



European Location Services for cross-border cooperation and e-Government

Head Office of Geodesy and Cartography

Agenda



- Who we are?
- INSPIRE framework
- ELF Project
- Example of simple spatial service for Polish e-Government - Geoportals API
- Summary





Who we are?



- **Head Office of Geodesy and Cartography (GUGiK) is Polish National Mapping and Cadastral Authority (NMCA)**
- **Is a Polish counterpart of Czech State Administration of Land Surveying and Cadastre (ČÚZK)**

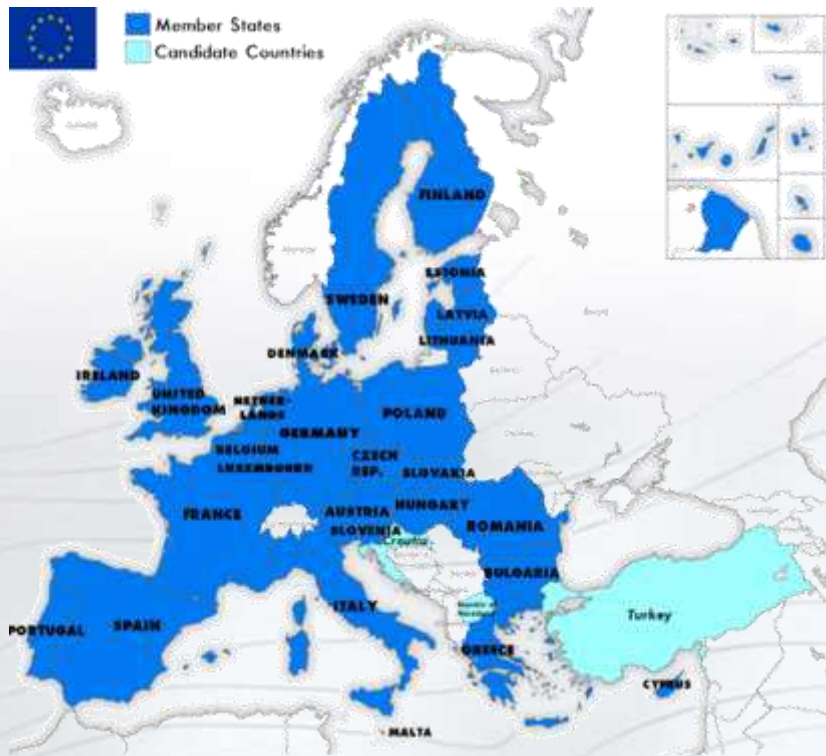


INSPIRE framework (1)



INSPIRE Initiative of European Union Countries

INSPIRE Directive of 14th March 2007





**Directive 2007/2/EC of the European Parliament and of the Council
of 14 March 2007
establishing an Infrastructure for Spatial Information in the European
Community INSPIRE**

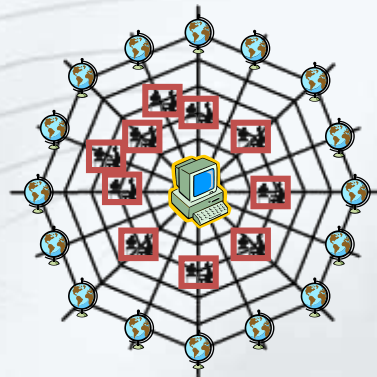


- **Goal:** facilitation of access to spatial information and reduction of costs of data acquisition
- **Idea:** **interoperability** – possibility to combine spatial datasets and network services
- **Recipient:** public administration
- **Target users :** public administration, business and citizens



INSPIRE establishes building blocks essential for every spatial data infrastructure to work. These building blocks include:

- datasets – containing relevant spatial aspects of surrounding world,
- services – publishing datasets,
- metadata – describing content of both datasets and services to facilitate search of spatial content



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All of INSPIRE building blocks are standardized to minimize workload required to find and reuse resources published by different organizations in different countries

The very same principles defined by INSPIRE can be also utilized for publication of national spatial data





As an Polish NMCA we have adopted INSPIRE principles. We have:

- 86 view services: 65 WMS, 21 WMTS
- 62 download services: 22 WFS, 6 WCS, 34 ATOM
- around 50 other services

publically available on maps.geoportal.gov.pl, providing all kinds of datasets.

Altogether we publish approximately 32 TB of data.

