

Open Spatial Data in Poland

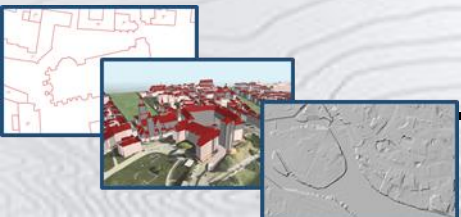
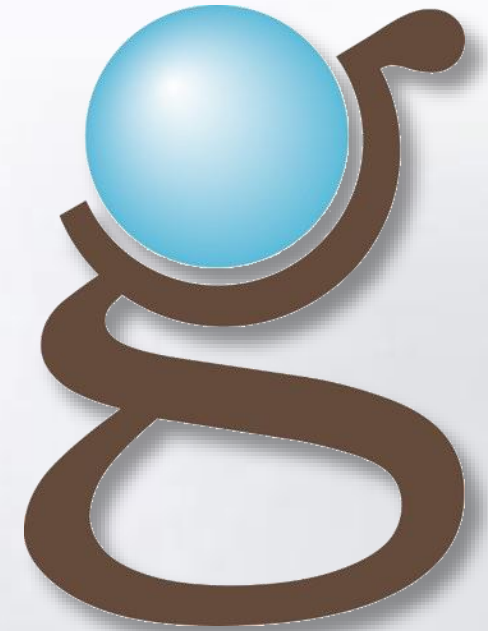
Marcin Grudzień

Spatial data for the sustainable development of the Republic of Moldova

27th October 2022

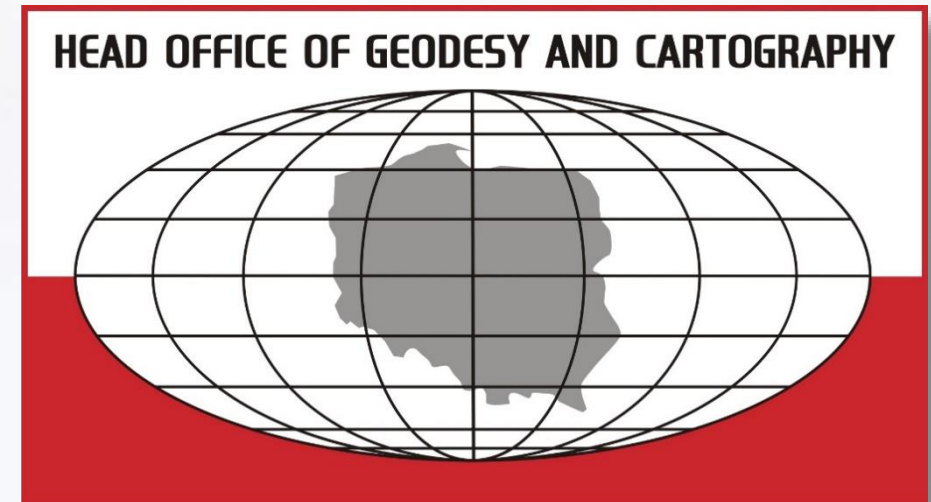
Agenda

- Who are we?
 - Organisational structure
- Why Open Data?
- Short history of data opening
- Ways of downloading the Open Data
 - Download statistics
- Advantages and disadvantages of Open Data
- Plans

