

Using the INSPIRE data in the Czech Republic

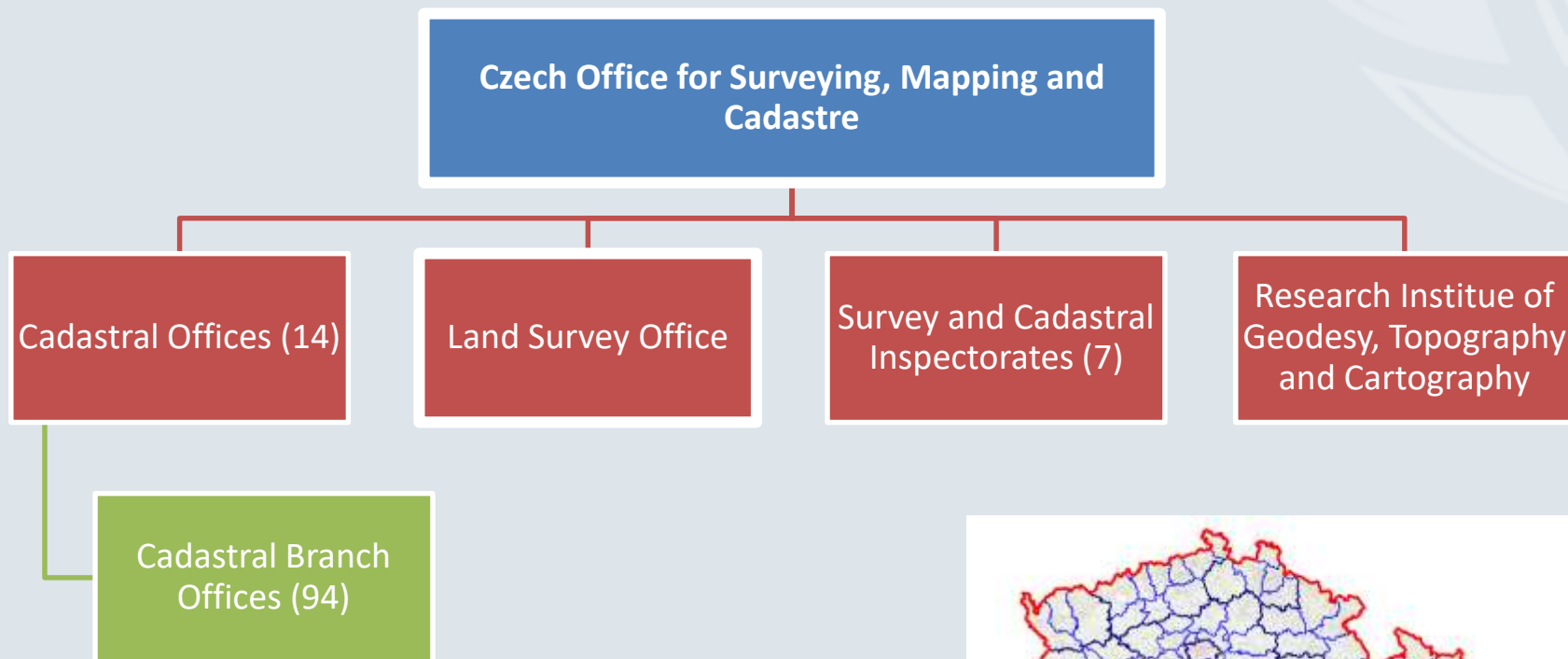
Ivana Svatá

ITC Department of Czech Offices for Surveying, Mapping and Cadastre

Agenda

- Role of ČÚZK branch in the INSPIRE implementation.
- What are we running and how we do it.
- Specific conditions for INSPIRE implementation at our office.
- Experience with running free services.
- Use-cases of the existing network services.

Branch Organizational Chart



Source Information Systems for specific INSPIRE themes



Czech Office for Surveying, Mapping and Cadastre (ČÚZK)

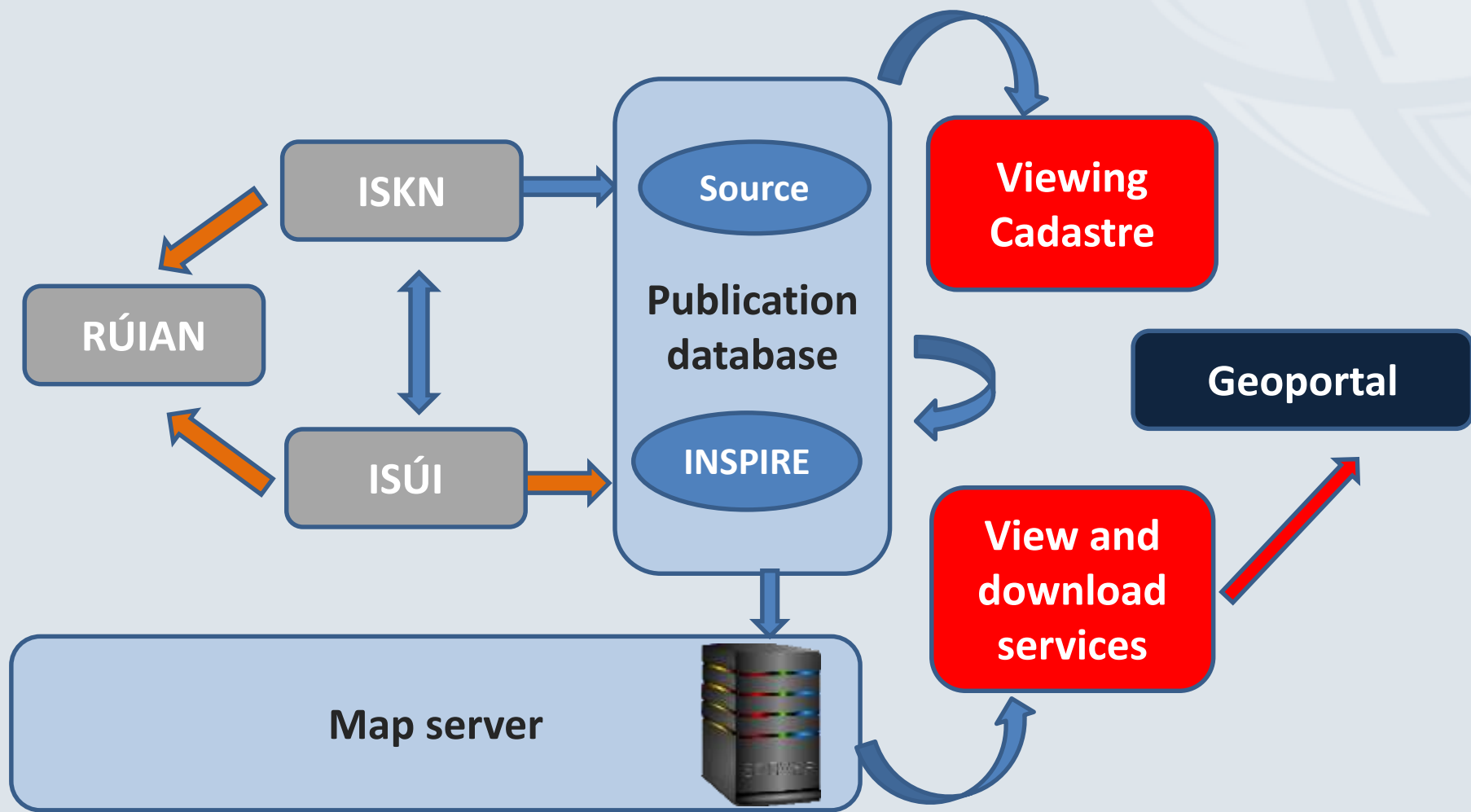
- Information System of Cadastre of Real Estates (ISKN)
- Basic Register of Territorial Identification, Addresses and Real Estates (RÚIAN)



