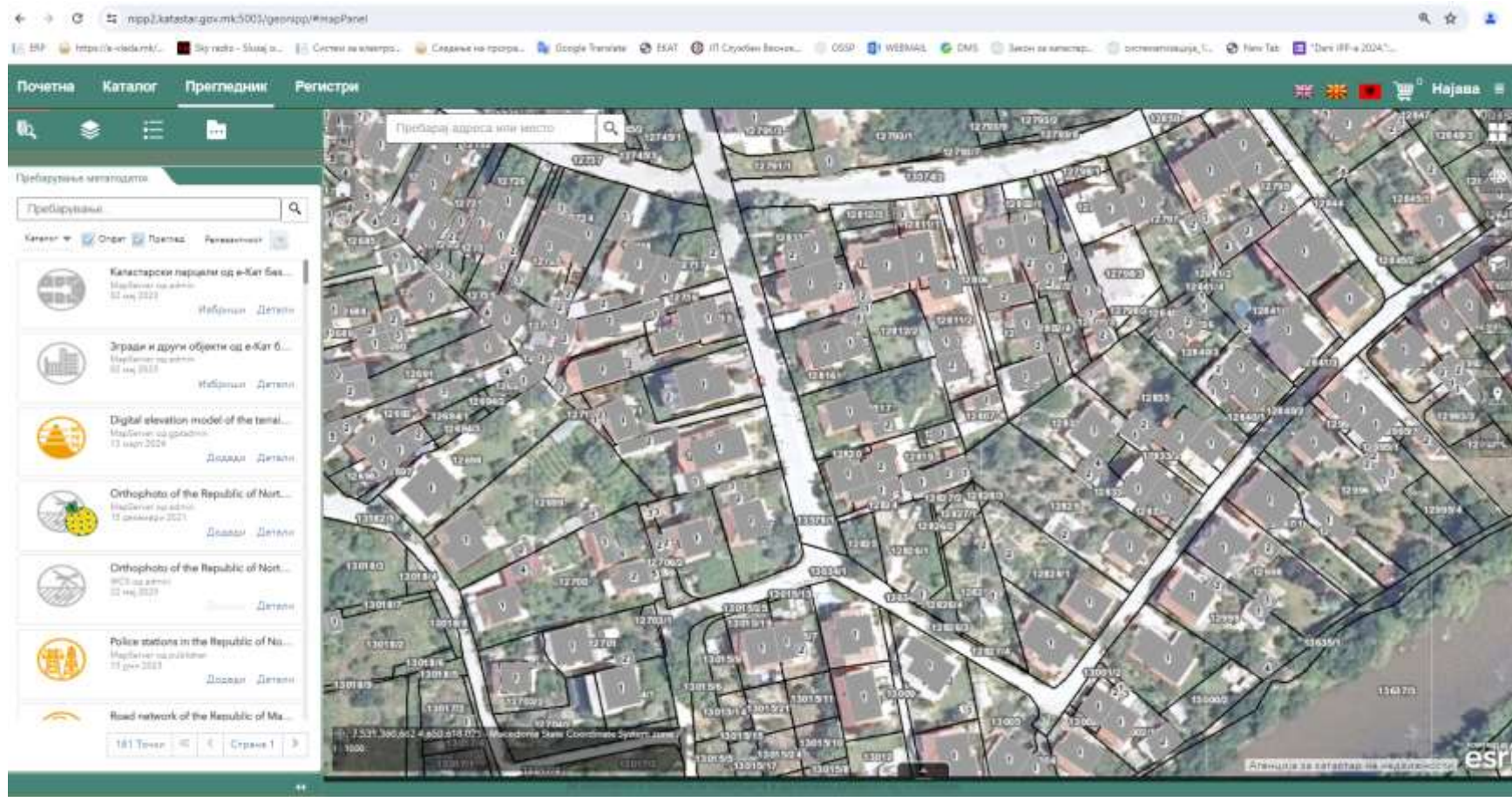


## BORDERS:

- state
- statistics regions
- local self government