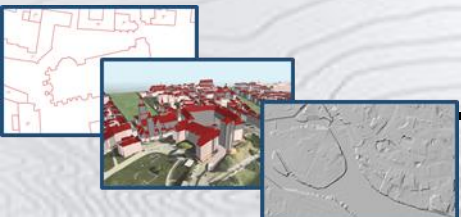
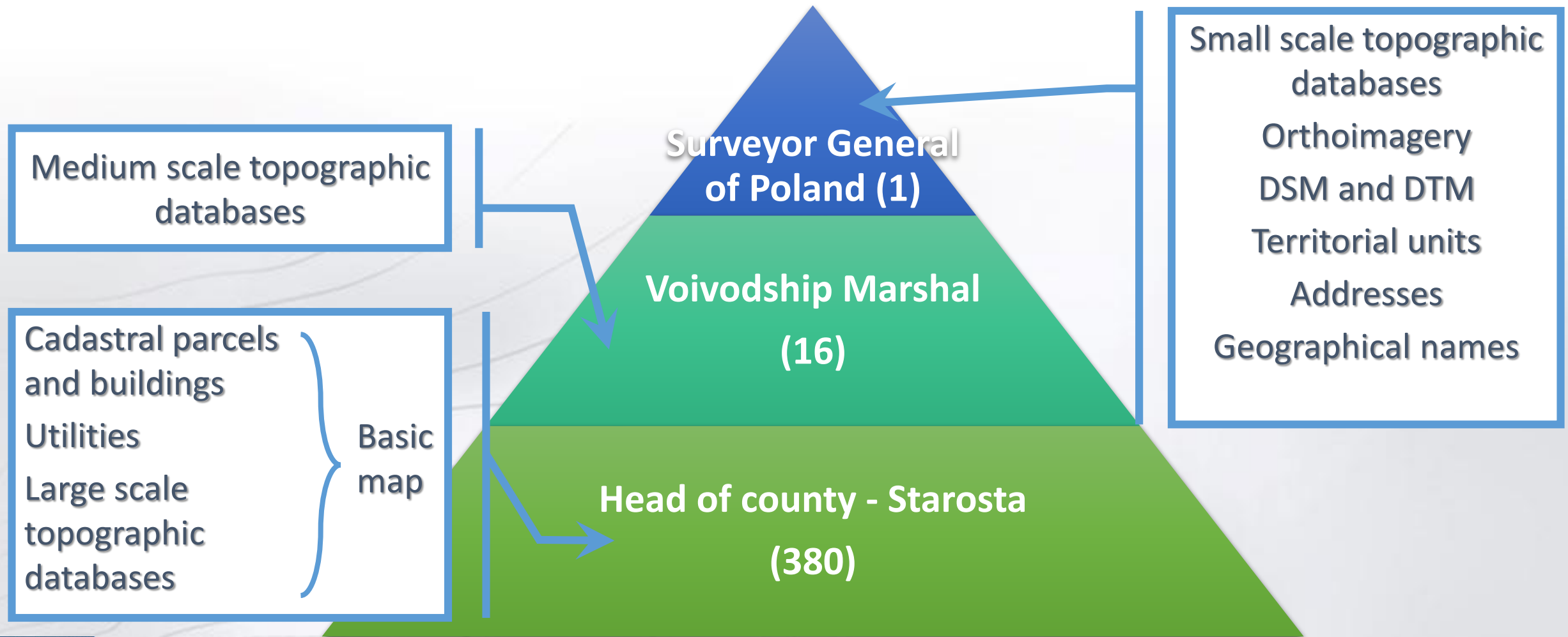


Who are we?

