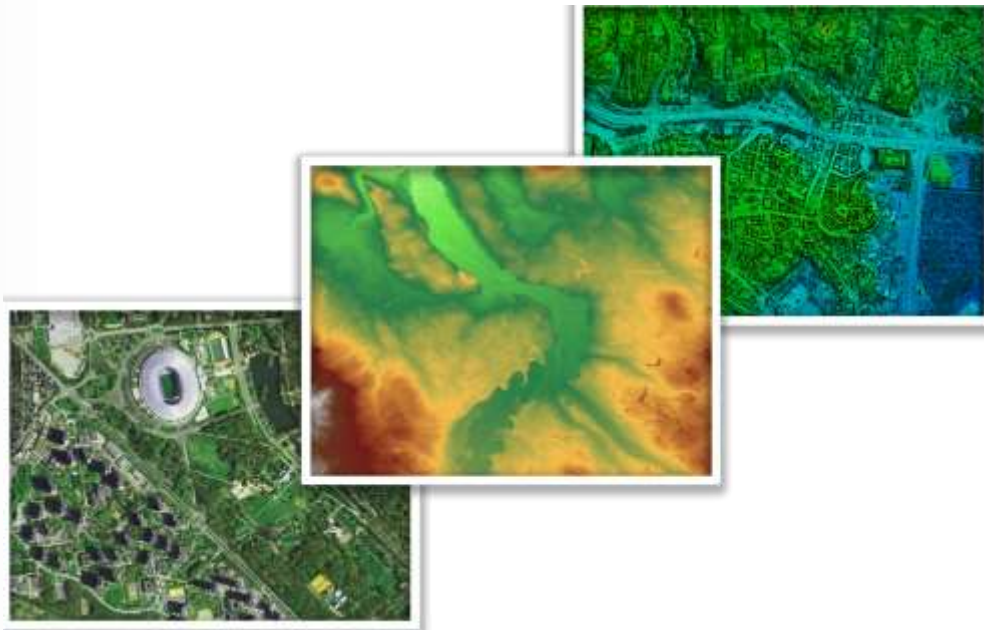


Surveyor General of Poland – chosen activities



Alicja Kulka,
acting Surveyor General of Poland

Surveyor General of Poland



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)

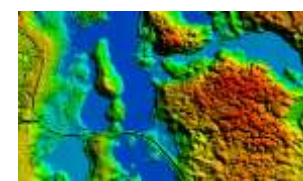
Main tasks :

- ✓ supervises implementation of national policy in geodesy and cartography
- ✓ manages central geodetic and cartographic data resource and geoportal
- ✓ elaborates and establishes registers and databases
- ✓ grants professional entitlements (licences) in geodesy and cartography and manages a register of authorised persons
- ✓ cooperates with foreign and international, specialised institutions and authorities as well as with local governments and professional organisations

Head Office of Geodesy and Cartography (GUGiK)



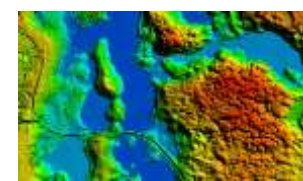
- Head Office of Geodesy and Cartography (GUGiK) is Poland's main spatial data provider. The role of GUGiK is to provide access to current spatial data and manage national spatial data infrastructure (NSDI).
- Spatial data in Poland is collected in the registers by many central institutions and local government units at all levels.
- The largest and the most important resources of spatial data is collected on the basis of the Geodetic and Cartographic Law.
- GUGiK is focused on data acquisition, digitalisation of geodesy and integration of e-services providing easy access to data for a wide range of users (environment, investment process, spatial planning, energy, etc.).



Head Office of Geodesy and Cartography (GUGiK)



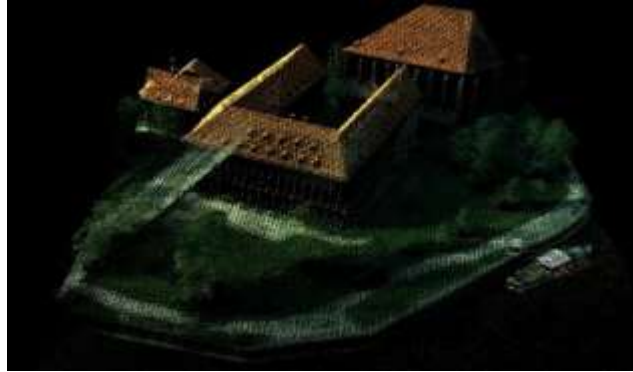
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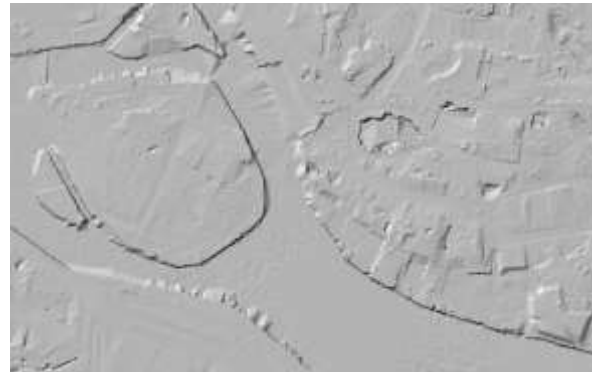
Providing of National Geodetic and Cartographic Resource