- settlements



# DATA FROM REC

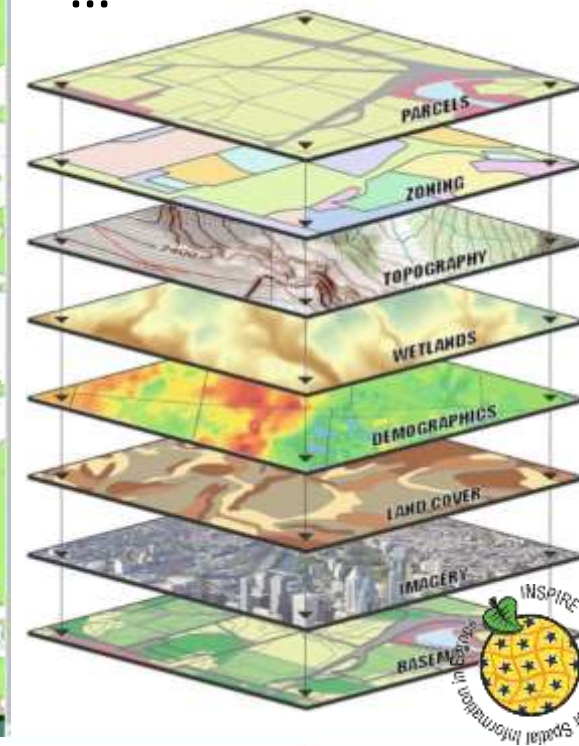
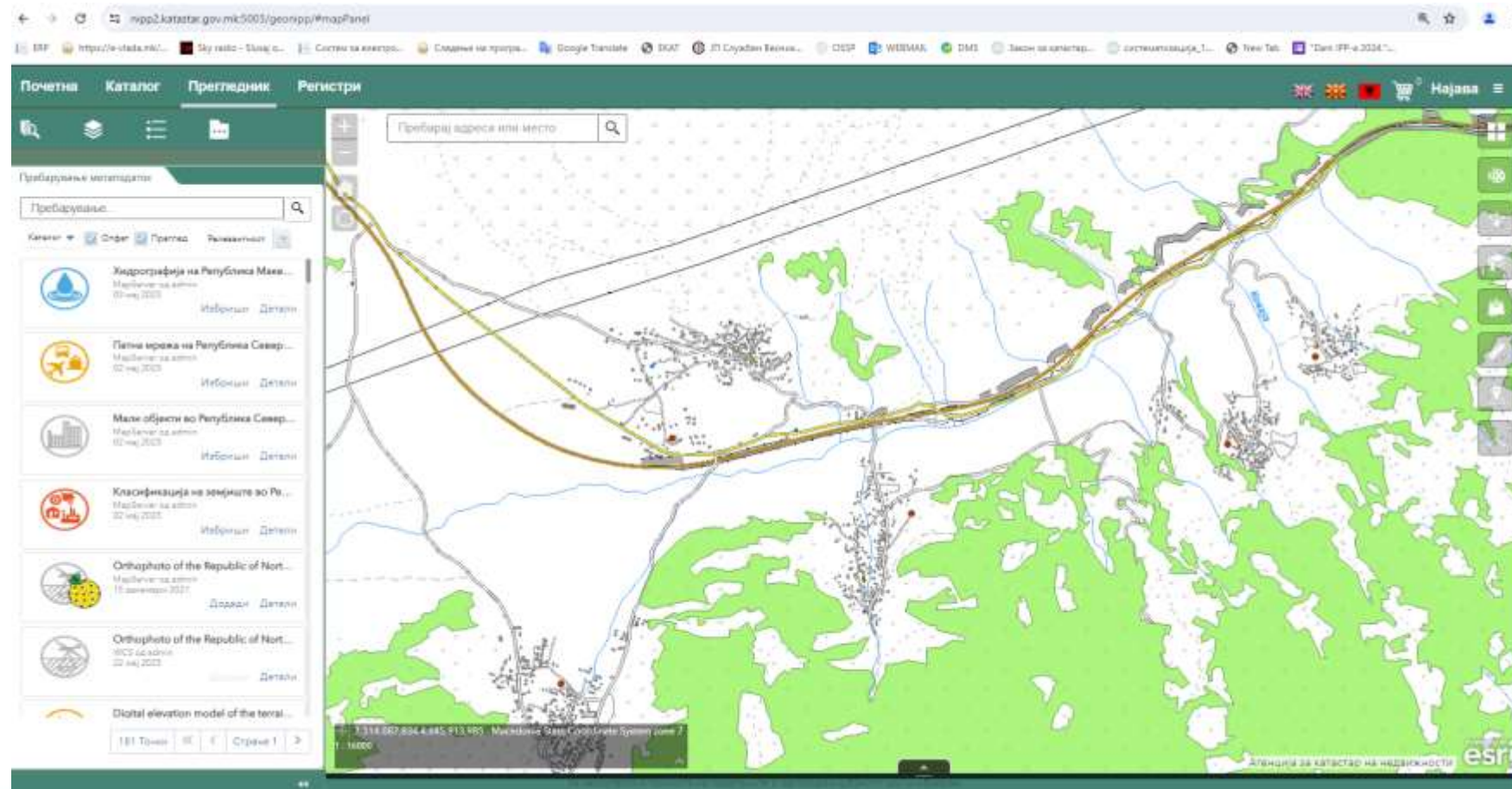