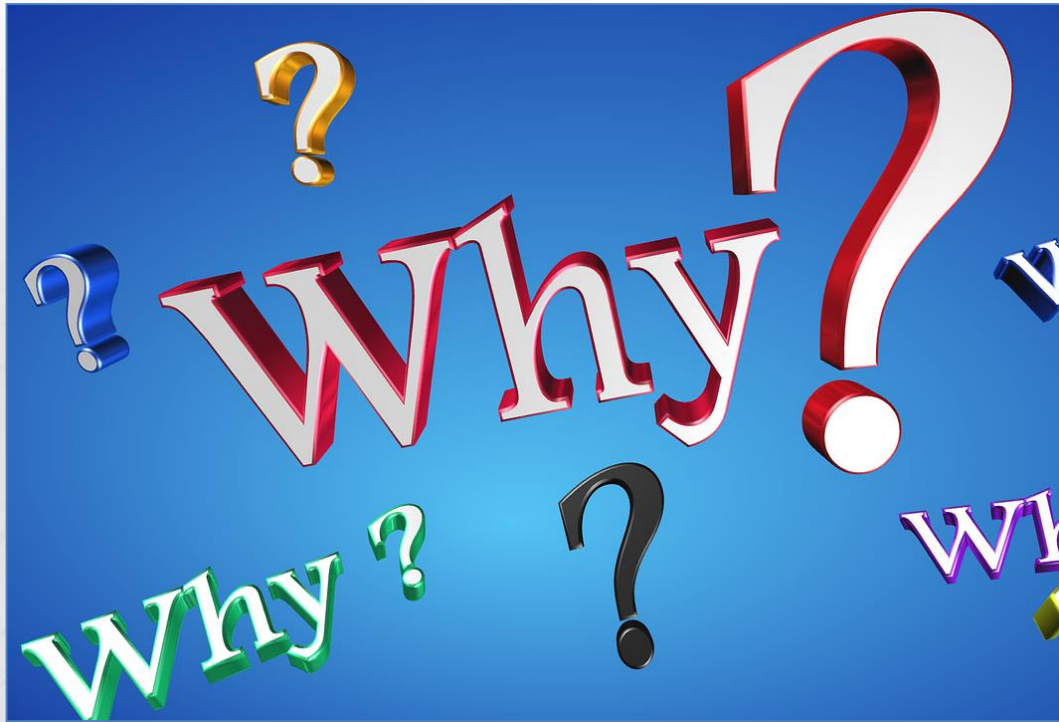
- The Head Office of Geodesy and Cartography (GUGiK) is Polish National Mapping and Cadastral Authority
- The Head of GUGiK is the Surveyor General of Poland (GGK), who is also the Head of the Polish Geodetic and Cartographic Service
- GGK coordinates INSPIRE implementation in Poland
- GGK is directly responsible for the harmonisation of data sets for 15 INSPIRE themes