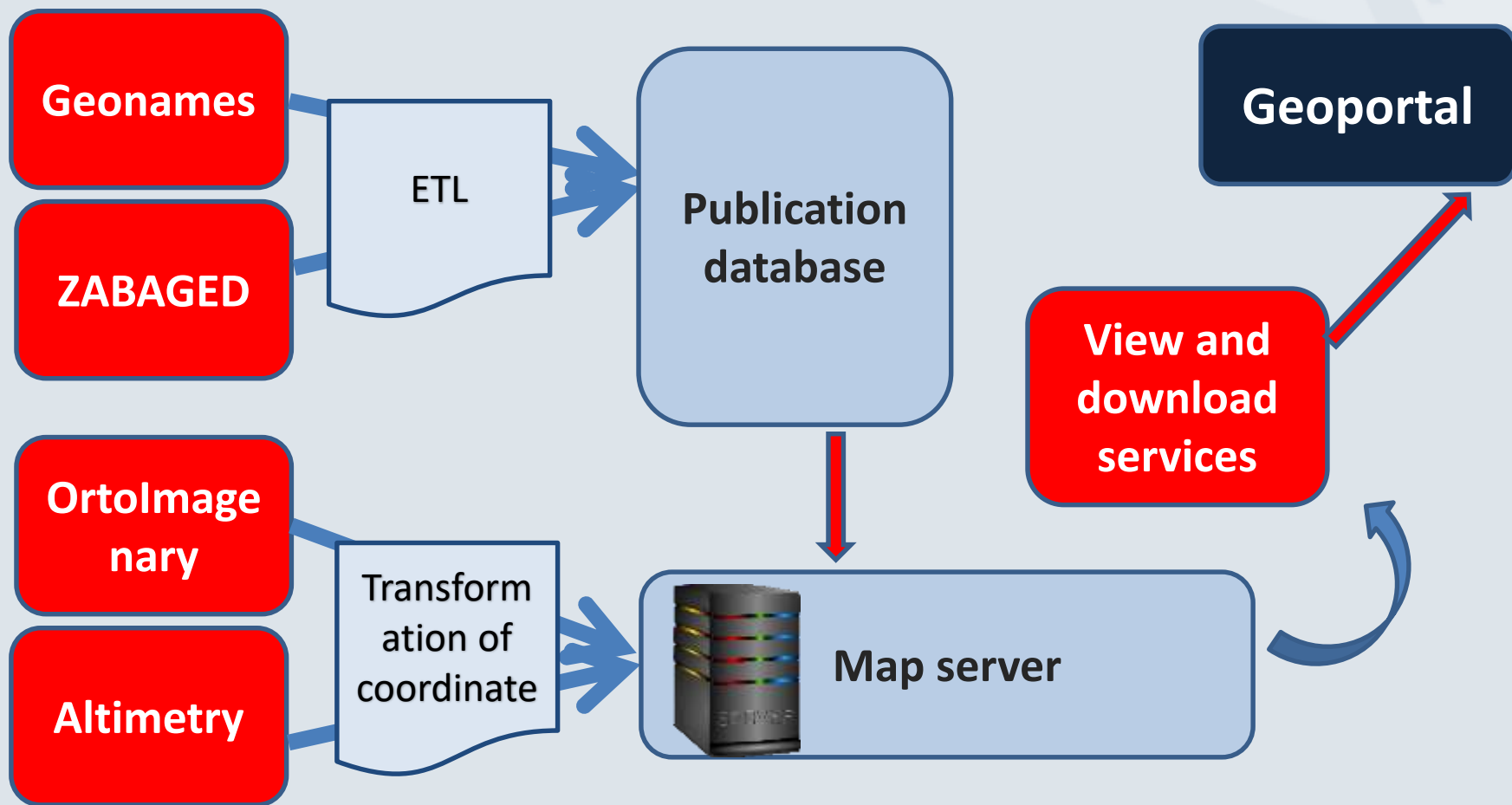
Land Survey Office (ZÚ)

- Geodetic control
- The Fundamental Base of Geographic Data (ZABAGED®)
- Altimetry of the Czech Republic (ZABAGED®)
- Database of geographic names (Geonames)
- Ortophotographic Representation of the Czech Republic

Workflow – INSPIRE – CUZK



Workflow – INSPIRE – ZU



Data sharing

- Data are provided by
 - Without any restriction, in computer-reading format as Opendata
 - On base license with fee
- Special type of license is used for national bodies and their state-funded institution, services are for free.