CADASTRAL DATA:  
-parcel  
-objects

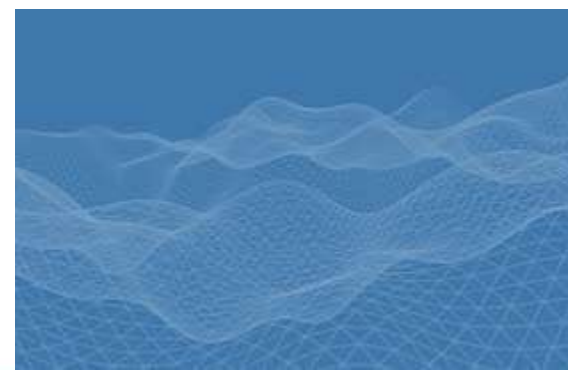
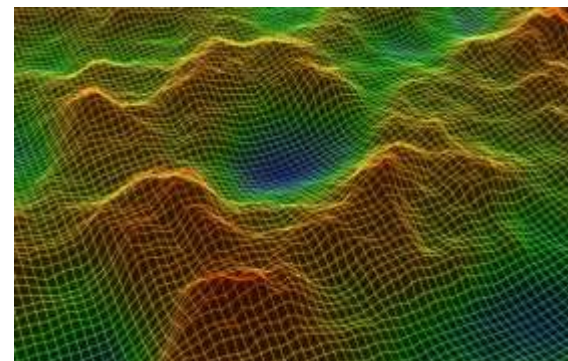
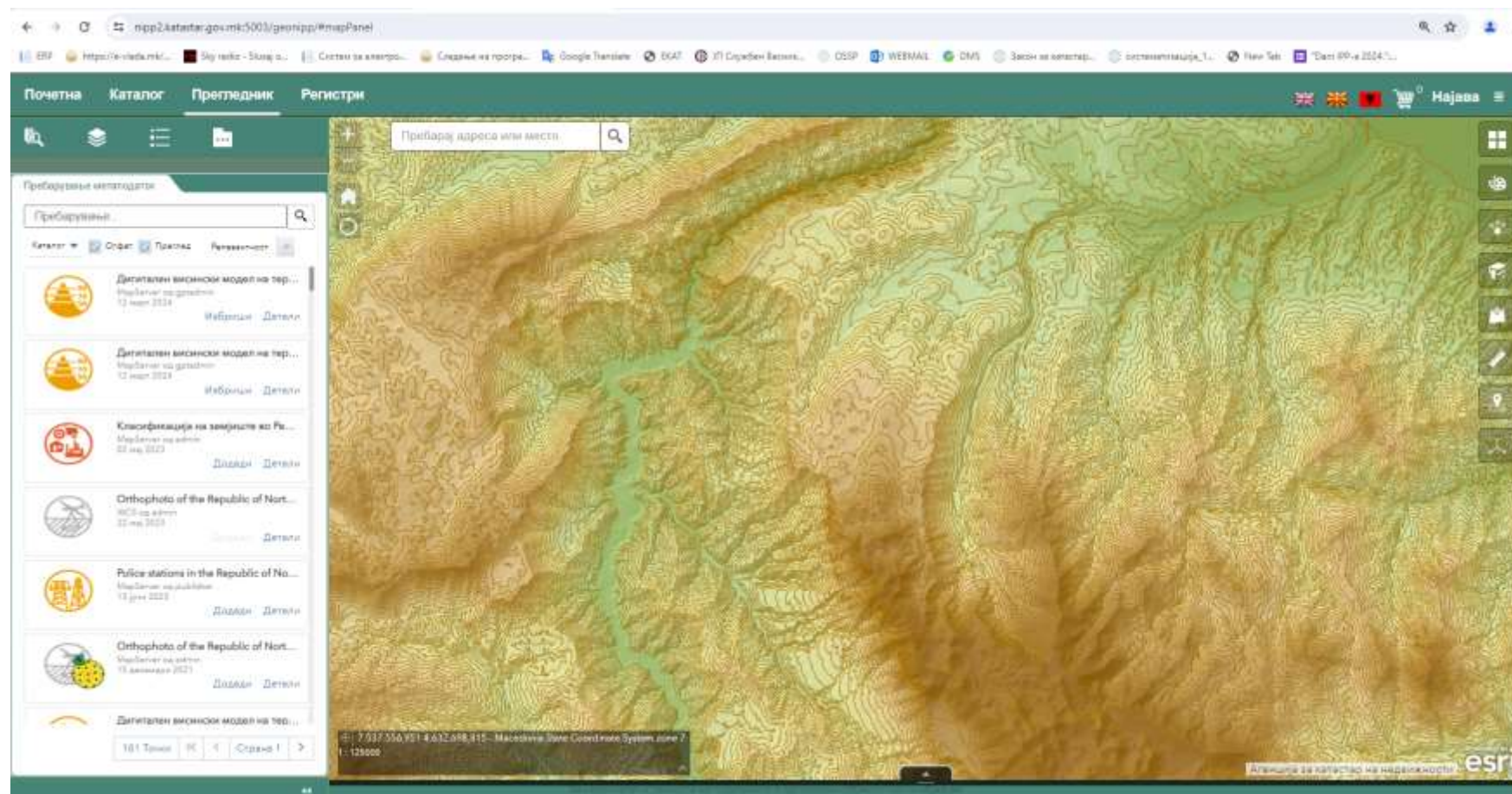