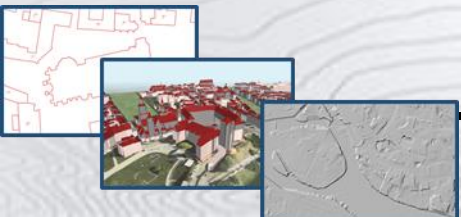
Polish Geodetic and Cartographic Service



Why we opened our data?



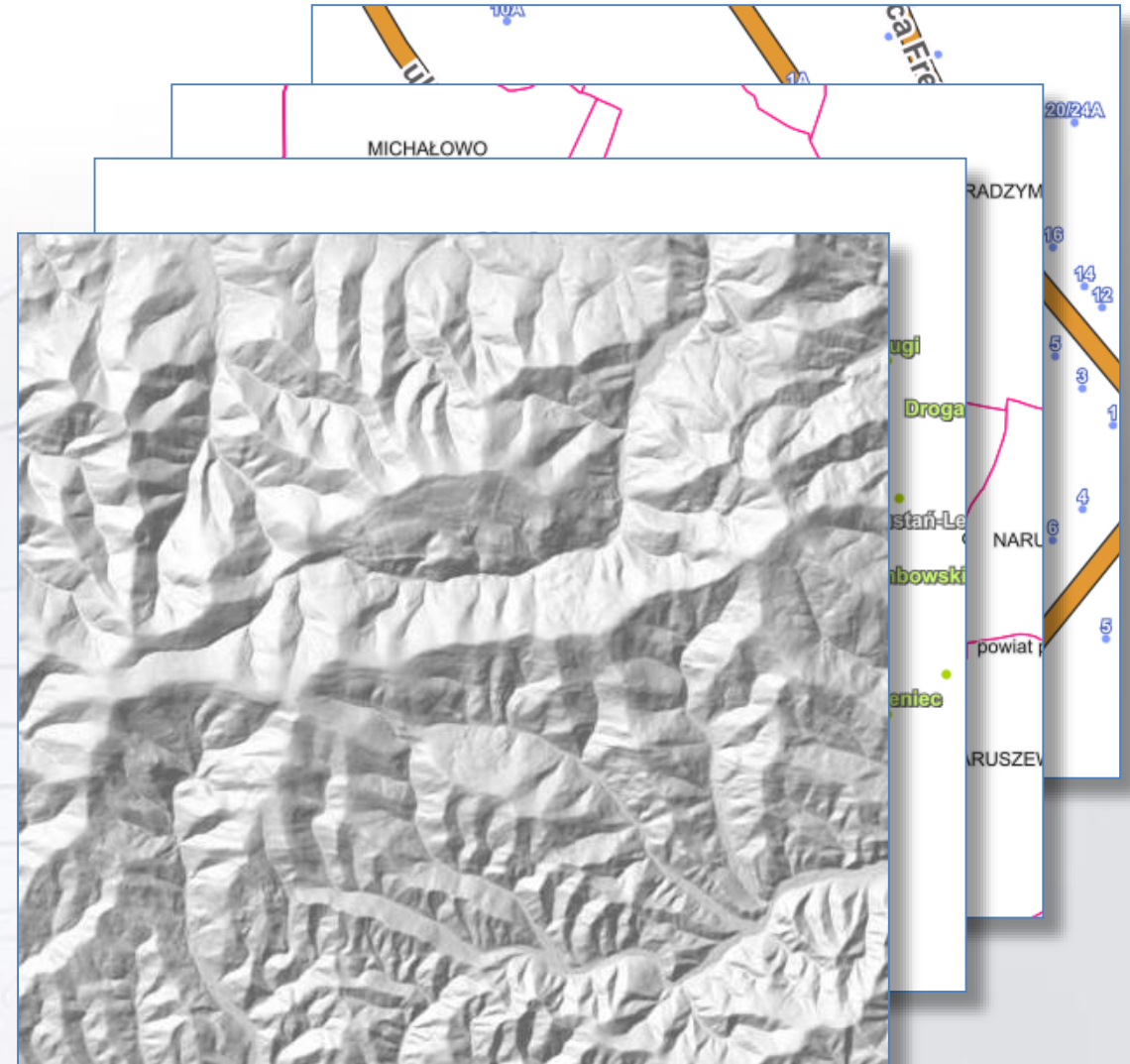
- Strategic
 - *“Every Polish Zloty spent on publicly available Open Data returns multiplied to the state budget”*
- Organisational
 - In many cases, money spent on maintaining staff and tools responsible for selling data was higher than income from the data