Side Effects of the publishing

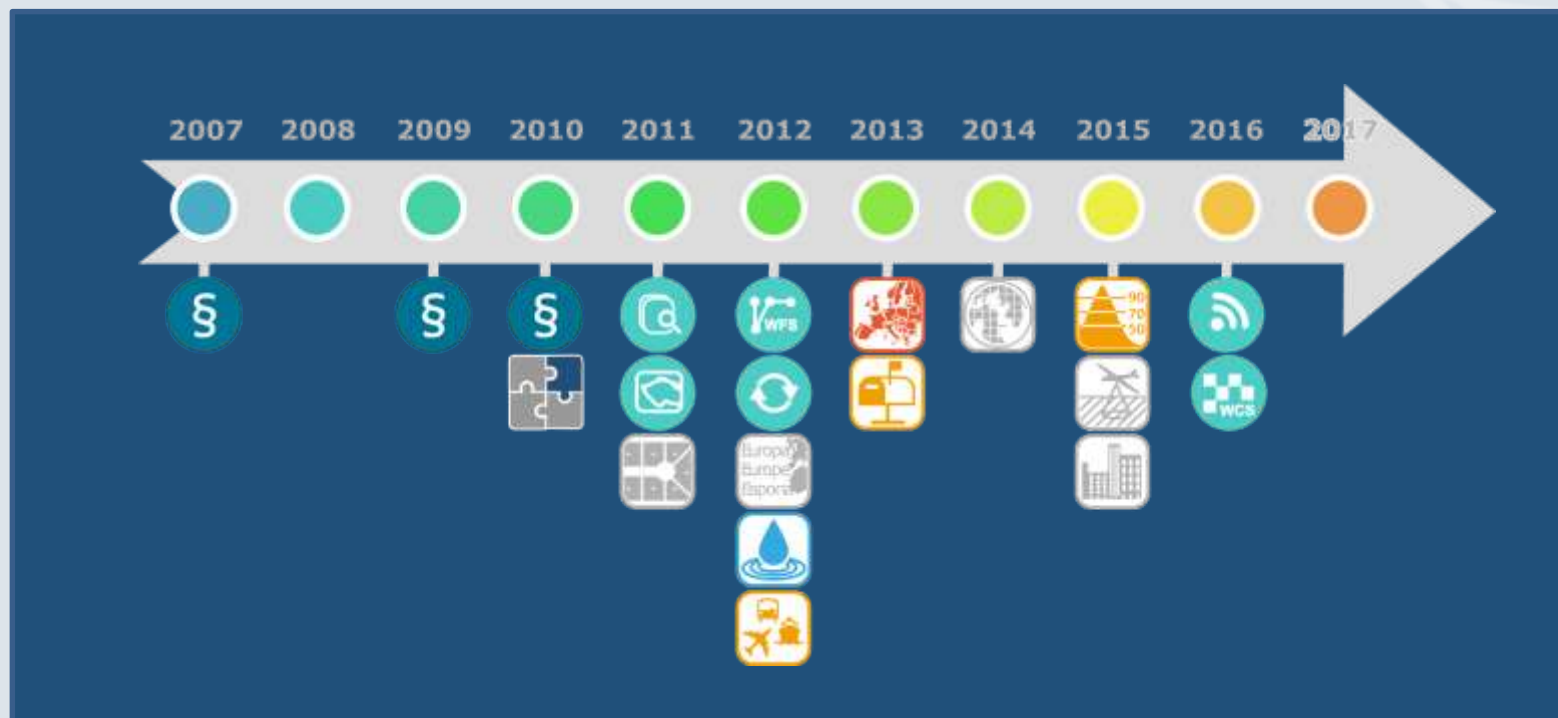
Bright side:

- On-line services (especially WMS) are used by a number of applications (both internal and external)
- As no registration is required, they are „easy to use“

Dark side:

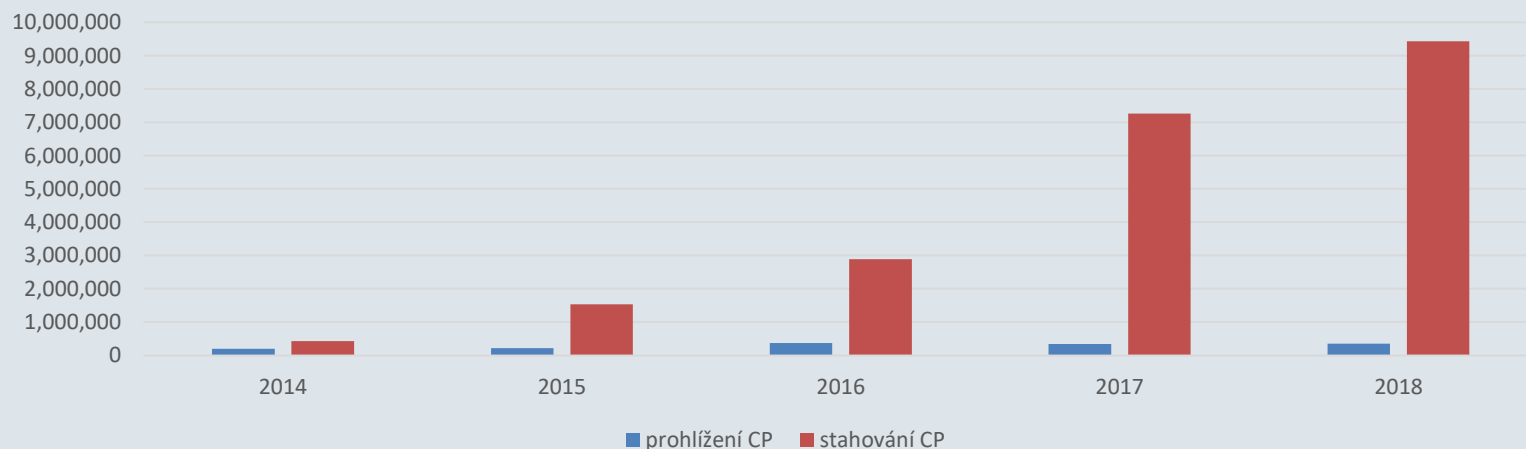
- It is not possible to guarantee availability and responses for free services and applications
- Most of our users are anonymous
- Difficulties with edge-matching on the state borders