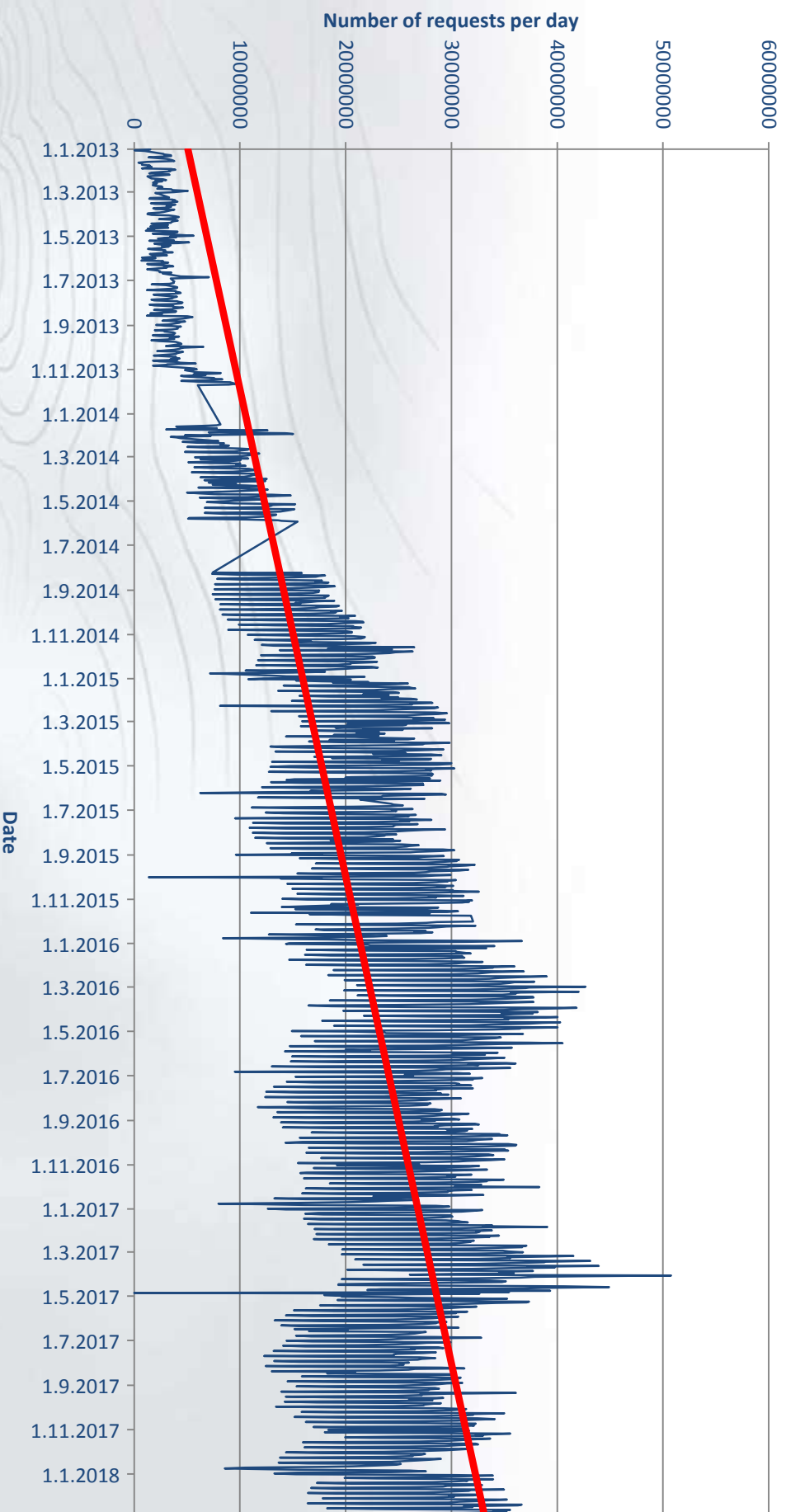




Statistics on national geoportals (1)