History of data opening (1)

- In July 2014 following data sets were opened
 - Addresses
 - Territorial Units
 - Geographical Names
 - Digital Elevation Model (100 m only)





History of data opening (2)

- In July 2020 following data sets were opened
 - Medium Scale Topographic Database (10k)
 - Orthoimagery
 - Digital Elevation Model
 - DTM, DSM and LIDAR
 - Geodetic Network Points
 - Cadastral Parcels
 - Only geometry (boundaries) and IDs
 - Buildings
 - Only geometry, IDs and classification

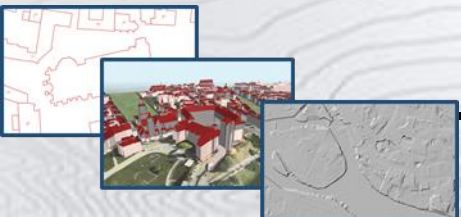
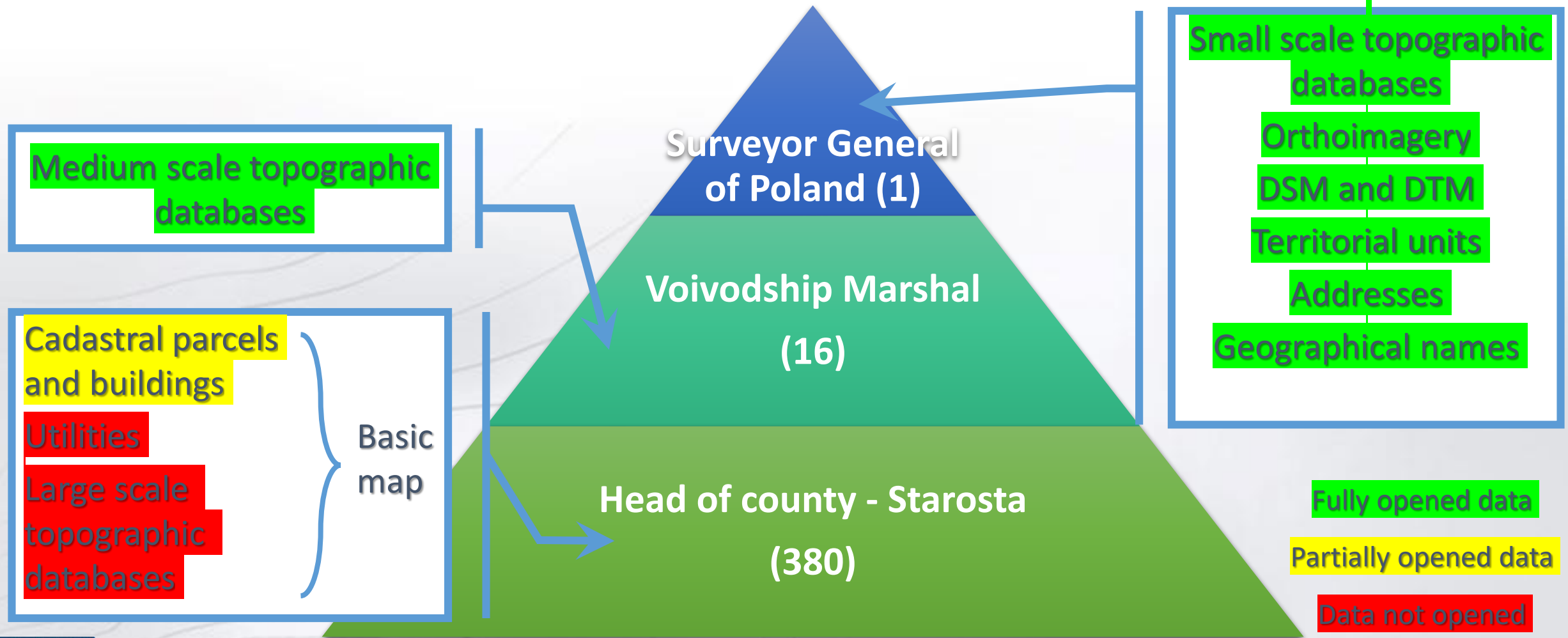


History of data opening (3)

- On the 2nd October 2022, access to the Polish ASG EUPOS system was fully opened
- The system users now have free access to all system services, including RTN/RTK corrections
- Registration is required



Polish Geodetic and Cartographic Service and Open Data



Open Data volumes

Data set	No. of files	Volume (GB)*
Addresses	15 503	4.25
Boundaries	21	3,09
DTM, DSM (including LIDAR)	1 089 210 (LIDAR 405 137)	36 117 (LIDAR 23 154)
Geodetic Control Network Points	51 246	140
Geographical Names	54	1.17
Medium Scale Topographic Database	1208	85
Orthoimagery	986 123	57 334
Small Scale Topographic Database	69	1.29