**ORTHOPHOTOMAPS/
AERIAL IMAGES**



LIDAR DATA



DEM



DSM



BDOT10k, BDOO



TOPOGRAPHIC MAPS



THEMATIC MAPS



GEODETIK NETWORK

500 TB, 5 000 000 FILES



All data is available at geoportal.gov.pl - via network services



The Geoportal is a primary tool to access the spatial data sets and services provided by GUGiK and many other public institutions.

It allows unprecedented integration and analysis of spatial data from many local, regional and central level organisations covering entire Poland.

The screenshot displays the homepage of the Geoportal. At the top, there is a navigation bar with the following links: Home, About Geoportal, Data, Services, Applications, Registers, Geodetic service, Help, Contact, and Newsletter. The main content area features a 'News' section with two articles. The first article, dated 08.09.2022, is titled 'Profesjonalna służba geodezyjna i kartograficzna w rozwoju województwa kujawsko-pomorskiego' and describes a training session held in Wądzyn. The second article, also dated 08.09.2022, is titled 'Podpisano umowy na aktualizację BDOT10k' and reports on the signing of contracts for the update of the BDOT10k database. On the right side of the page, there are several promotional banners: 'National Geoportal', 'Geoportal 3D', 'INSPIRE Geoportal', 'CAPAP resources', and 'Portal PZGiK (zakup danych on-line)'. The website logo 'geoportal.gov.pl' is prominently displayed at the top left of the page content.

Not only data but many useful analysis

geoportal.gov.pl

FILE VIEW ANALYSIS DOWNLOAD DATA SEARCHES

National geoportal

eng YouTube

Map contents

Surface visibility

Rysuj

Promień: 512,99 m

Wysokość obserwatora względem terenu: 1,70 m

Liczba kierunków: 72

Przelicz

Zapisz (txt) Zapisz (shp)

Map coordinate system 1992 (EPSG 2180) X: 319660.75 Y: 520757.52 N: 50°44'36.76" E: 19°17'39.44" Current scale 1:5000