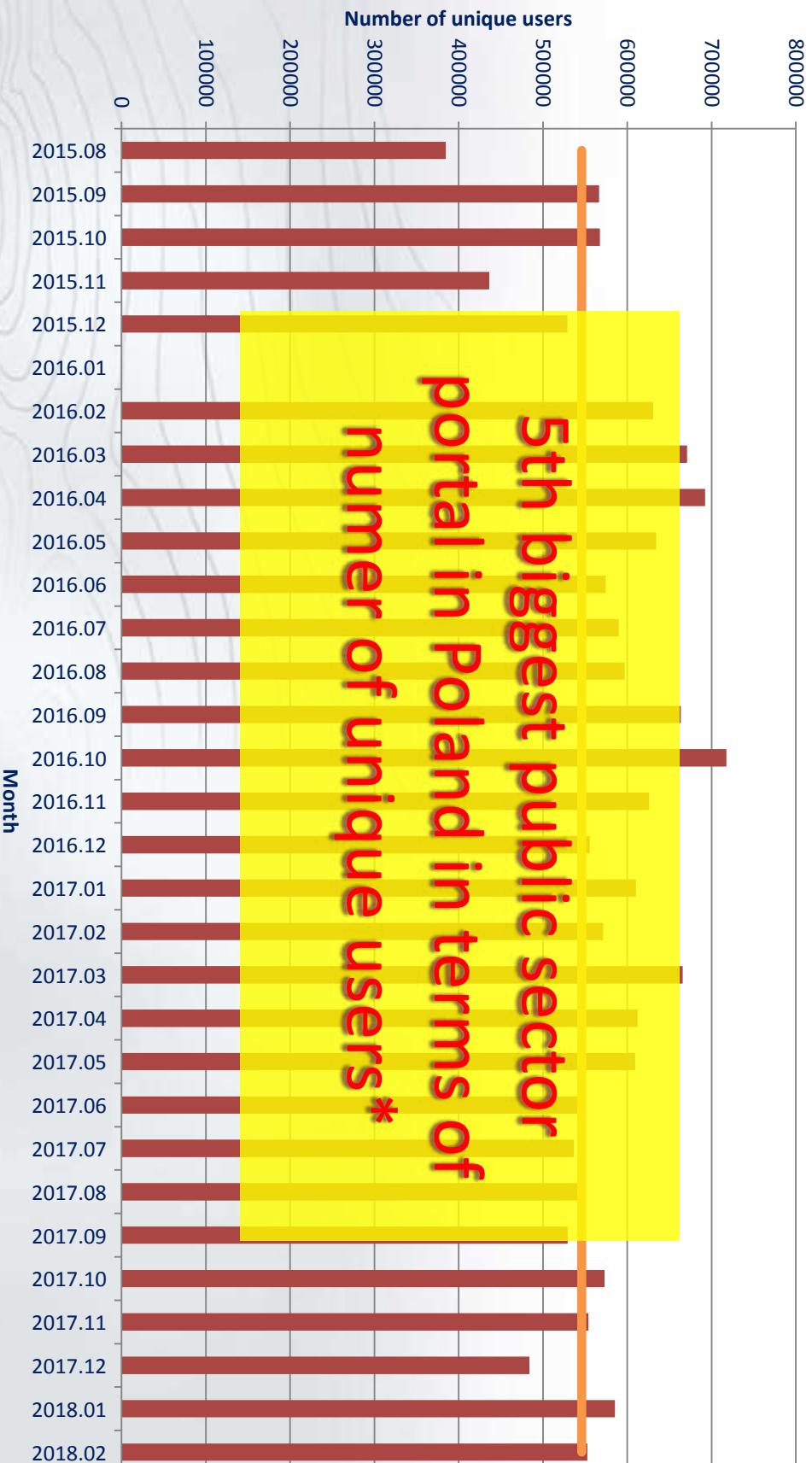
Number of daily request



Statistics on national geoportals (2)



Number of monthly users

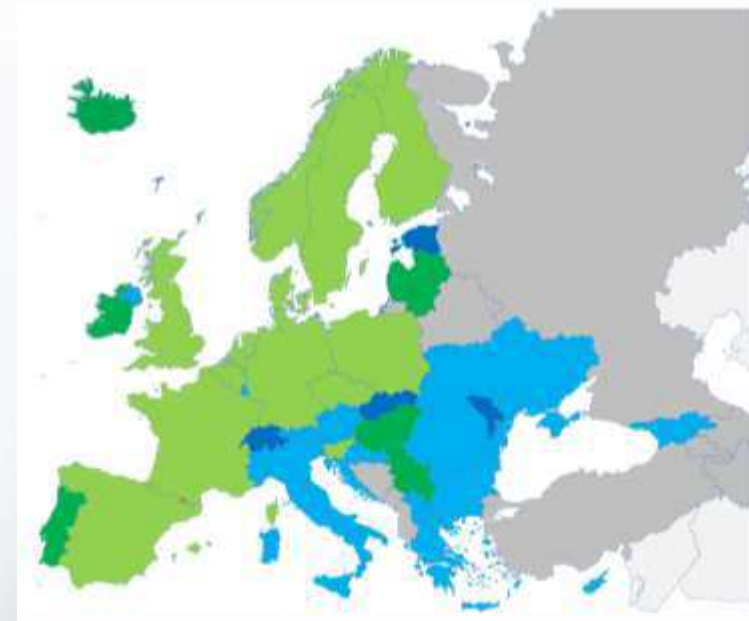


* According to <https://widok.gov.pl/statistics/>

European Location Framework Project (ELF) (1)



- Project involved significant part of European National Mapping and Cadastral Authorities
- <http://www.elfproject.eu/>
- The project was a proof of concept for INSPIRE
- Czech-Polish cluster has been established