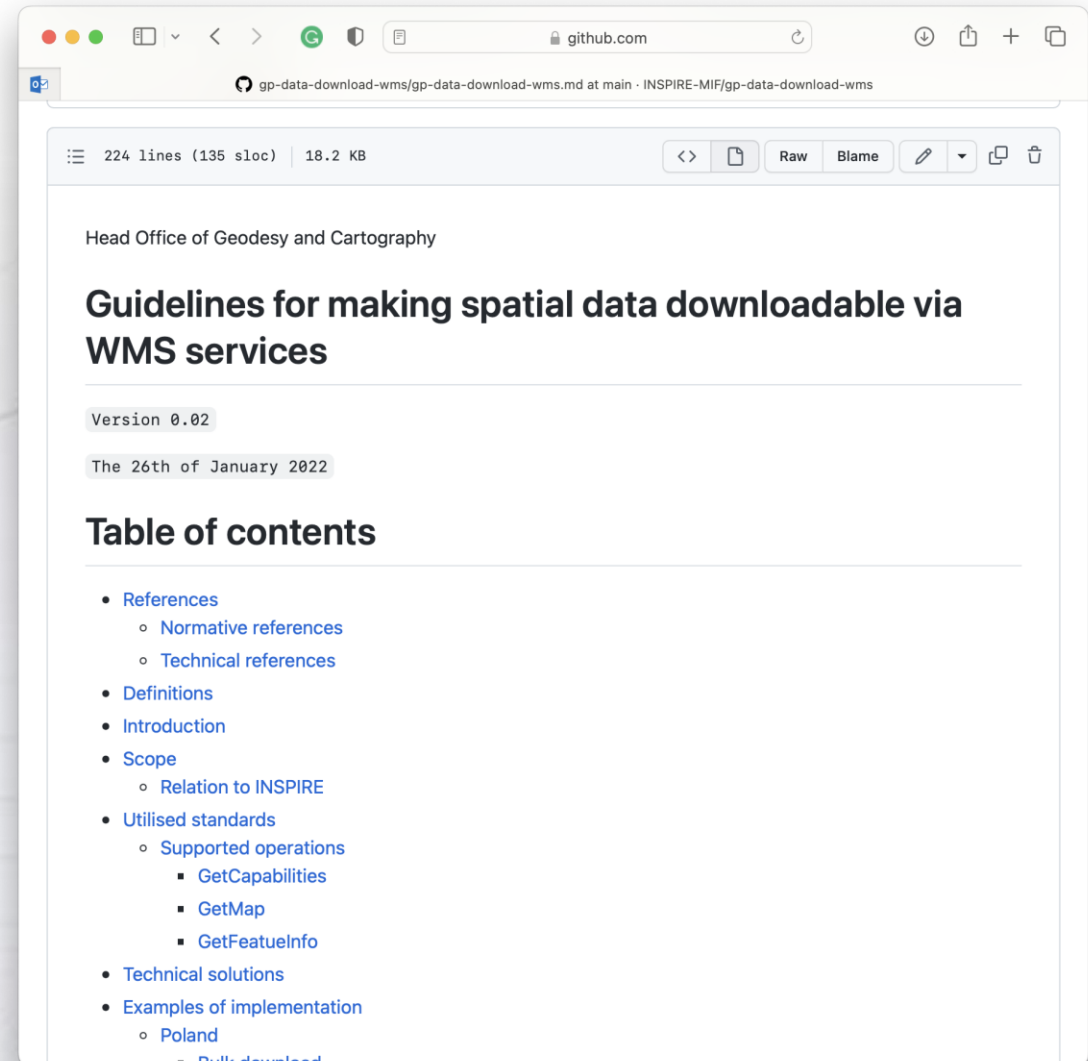
* values obtained on the 19th of October 2022





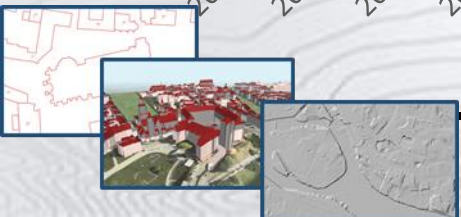
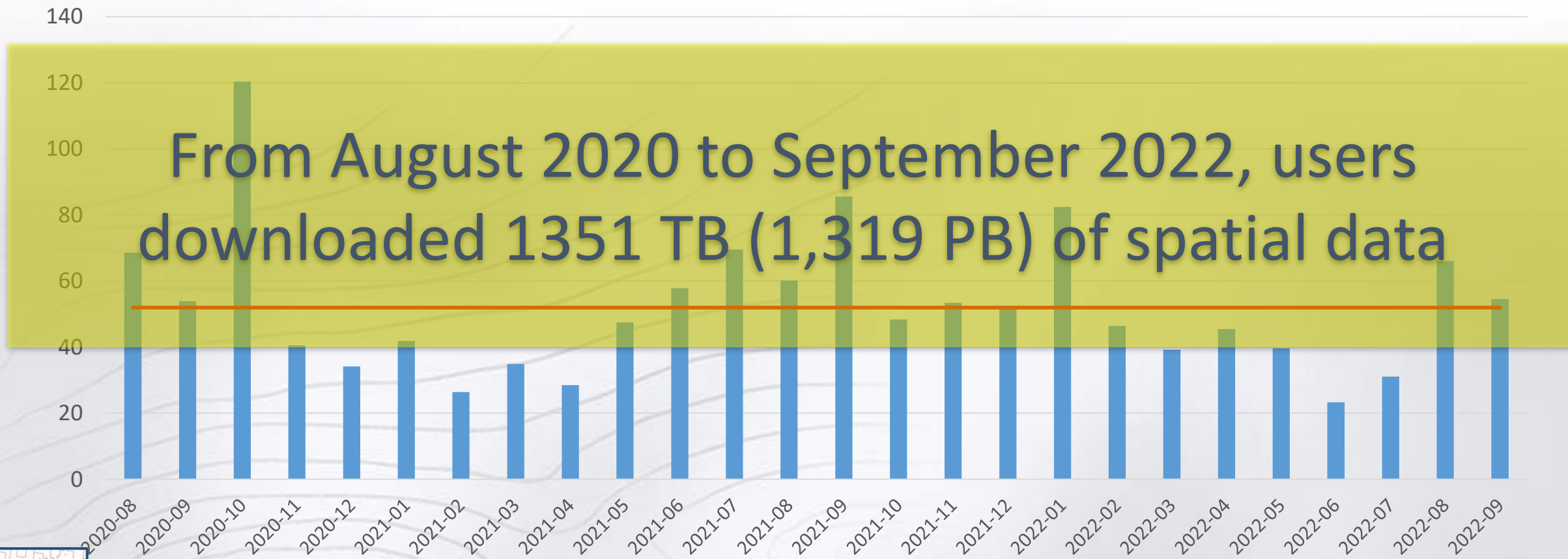
Ways to download the data