Use of photogrammetric data



Crisis management

Environmental protection

Monitoring of changes

Real Estate market

Investments

Spatial planning

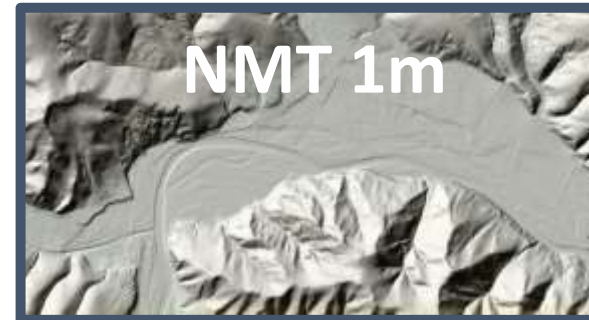
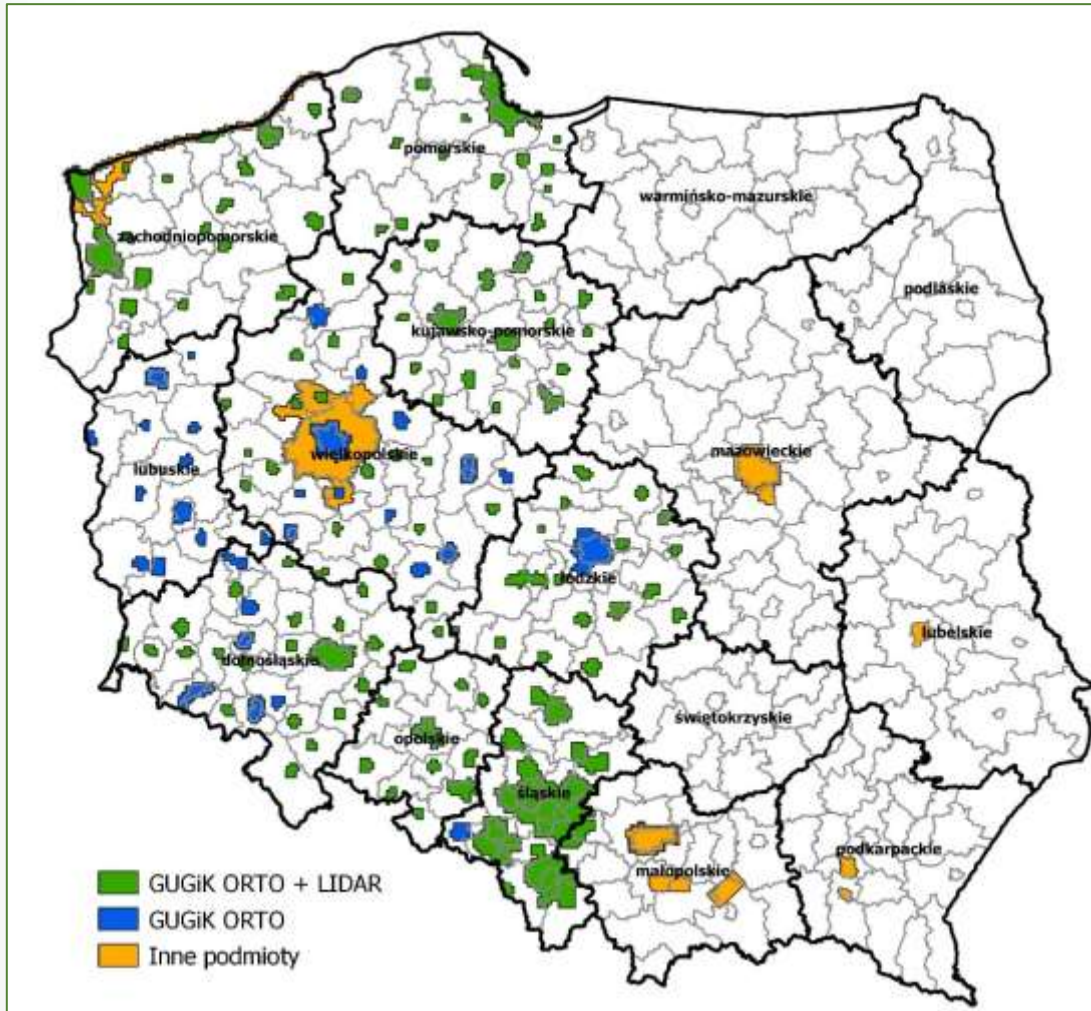
Architectural inventory

Public administration

Geodesy

And more...













2022 – High resolution data for cities

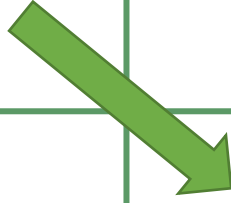
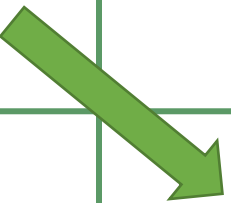