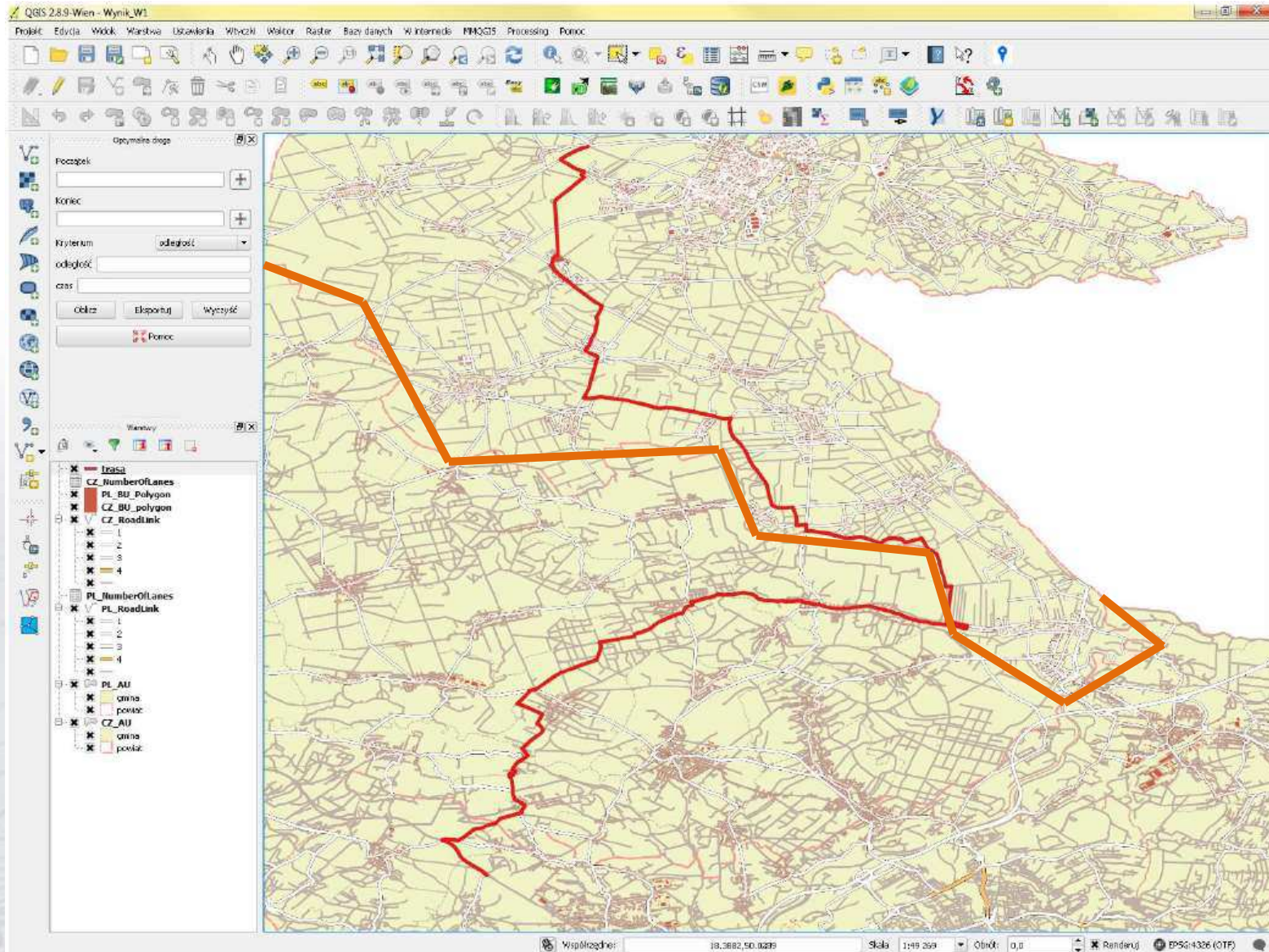


Workshop in Kraków

- Goal of the workshop was to provide a map with an optimal route for a truck transporting hazardous materials (hazmat) from Polish Racibórz to Czech Ostrava avoiding build-up areas
- Workshop's attendees worked on the data downloaded using INSPIRE/ELF services



European Location Framework Project (ELF) (3)





We have noticed that for some stakeholders it is difficult to integrate with our INSPIRE services because of:

- **Significant part of IT specialist integrating with our services are not GIS specialists**
- **Competition like Google, Bing, Open Street Map**
- **Time of developers is expensive**
- **License restrictions**



What we need is:

- Services/applications with simple APIs
- Standardised but not „spatial” interfaces like SOAP, REST
- Simplified data models
- Popular, non-spatial data exchange formats; XML, JSON instead GML
- Eye catching and simple map compositions
- Simple licensing, open data

API service (1)