- Standard spatial network services
[WMS, WMTS, WFS, WCS, ATOM feed](#)
- [Polish Open Data Portal](#) and [GUGiK's website](#)
- Index maps available on [the national geoportal](#)
 - This way of publishing spatial data was proposed as [INSPIRE Good Practice](#)



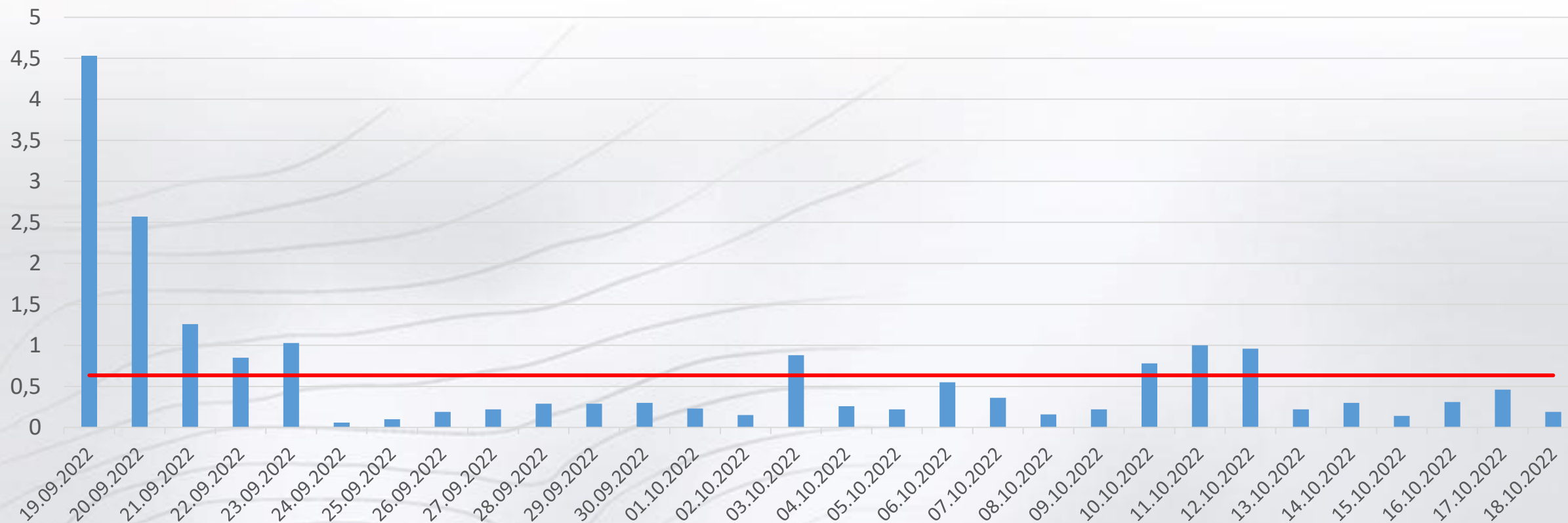
Data download statistics (1)