GUGiK		INNE PODMIOTY
ORTO + LIDAR	ORTO	ORTO + LIDAR
14 543 km ²	3 898 km ²	8 093 km ²

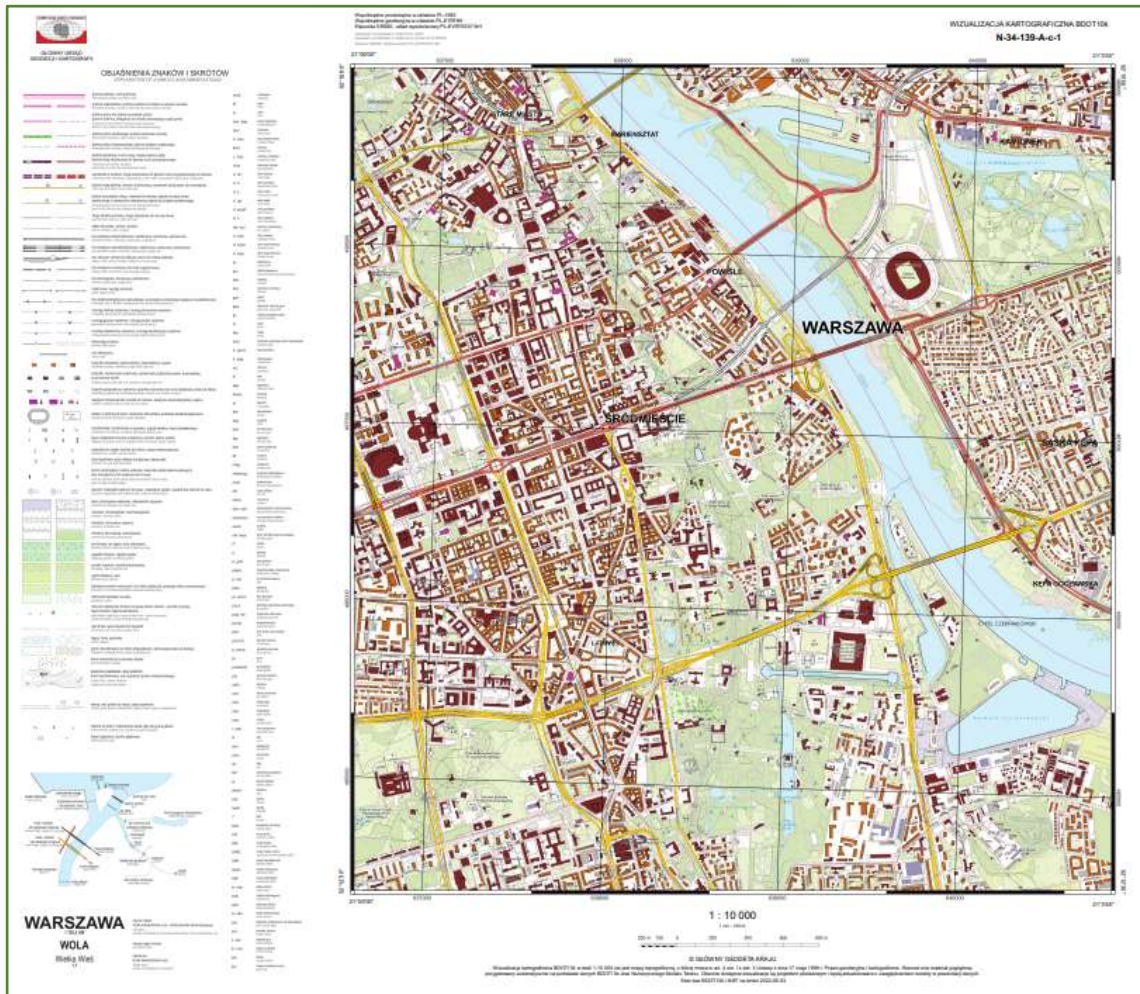


Plans for data acquisition

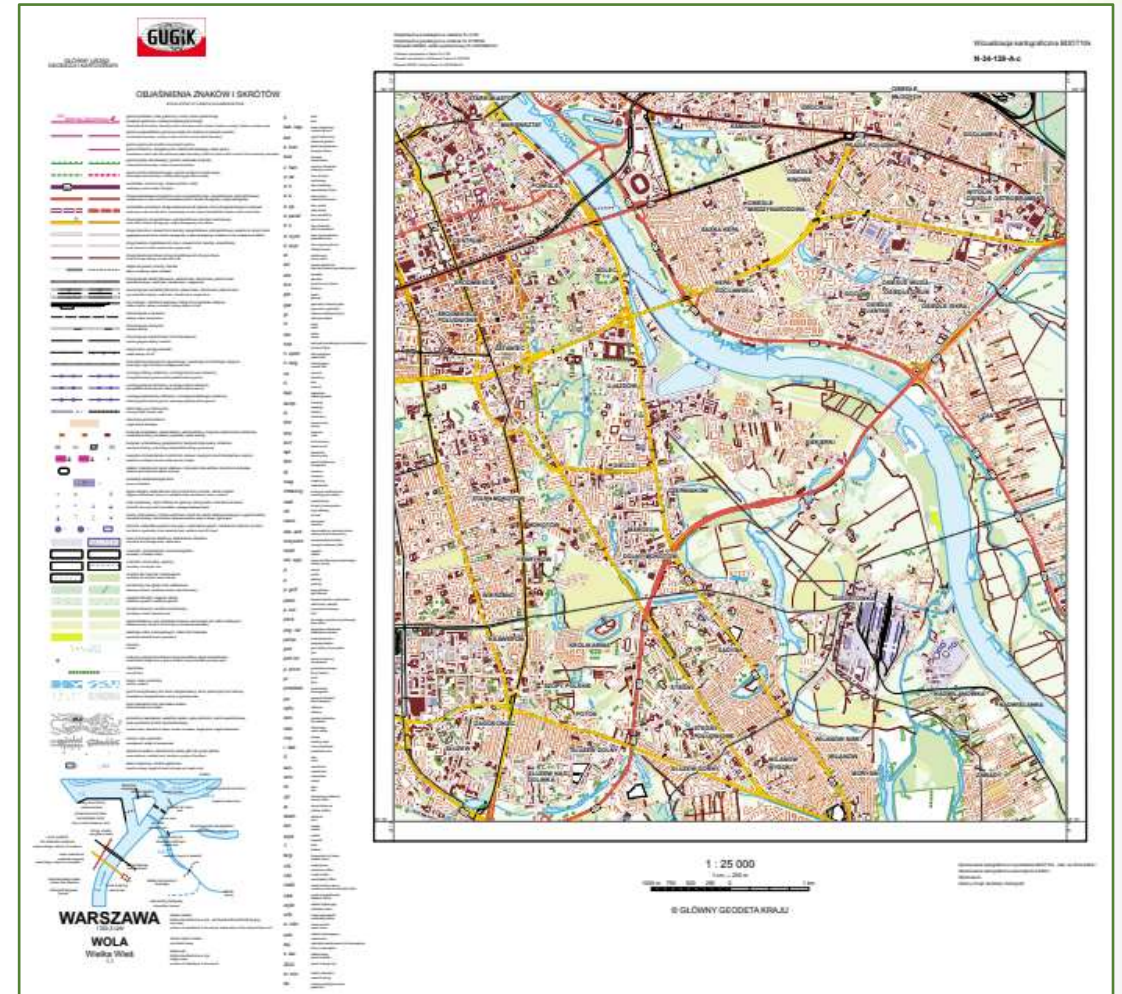
	2023	2024	2025
LIDAR 			
ORTOPHOTOMAP 			
BDOT10k 			