What Are We Running



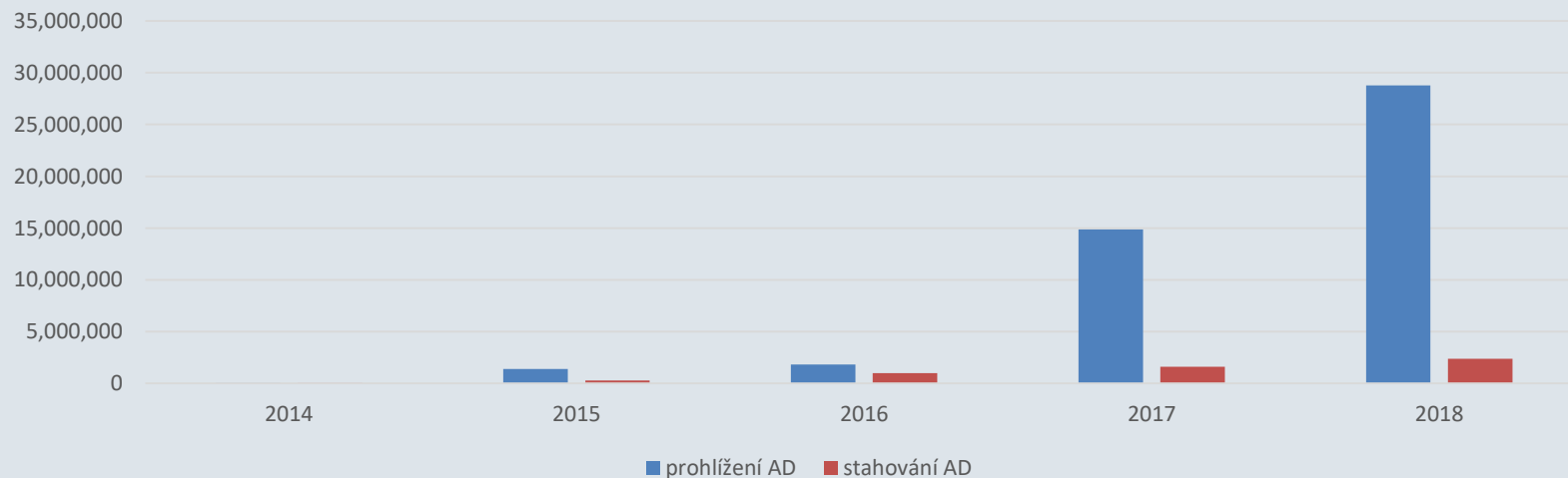
Use of data CP – national data exist

- National service has been provided since 2008
- Harmonize CP services started in 2012
- Number use of harmonized services for theme cadastral parcels is almost 10 milion queries per year, it is around 1% of general national service
- We are preparing extension of dataset CPX



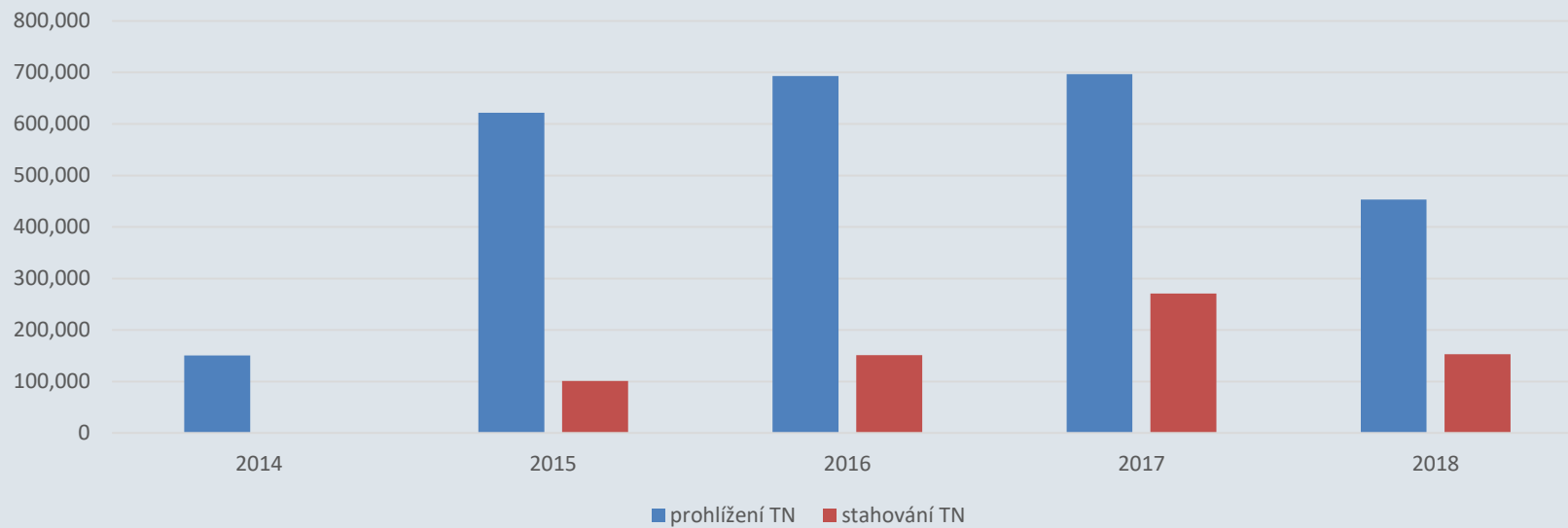
Use of data AD – national data don't exist

- Dataset is part of Registr of Administrative Units, Addresses and Estates, which was getting to operated in 2012, belong to term of Two years adoption
- Services of register have been created as harmonized since beginning
- Numbers of requiriments to the services is around 30 milion per year