# TOPOGRAPHIC DATA SETS

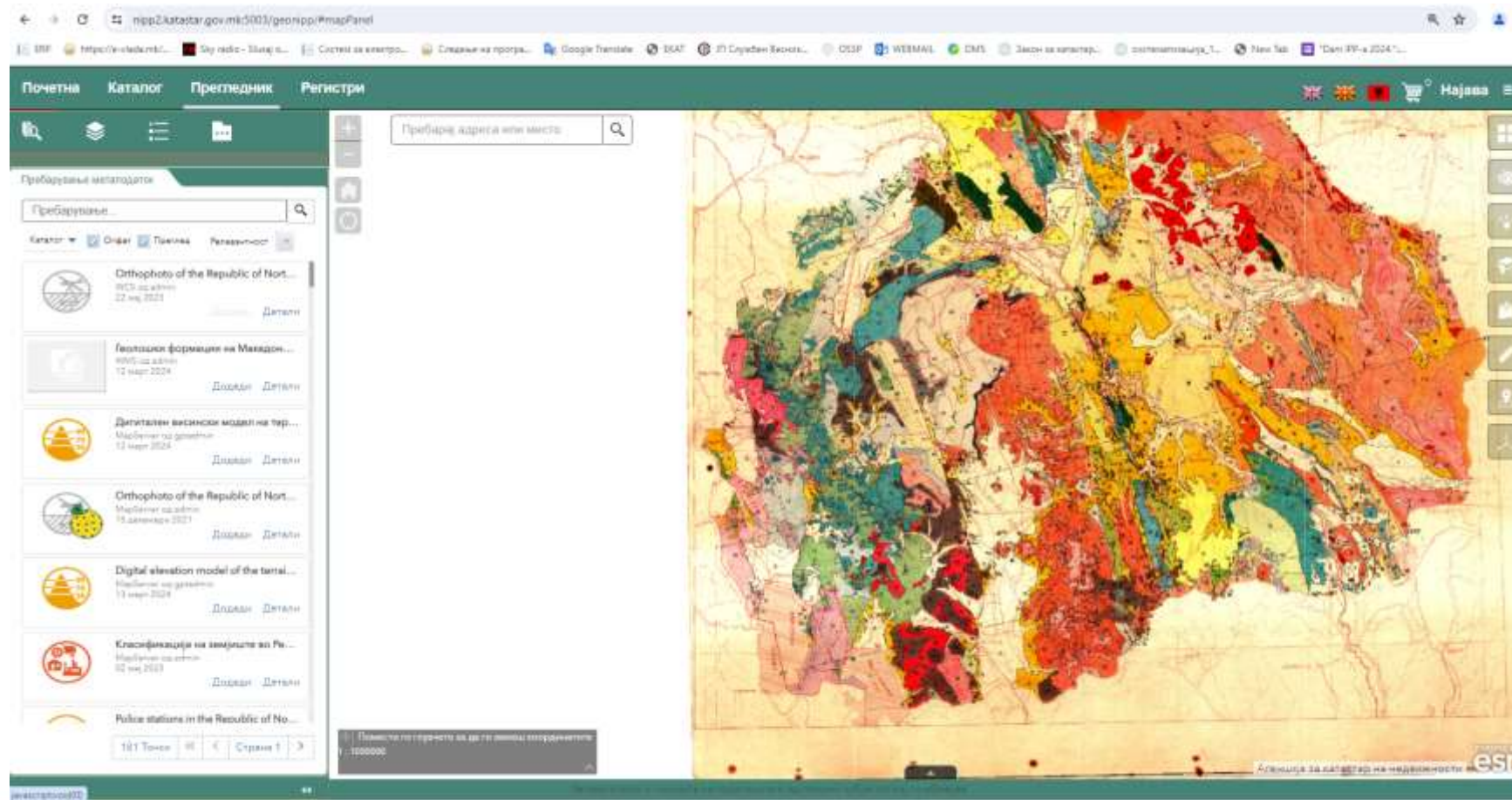
- land cover
- hydrography
- roads
- railway
- geographical names
- ...