Cartographic visualization - BDOT10k

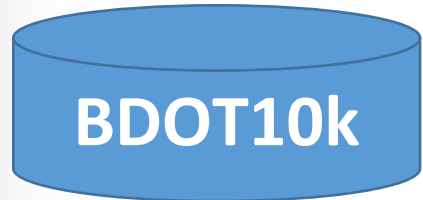


SCALE 1:10 000



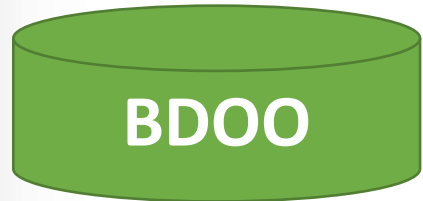
SCALE 1:25 000

BDOO – automatic production in 2022



BDOT10k

Scale 1:10 000



BDOO

Scale 1:250 000

The screenshot shows the geoportal.gov.pl website with a map of the Warsaw region. A pop-up window titled "Dane do pobrania BDOO" (Data for BDOO download) is displayed, listing download links for the Mazowieckie voivodeship for the years 2022, 2021, and 2015, as well as national data packages for the same years. The map interface includes a legend on the right side with various layers like "Baza Danych Obiektów Ogólnogeogr" and "Państwo". The status bar at the bottom indicates the map's coordinate system (EPSG 2180) and current scale (1:500000).