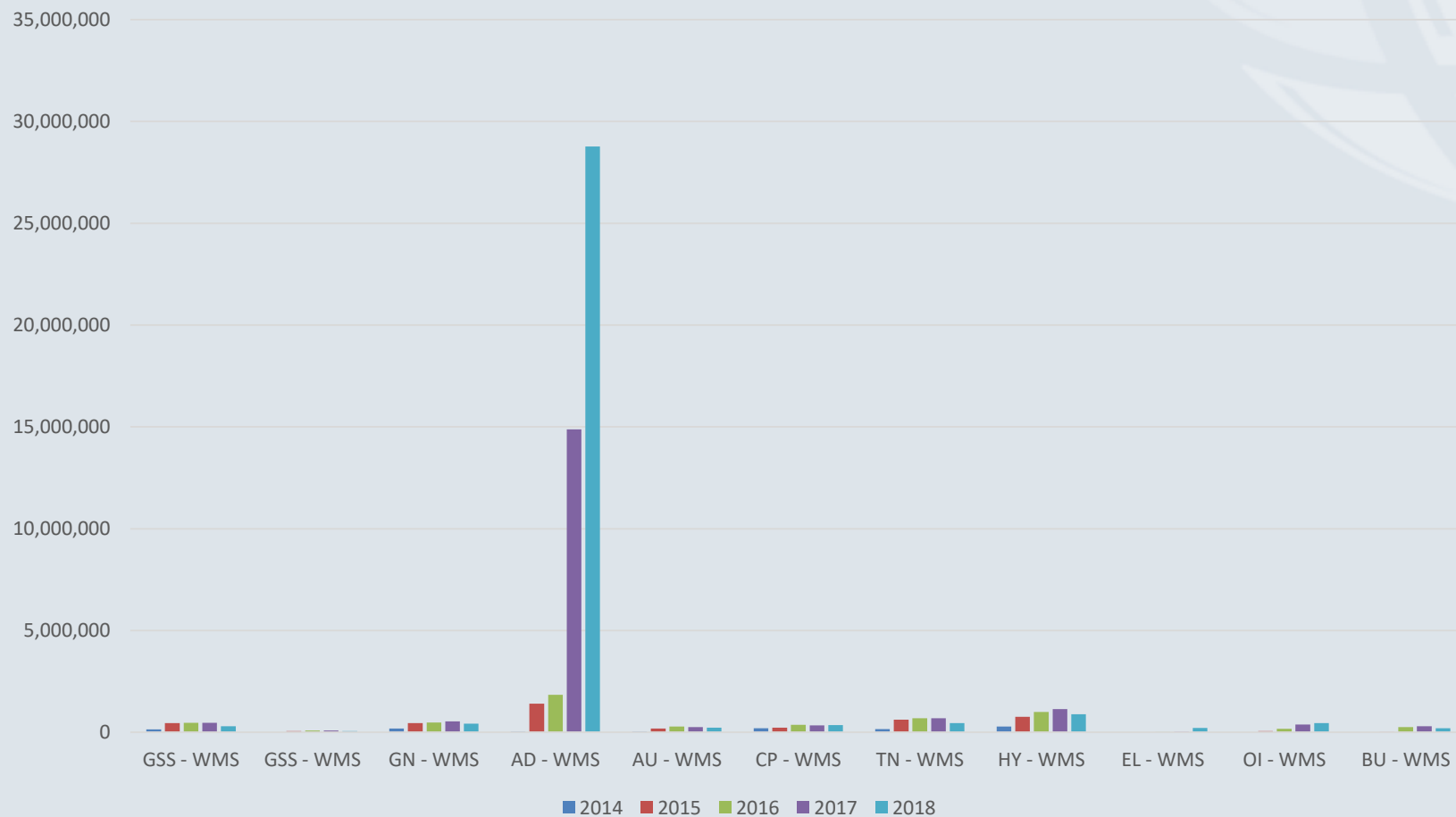


Use of Transport Network licenced data

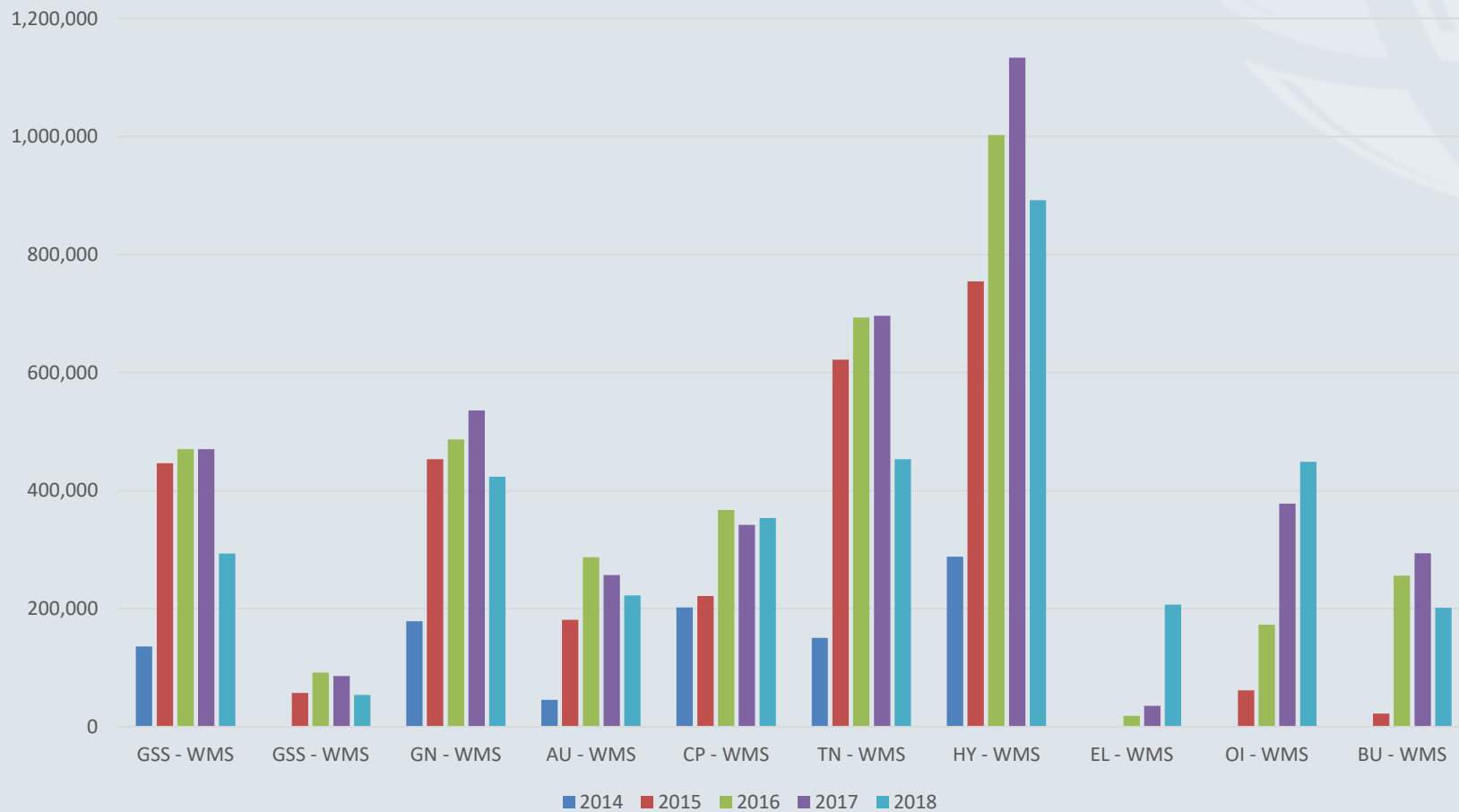
- Datasets are part of base map of the Czech Republic
- National services exist
- This datasets are licensed, only for national bodies are without fee