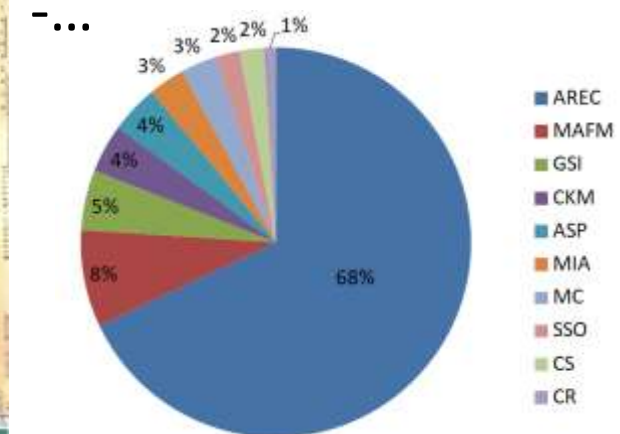
# DEM



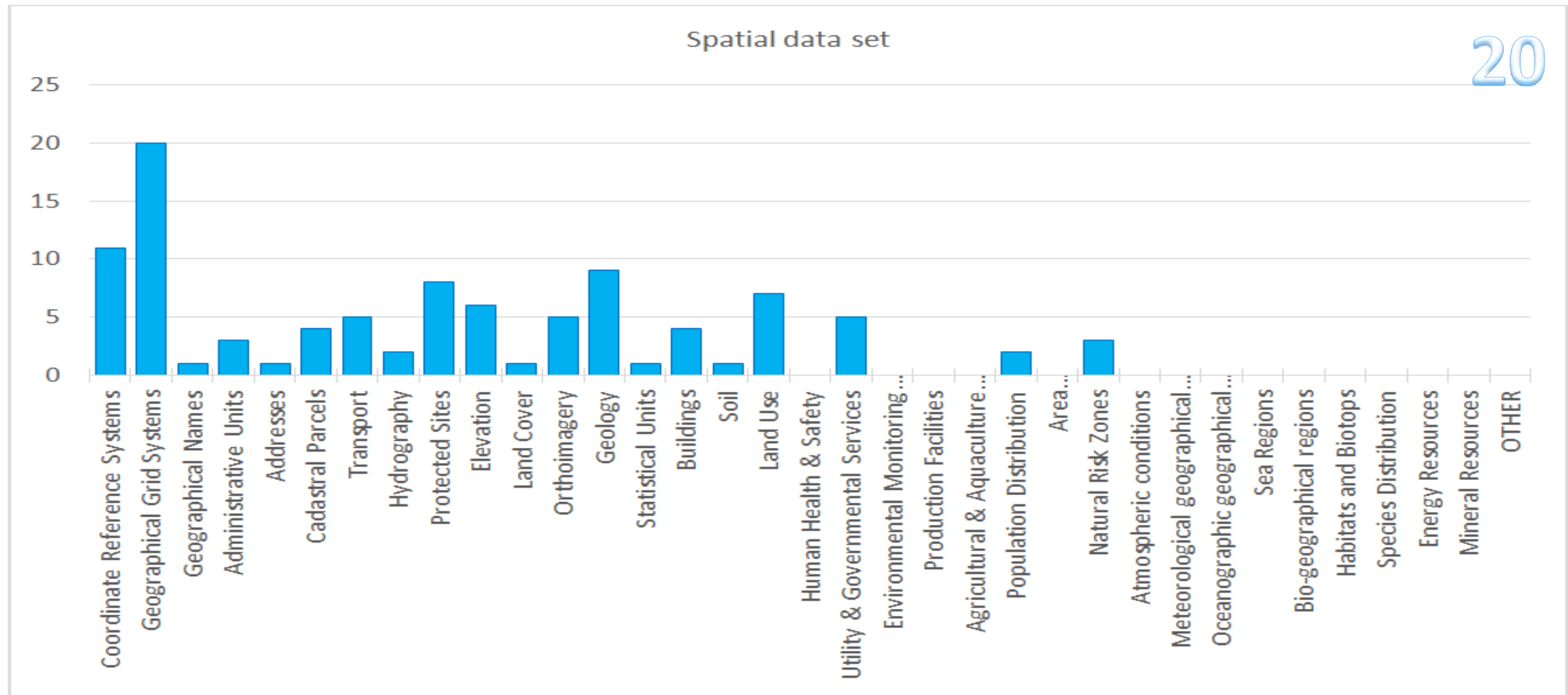
# DATA FROM NSDI SUBJECTS



- geological maps
- statistic data
- forest protection data
- cross borders
- national parks