- Presentation of users' business objects using state, official spatial data as a background
- Additional functionalities allow to:
 - Create private and public map compositions
 - Create, update and delete business objects using GUI
 - Define own markers
 - Define clusters of objects
 - Connect external WMS, WMTS services
- Online documentation
<http://mapy.geoportal.gov.pl/iMapLite/doc/>

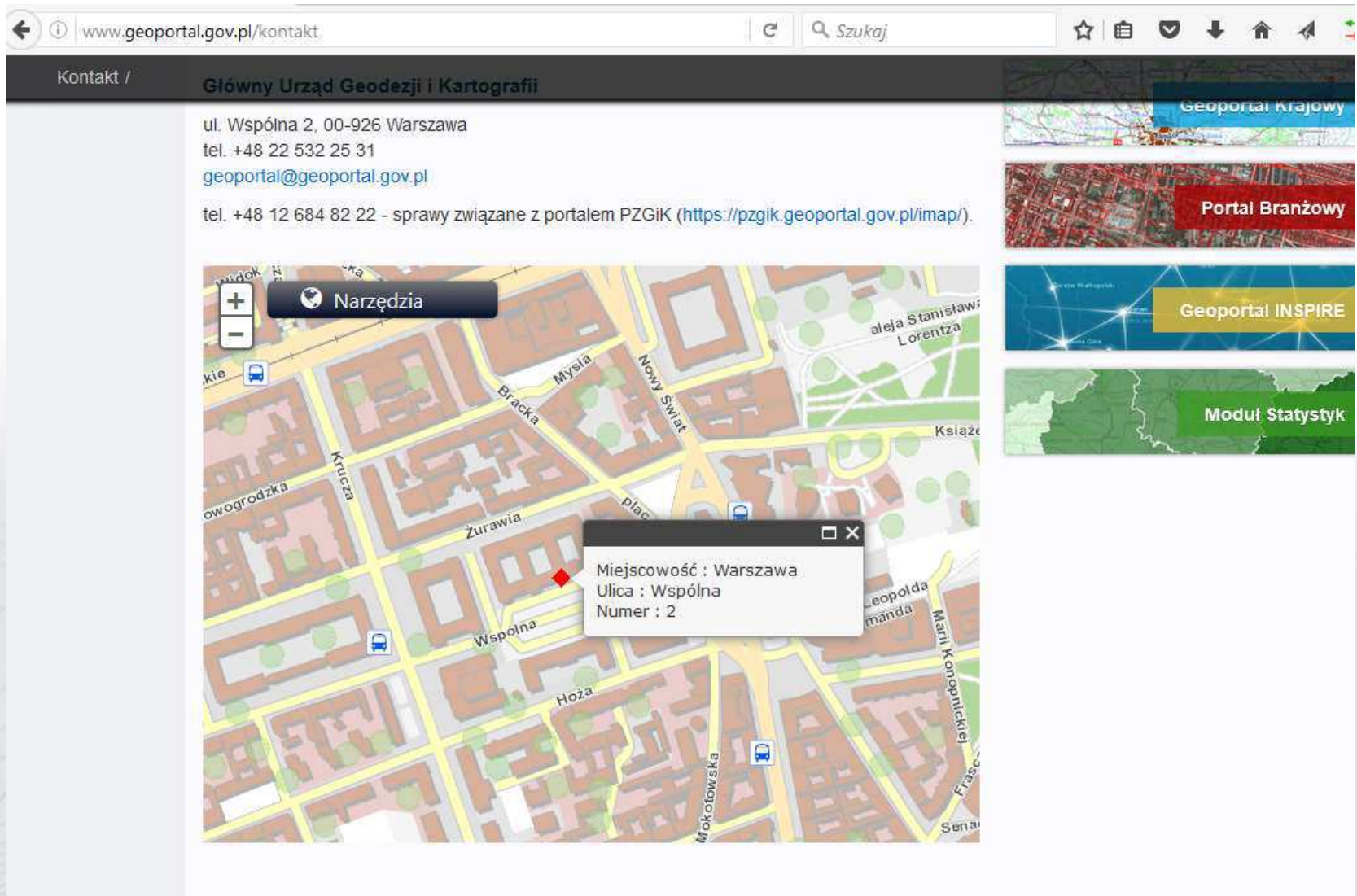
API service (2)



www.geoportal.gov.pl/kontakt

Kontakt / **Główny Urząd Geodezji i Kartografii**

ul. Wspólna 2, 00-926 Warszawa
tel. +48 22 532 25 31
geoportal@geoportal.gov.pl
tel. +48 12 684 82 22 - sprawy związane z portalem PZGiK (<https://pzgik.geoportal.gov.pl/imap/>).