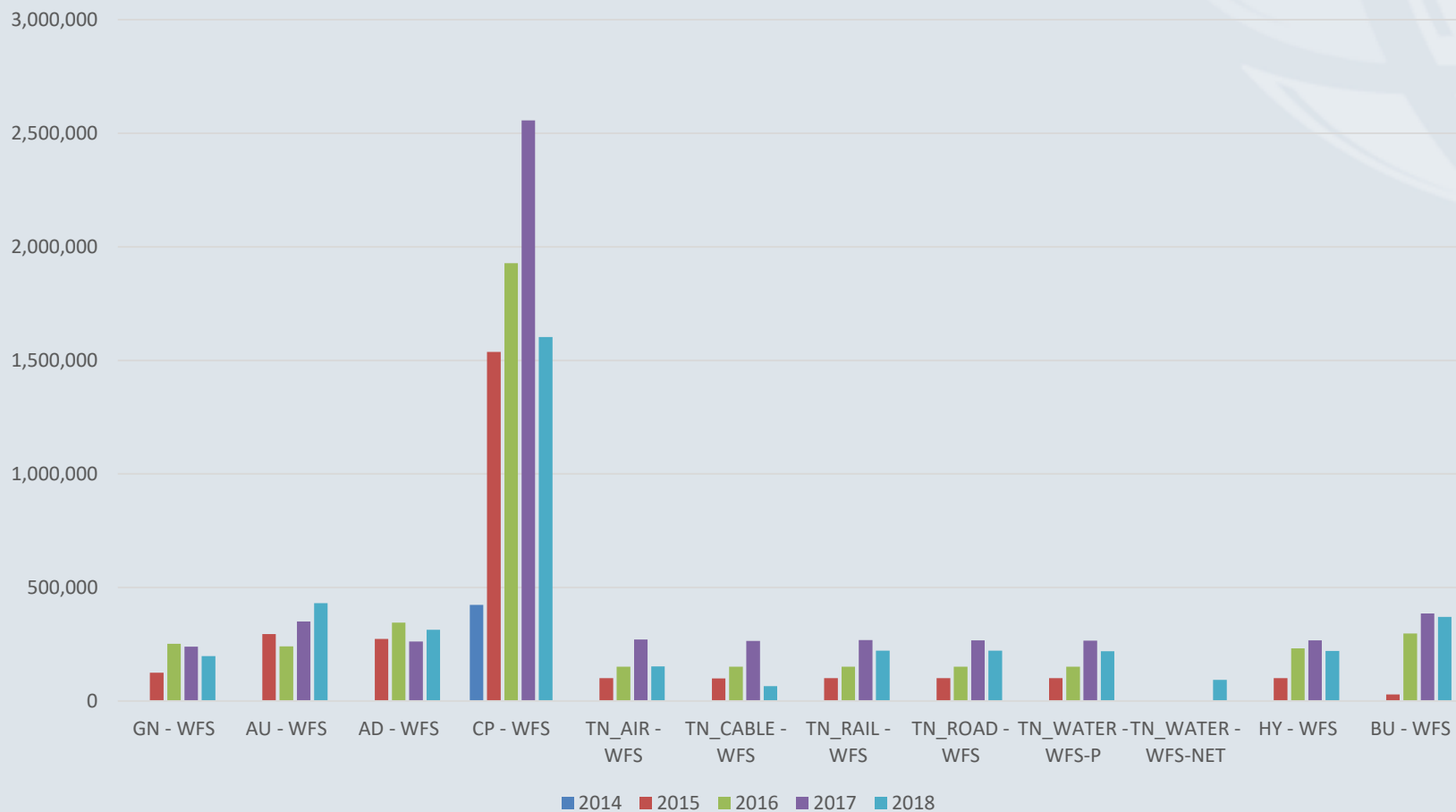
Use of WMS service 1



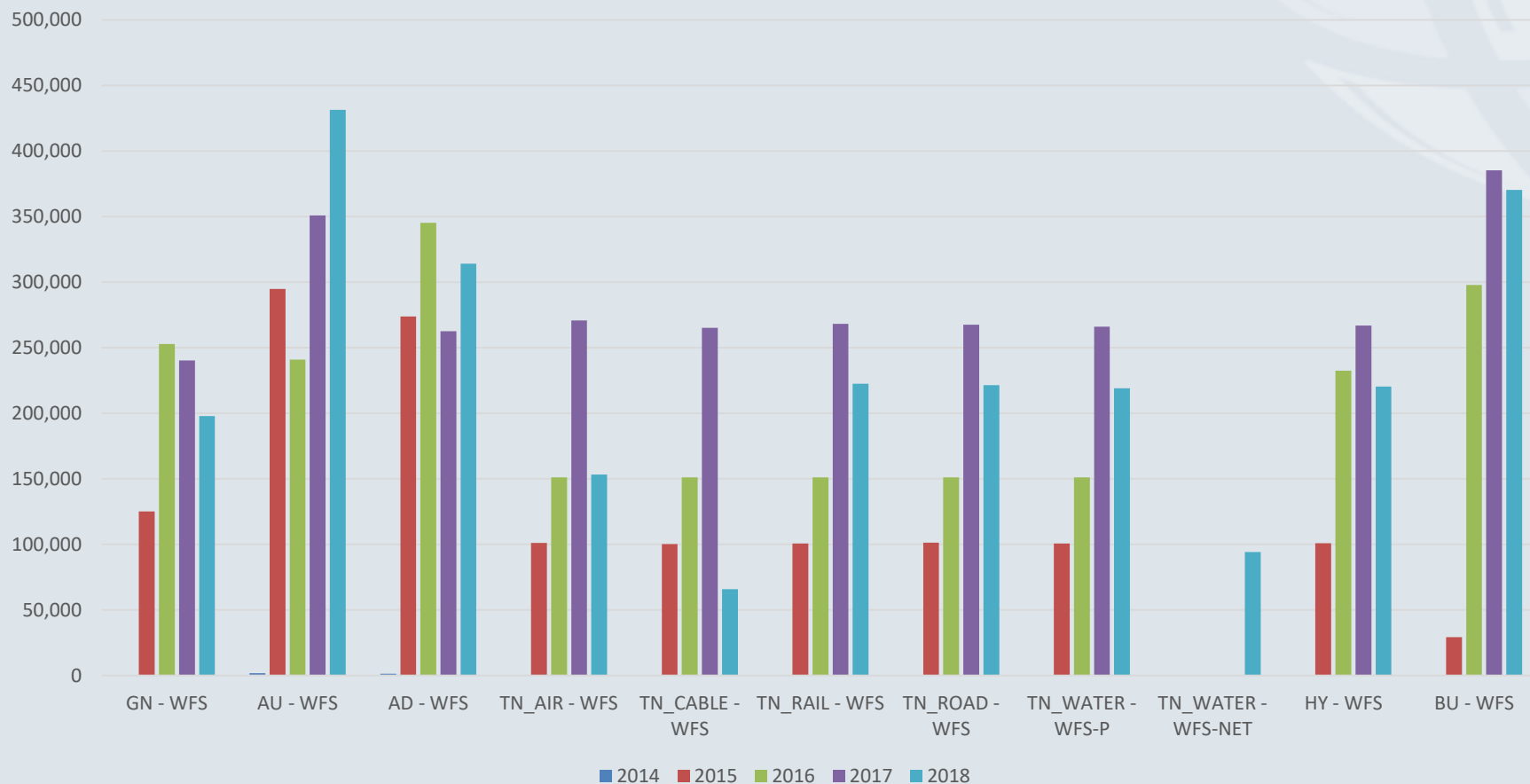
Use of WMS service 2



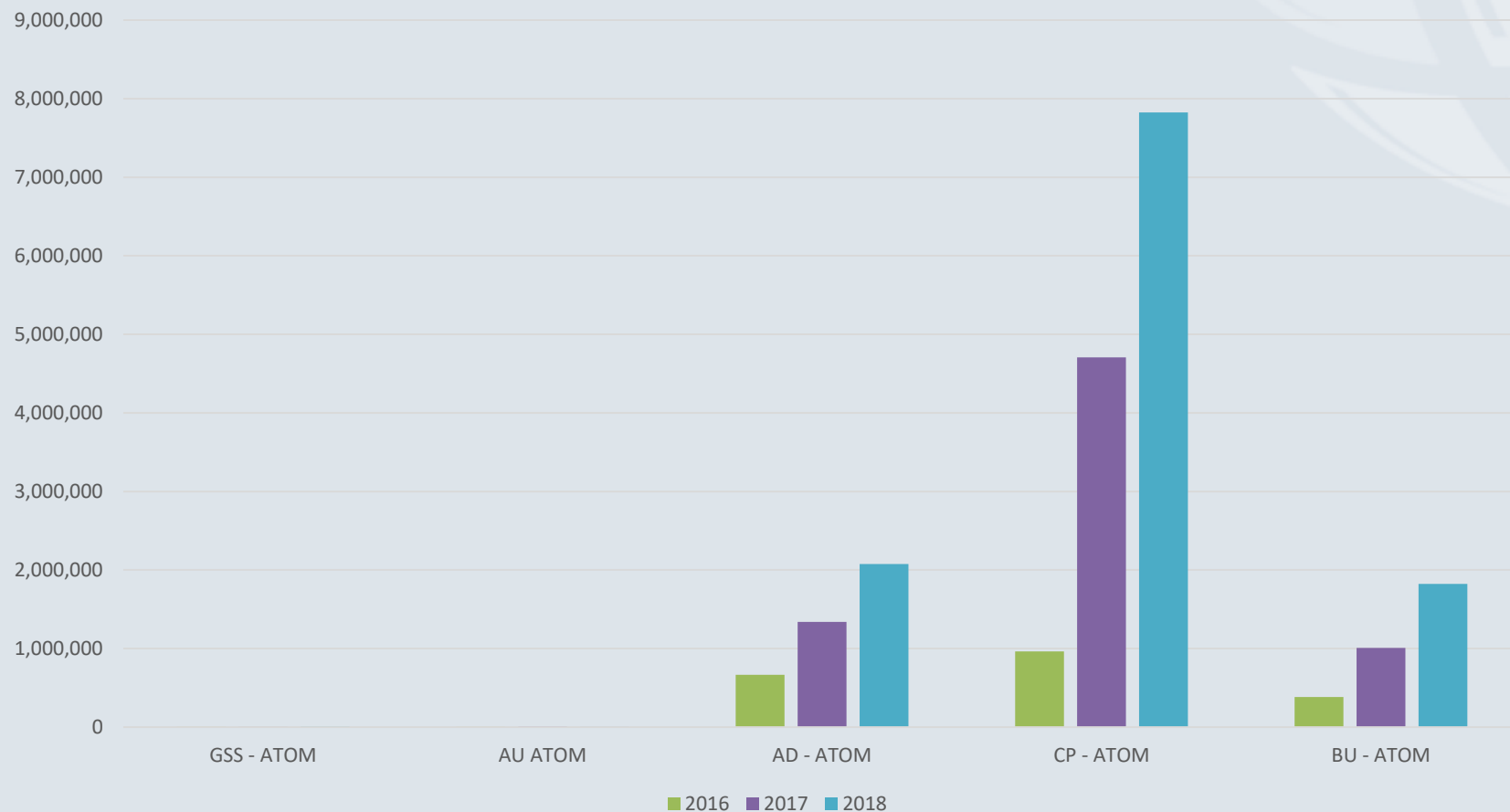
Use of WFS service 1



Use of WFS service 2



Use of ATOM service



Use-cases

How we are able to estimate use-cases of anonymous users ?

- Generally we get IP addresses only.
- Some applications contain links to the web pages, from which our network services were accessed.
- During October 2018 more than 1 thousand such pages were monitored.

Celkem: 83 227 diferent URL	Page	Share
http://www.ikatastr.cz/ikatastr.htm	83 062 770	65.7 %
http://ikatastr.cz/ikatastr.htm	15 082 465	11.9 %
http://www.ikatastr.cz/iKatastrM.htm	8 011 745	6.3 %
https://www.katastr2.cz	6 591 114	5.2 %
https://www.waze.com/cs/editor/	1 167 401	0.9 %
http://www.ikatastr.cz	1 104 561	0.8 %
https://www.waze.com/cs/editor	881 961	0.6 %
https://www.bimtool.eu/cadastre	658 362	0.5 %
http://ikatastr.cz/iKatastrM.htm	653 258	0.5 %

Application „iKatastr“



The screenshot displays the iKatastr web application. On the left, a map shows a street layout with parcel numbers and a highlighted parcel (605/12). A search bar at the top left contains the text "vyhledat ulici, obec, místo". A small window titled "info z katastru nemovitostí" is open over the map, showing details for parcel 605/12. On the right, a larger window displays the "Nahlížení do katastru nemovitostí" page, which includes a table of parcel information and a section for building details.

info z katastru nemovitostí

Nahlížení/vlastníci	rovnou otevřít	<input checked="" type="checkbox"/>
Parcela	605/12	5071 m ²
Stavba	č.p. 1800	4997 m ²
K.území	Kobylisy	úřad Praha
Místo	Obec: Praha	

Informace o pozemku

Parcelní číslo:	605/12
Obec:	Praha [554782]
Katastrální území:	Kobylisy [730475]
Číslo LV:	1685
Výměra [m ²]:	5071
Typ parcely:	Parcela katastru nemovitostí
Druh pozemku:	zastavěná plocha a nádvoří