Data downloaded monthly in TB



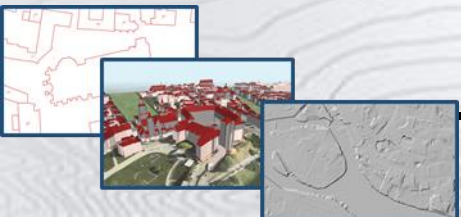
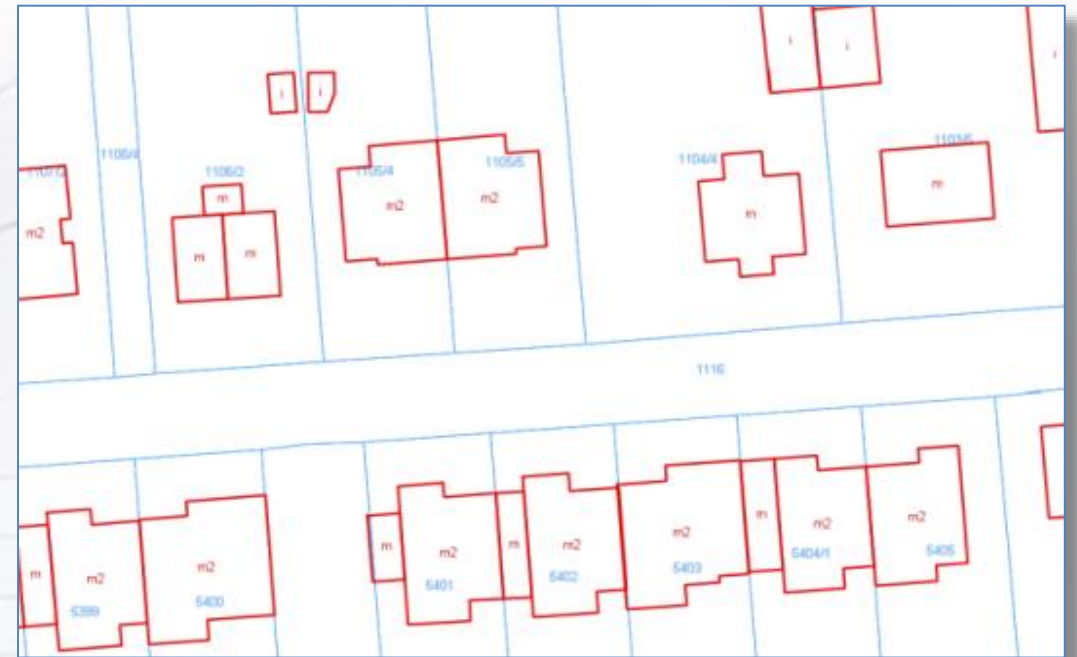
Data download statistics (2)

Daily download during 30 days (in TB)



Open Data on the local level

- Publishing of Open Data was more challenging for local governments (counties)
- Since May 2022, all 380 counties have published WFS services with cadastral parcels and buildings
 - It took 21 months and required significant support from GUGiK



Open Data - advantages and disadvantages (1)

User perspective

Advantages

- Free online access to the vast collection of spatial data
- No credentials or registration required

Disadvantages

- None



Open Data - advantages and disadvantages (2)

Data publisher (GUGiK) perspective

Advantages

- Wider utilisation of spatial data managed by the organisation
- Liberation of human resources that can be allocated to other vital tasks, e.g. data capture, data quality assurance, etc.

Disadvantages

- No income from the data sale
- Potential negative impact on state security



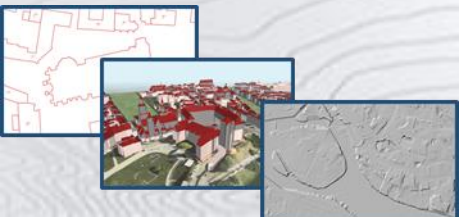
Wide utilisation of Open Data



Plans

■ Unclear

- On one hand side, there is still a push for opening further data sets
- On the other hand, there are security concerns





Thank you for your attention

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