3D building models LoD1 – automatic process 2022



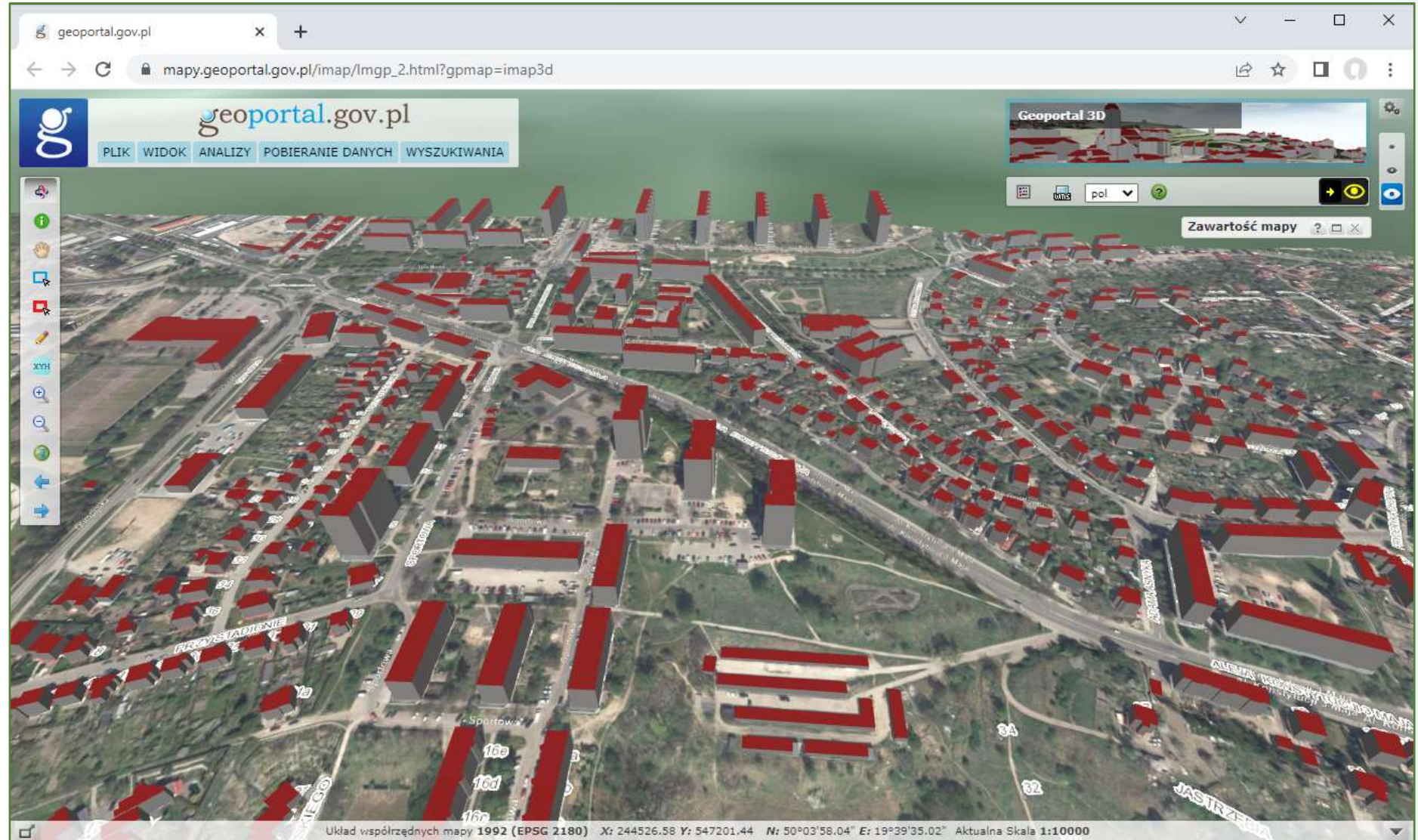
BDOT10k



LIDAR



NMT



New Quasi-geoid model PL-geoid2021

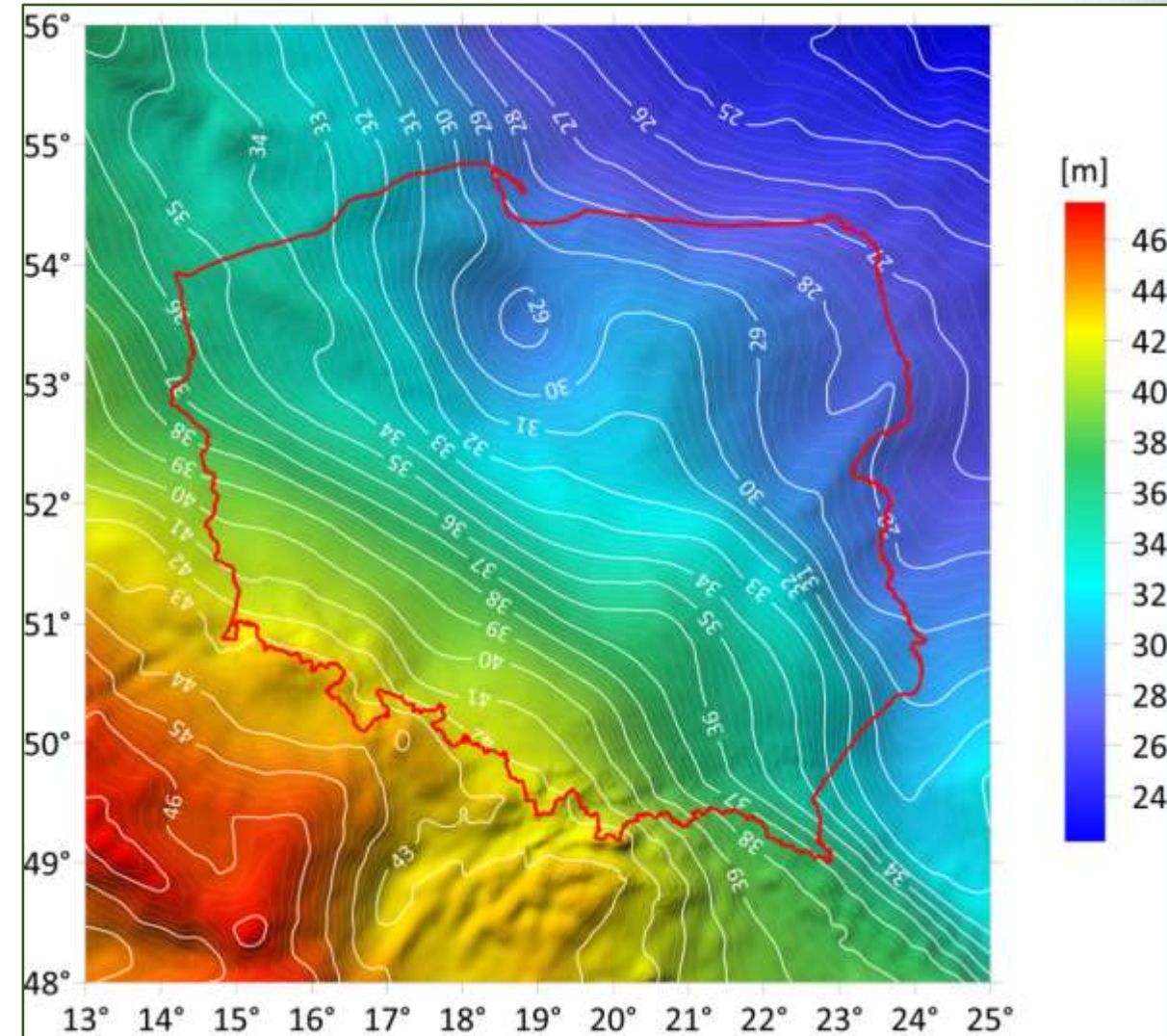


Developed by method:

✓ **GGI** - Geophysical Gravity Inversion

The following were used for the study:

- ✓ global model of the geopotential SGG-UGM-2
- ✓ gravimetric data available
- ✓ digital terrain model of the SRTM V 4.1. (3 ")



ASG-EUPOS - development of the system



New stations of ASG-EUPOS:

- ✓ Kołobrzeg (KLBG), Braniewo (BRWO), Końskie (KSKE) i Oleśnica (OLES) – 4 new stations in 2022 r.
- ✓ Included in the network, possible RTN and RTK corrections based on these stations.

Planned development of the ASG-EUPOS system:

- ✓ 14 new stations: Wicko (WCKO), Gołdap (GLDP), Pisz (PISZ), Wągrowiec (WAGR), Inowrocław (INOW), Osiek (OSEK), Słupno (SLUP), Siemiatycze (STCE), Terespol (TRSP), Radzyń Podlaski (RDZP), Zamość (ZAMO), Bolesławiec (BOLE), Głubczyce (GLUB), Oświęcim (OSWM).
- ✓ Stabilization of eccentric points for stations and their inclusion in the basic vertical geodetic network with measurements as part of the 5th levelling campaign.



Administrative division in Poland

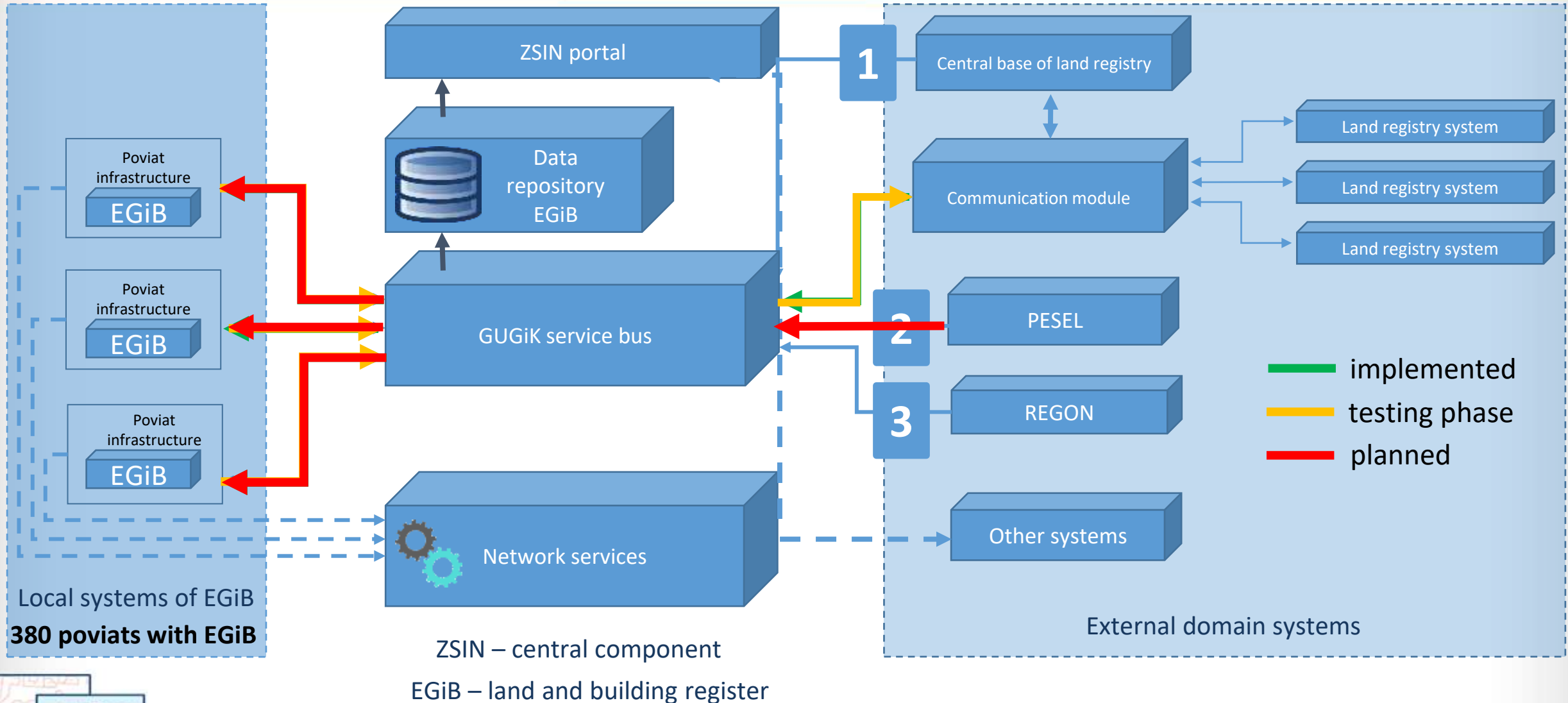


16 voivodships

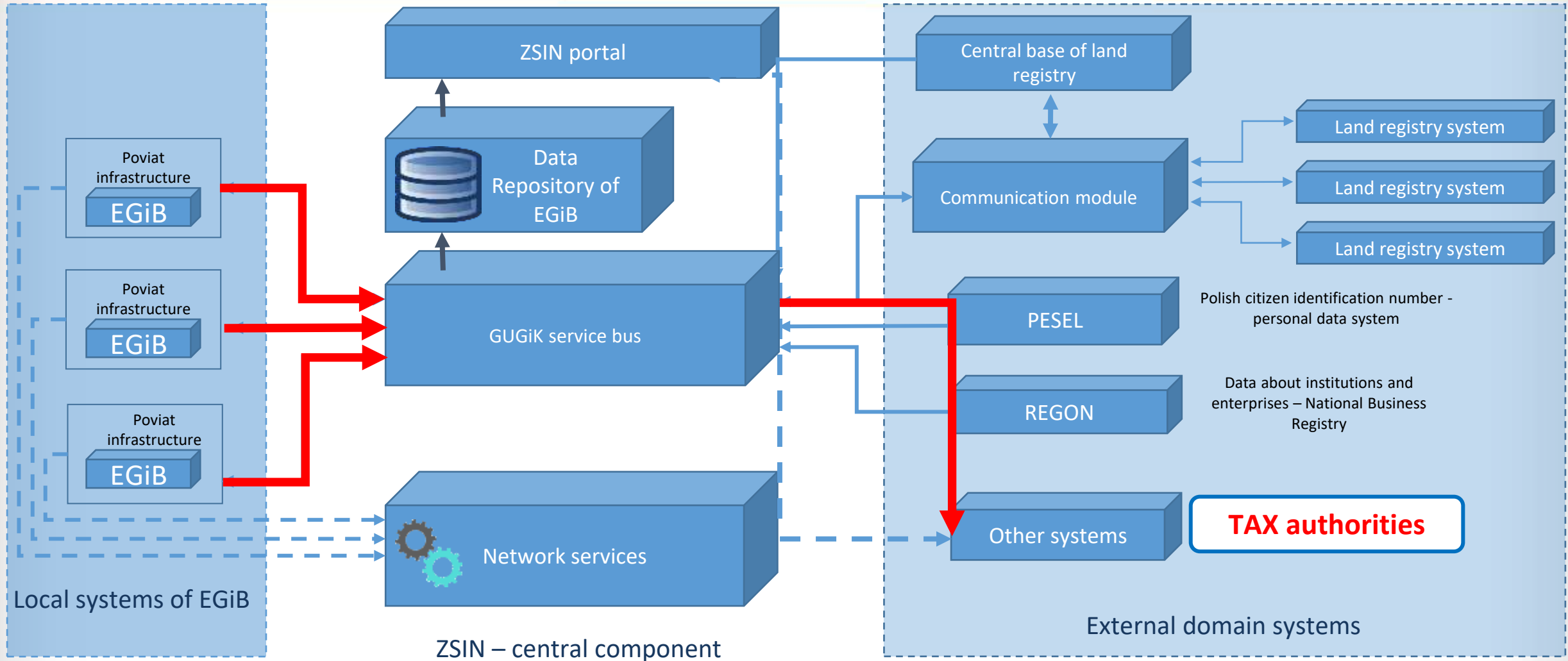
380 poviats



Cadastral system – new architecture



Cadastral system – new architecture



Geospatial World Awards 2021 for GUGiK in the SDI



The award was granted in the "Spatial Data Infrastructure" category for facilitating access to official spatial data using the www.geoportal.gov.pl service and for releasing a significant part of spatial data to promote their popularization in society and increase the level of use.



XXVII FIG CONGRESS 11-15 September 2022,

Warsaw

Thank you for your attention

Kind invitation to technical tour to Head Office of Geodesy and Cartography – Department of Geodesy, Cartography and GIS, on Tuesday, September 13th

<https://www.fig2022.symposium.pl/tour/head-office-of-geodesy-and-cartography>