Narzędzia

Geoportale Krajowy

Portal Branżowy

Geoportale INSPIRE

Moduł Statystyk

Miejscowość : Warszawa
Ulica : Wspólna
Numer : 2



API service (3)



Use cases

- Ministry of Entrepreneurship and Technology
<https://www.biznes.gov.pl/>
- The General Office of Building Control
<http://wyszukiwarka.gunb.gov.pl/mapa-api/>
- Ministry of Justice
- Directorate for National Roads and Motorways
<https://kpd.gddkia.gov.pl>
- Polish Television
<https://play.google.com/store/apps/details?id=pl.tvp.komunikaty>
- Police
<https://mapy.geoportal.gov.pl/iMapLite/KMZBPublic.html>
- Others



Point of Single Contact
businessinpoland.gov.pl



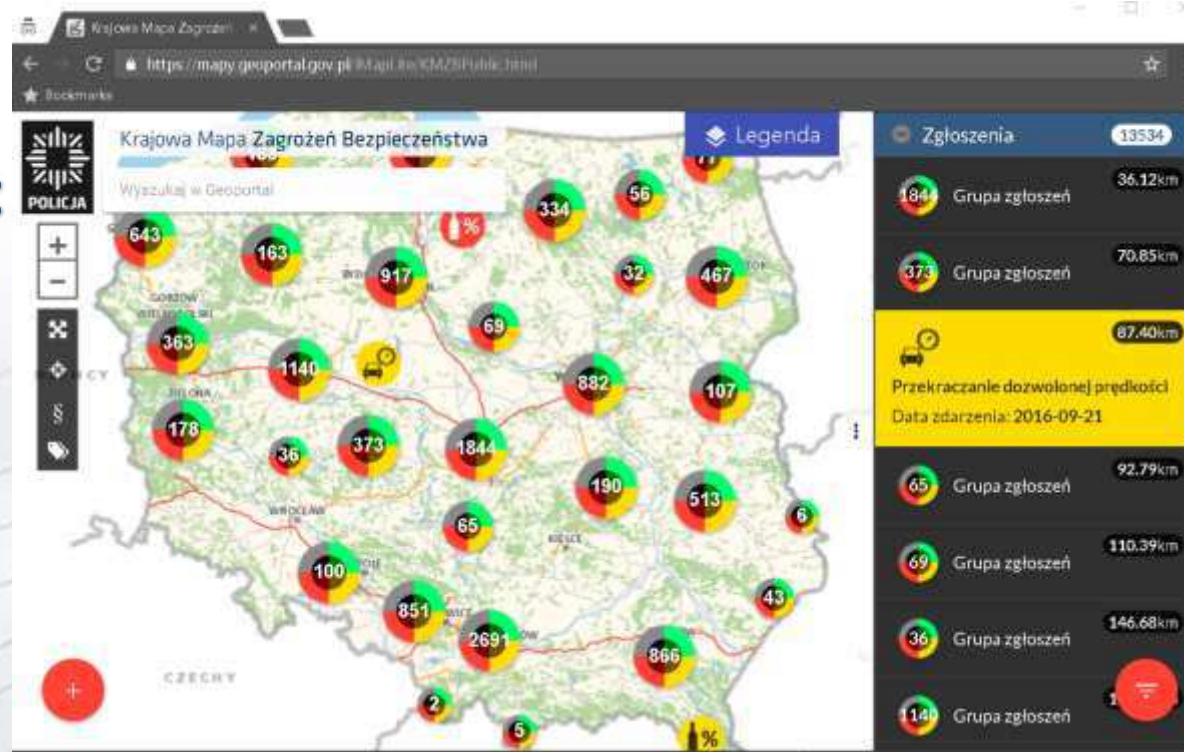
POLICJA

National Security Map (1)



<https://mapy.geoportal.gov.pl/iMapLite/KMZBPublic.html>

- Portal that allows people to report online location of: minor criminal offences and potentially dangerous sites



National Security Map (2)



Reported crimes

- Act of vandalism
- Illegal rubbish dump
- Pouching
- Illegal clearance of trees
- Illegal car race
- Incorrect car parking
- Damaged greenery
- Quad race in forest
- Exceeding speed limit
- Public drinking
- Burning up grass
- Cruelty to animals
- Beggary



National Security Map (3)



Reported potentially dangerous situation

- Homeless people
- Unlisted swimming area
- Grouping area of adolescents endangered by demoralization
- Dangerous location on waters
- Unprotected railway pedestrian crossing
- Unprotected grade crossing
- Damaged road infrastructure
- Drowning
- Drugs abuse
- Homeless dog
- Collision with wild animal
- Traffic organisation problem



National Security Map (4)