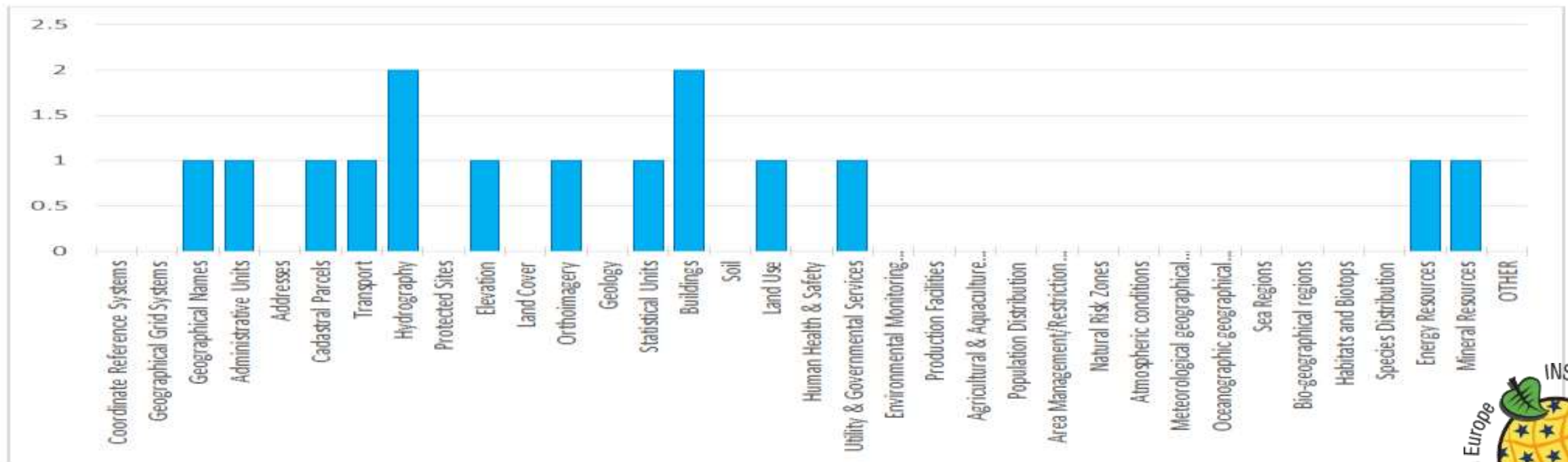


# REPRESENTATION OF DATA BY INSPIRE THEMES

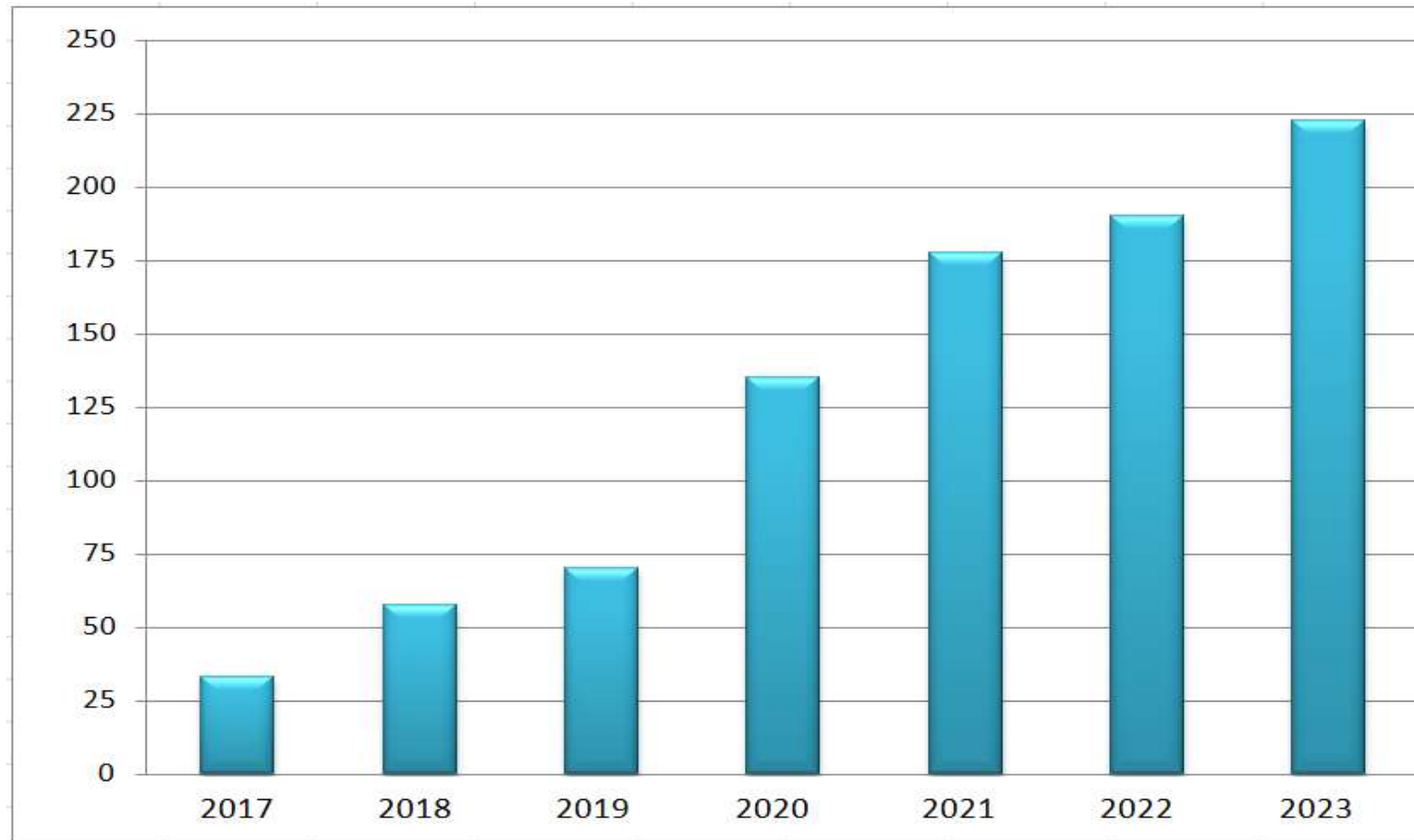


# HARMONIZED DATA SETS ACCORDING INSPIRE

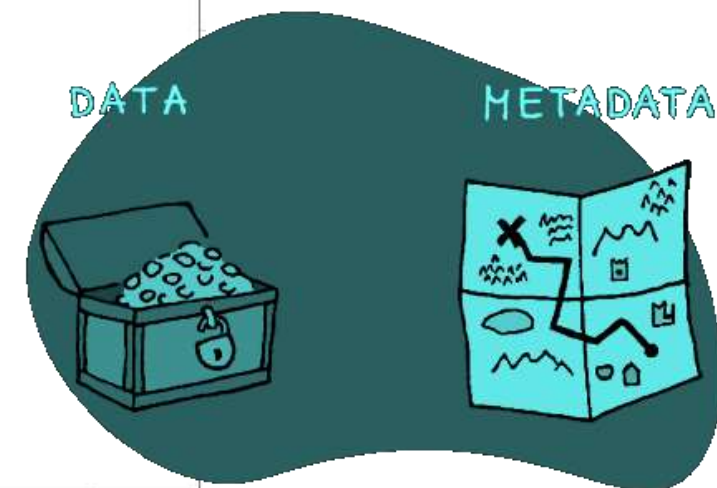
15



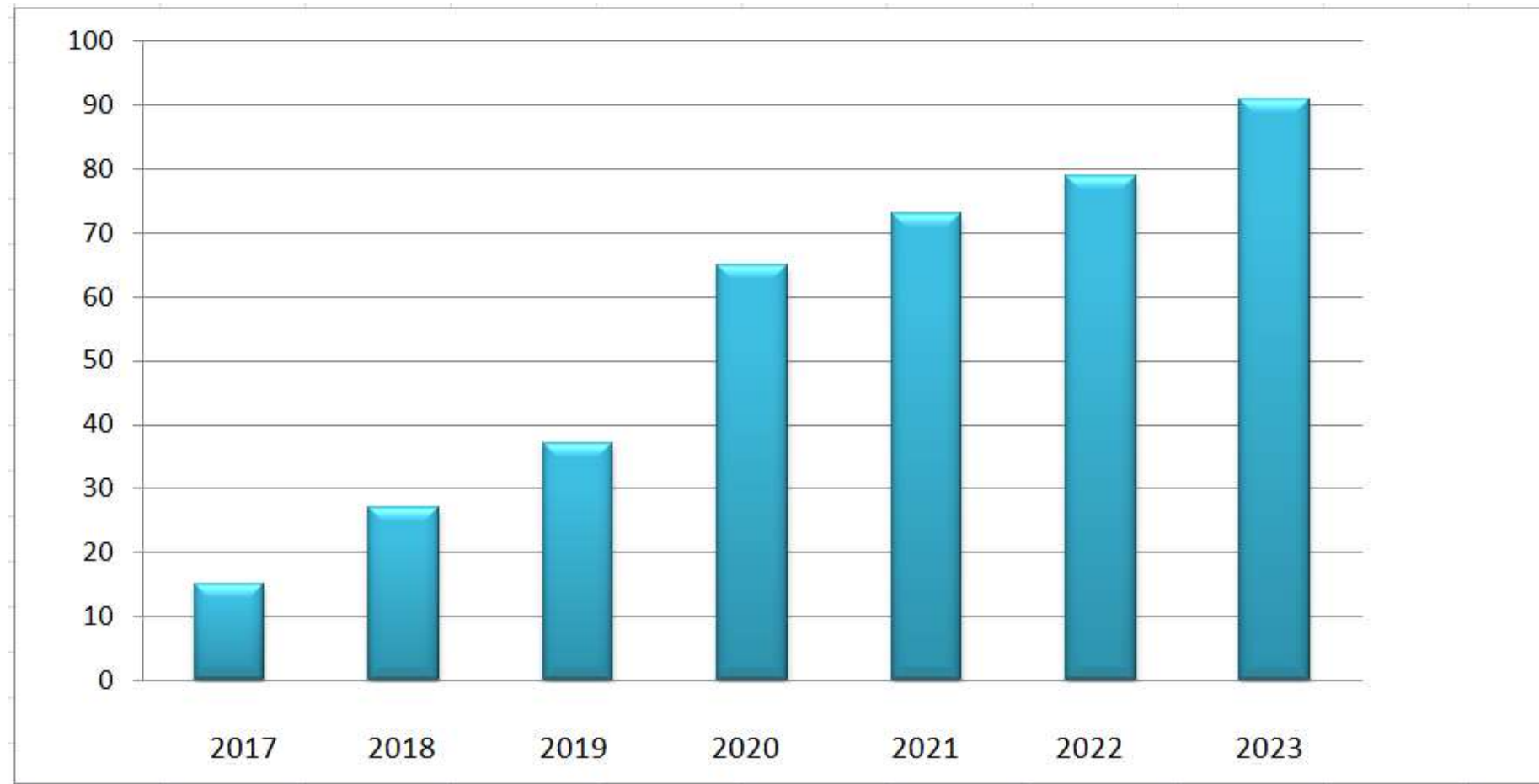
# METADATA (XML/HTML)