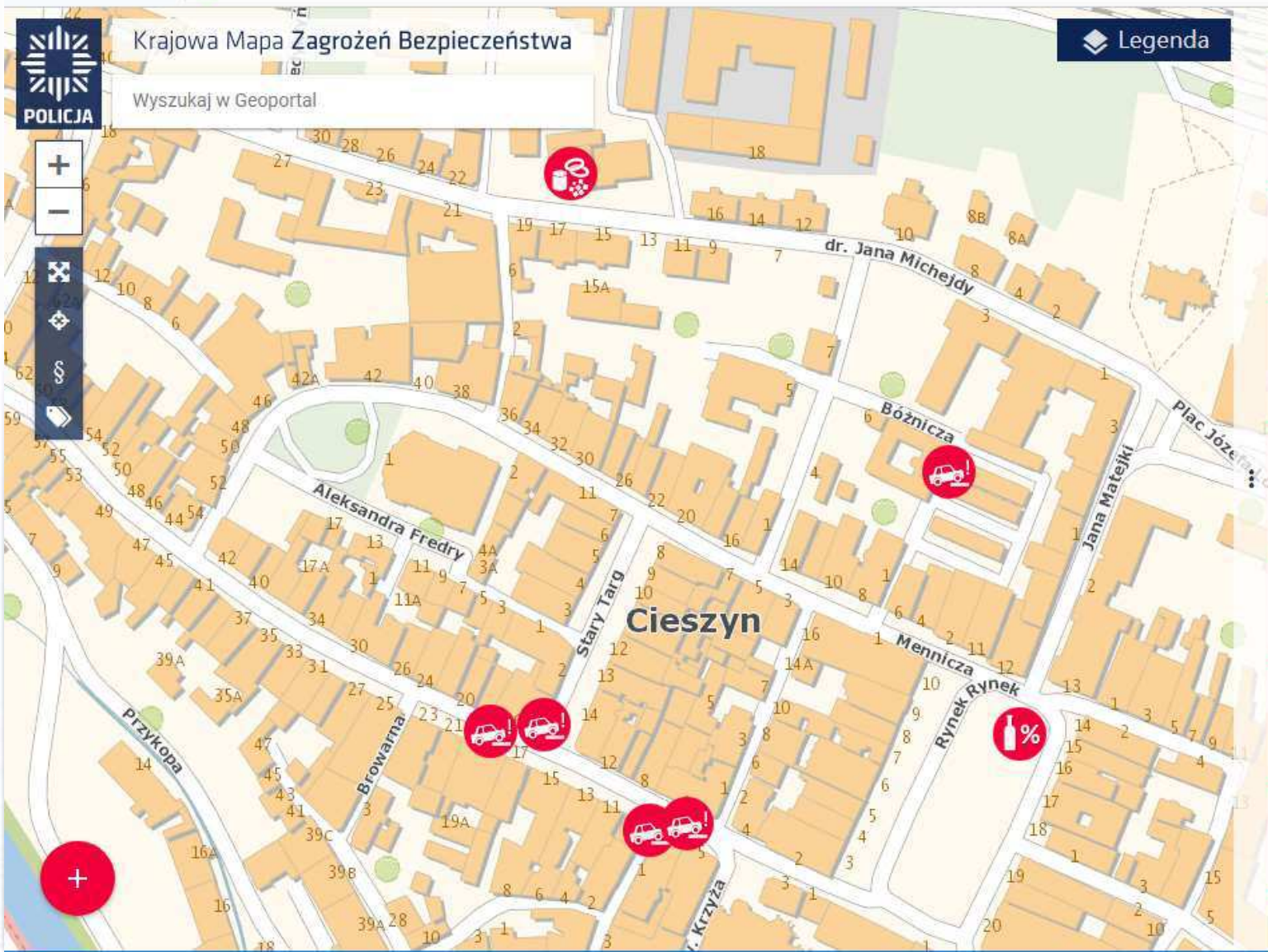
mapy.geoportal.gov.pl/iMapLite/KMZBPublic.html



Krajowa Mapa Zagrożeń Bezpieczeństwa

Wyszukaj w Geoportal

Legenda



Zgłoszenia 7

Spożywanie alkoholu w miejscach niedozwolonych
Data zdarzenia:

Nieprawidłowe parkowanie
Data zdarzenia: 2017-01-07 10:30

Nieprawidłowe parkowanie
Data zdarzenia:

Nieprawidłowe parkowanie
Data zdarzenia: 2017-09-12 20:06

Nieprawidłowe parkowanie
Data zdarzenia: 2017-09-14 14:59

Nieprawidłowe parkowanie
Data zdarzenia: 2017-09-23 12:13

Dzikie wysypiska śmieci
Data zdarzenia: 2018-03-

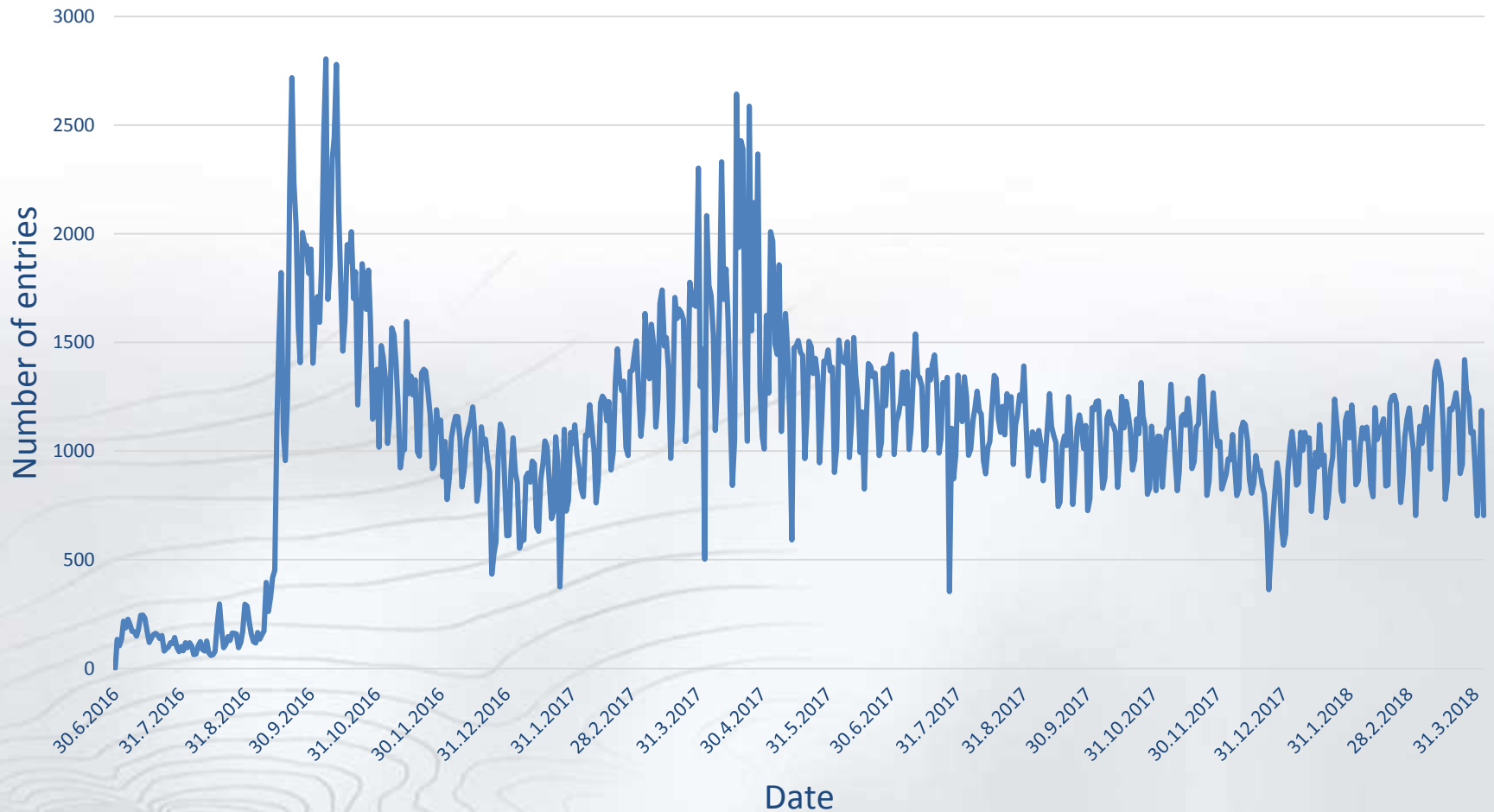




National Security Map - statistics



Number of daily entries





Why people use our services for e-Government?

- We are more predictable
 - people in OSM may cease their activities
 - Google may start charging for their services
- Reputational factor - public sector organisations tend to utilize tools/services provided by other public sector organisations
- We are part of public sector. Therefore, other public sector organisations can influence our activities
- Standard services require customization to meet a needs of public organizations. We have proved that we listen and that we are flexible



- Although „traditional” INSPIRE network services provide a lot of information they are considered by a large group of potential users as difficult to implement and as a result „not cool”
- At the same time we should develop the service to a wider audience which are:
 - Simpler
 - Utilizing standard „non-spatial” interfaces
 - Good looking
- We continue to follow such approach in our activities for example in project Spatial Analysis Centre of Public Administration (CAPAP)



Thank you for your attention

Questions?

www.geoportal.gov.pl

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