221



# WEB SERVICES (WMS/WFS/ATOM/WCS)



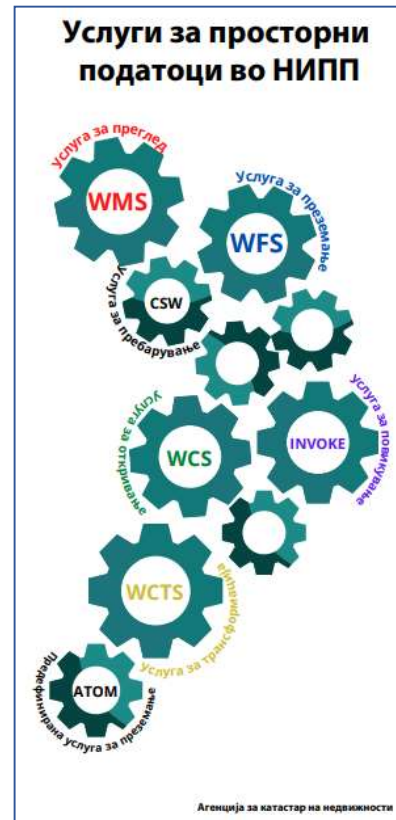
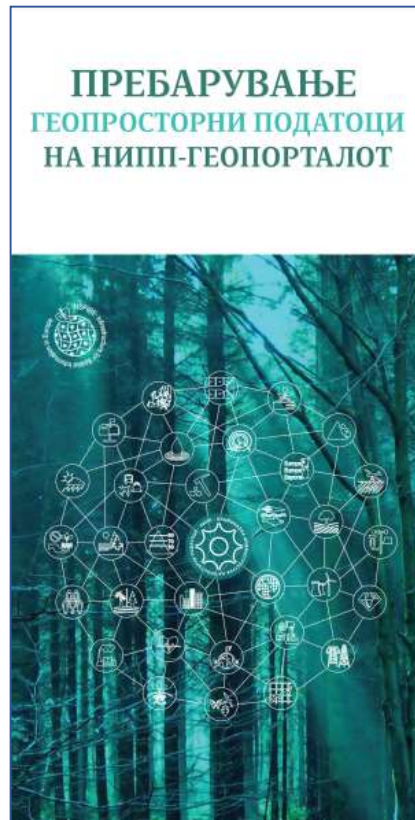
91



# RAISING AWARENESS

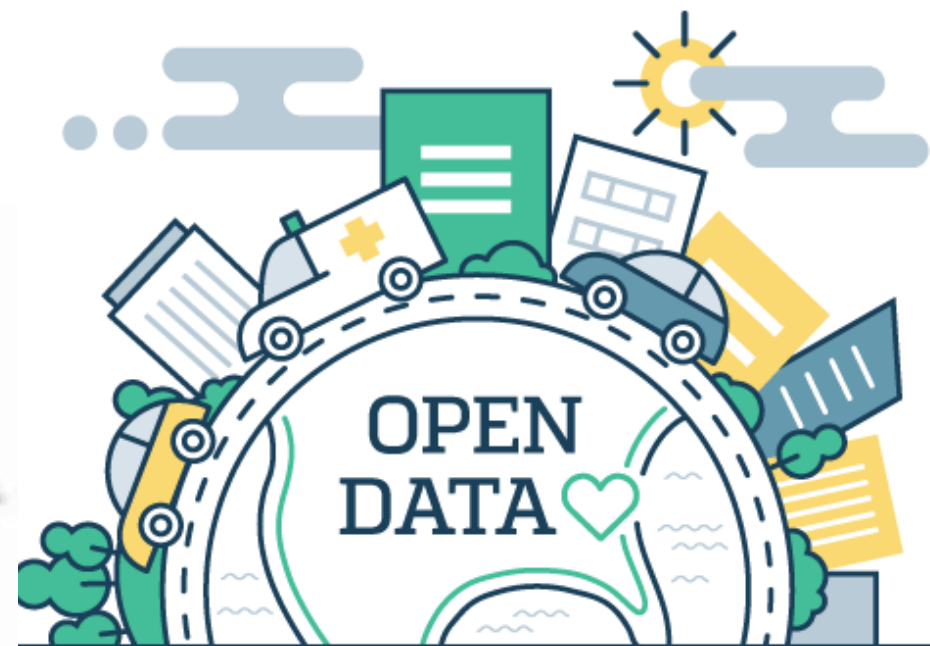
40263 users

Promote NSDI and increases the users



# FUTURE STEPS

- Full compliance with the INSPIRE directive
- Introduction of open data and transposition of the Open Data directive
- NSDI business model and licences



# THANK YOU FOR YOUR ATTENTION!