Součástí je stavba

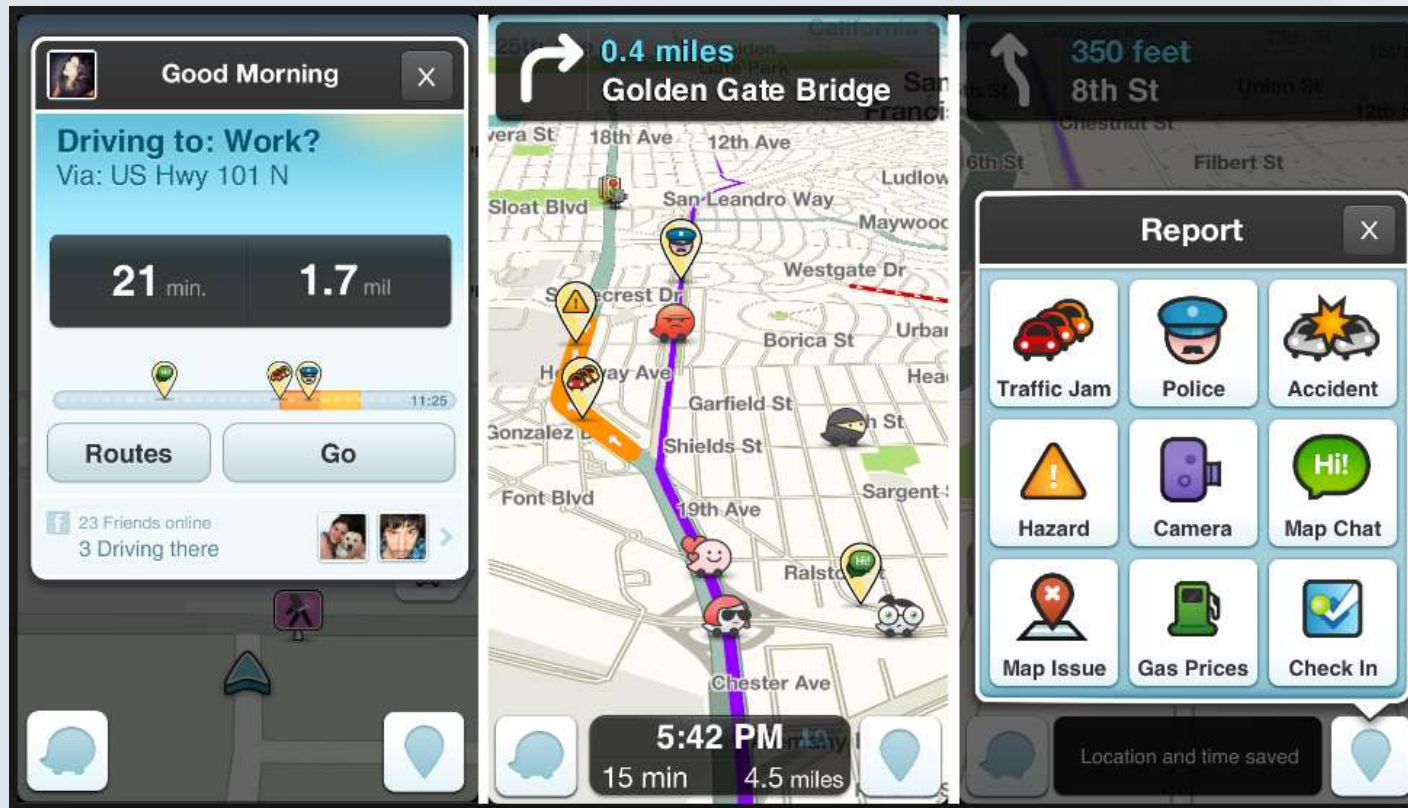
Budova s číslem popisným:	Kobylisy [400611]; č. p. 1800; stavba pro administrativu
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Vlastníci, jiní oprávnění

Vlastnické právo	Podíl
Česká republika,	

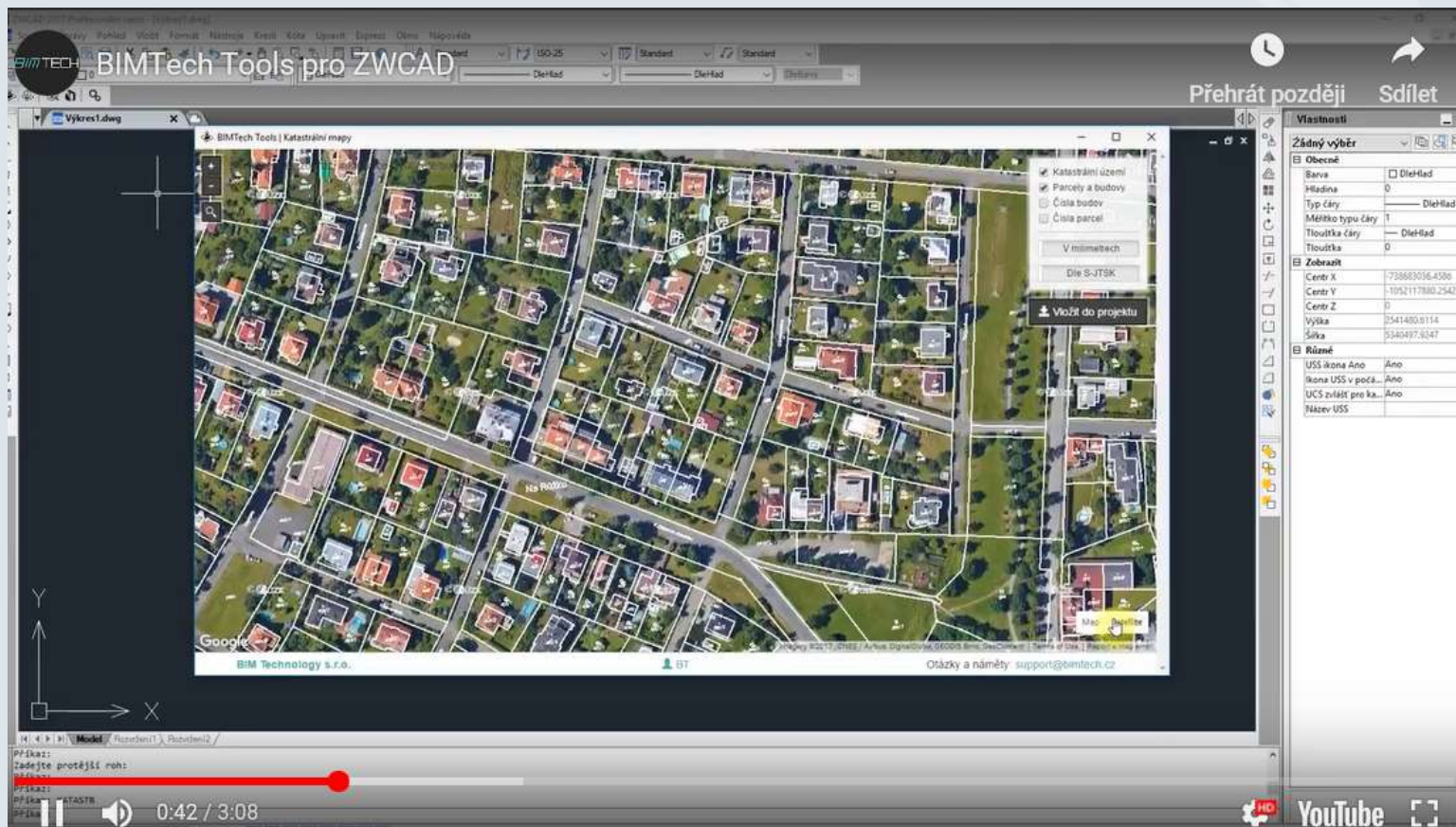
<https://ikatastr.cz>

Application „Waze“



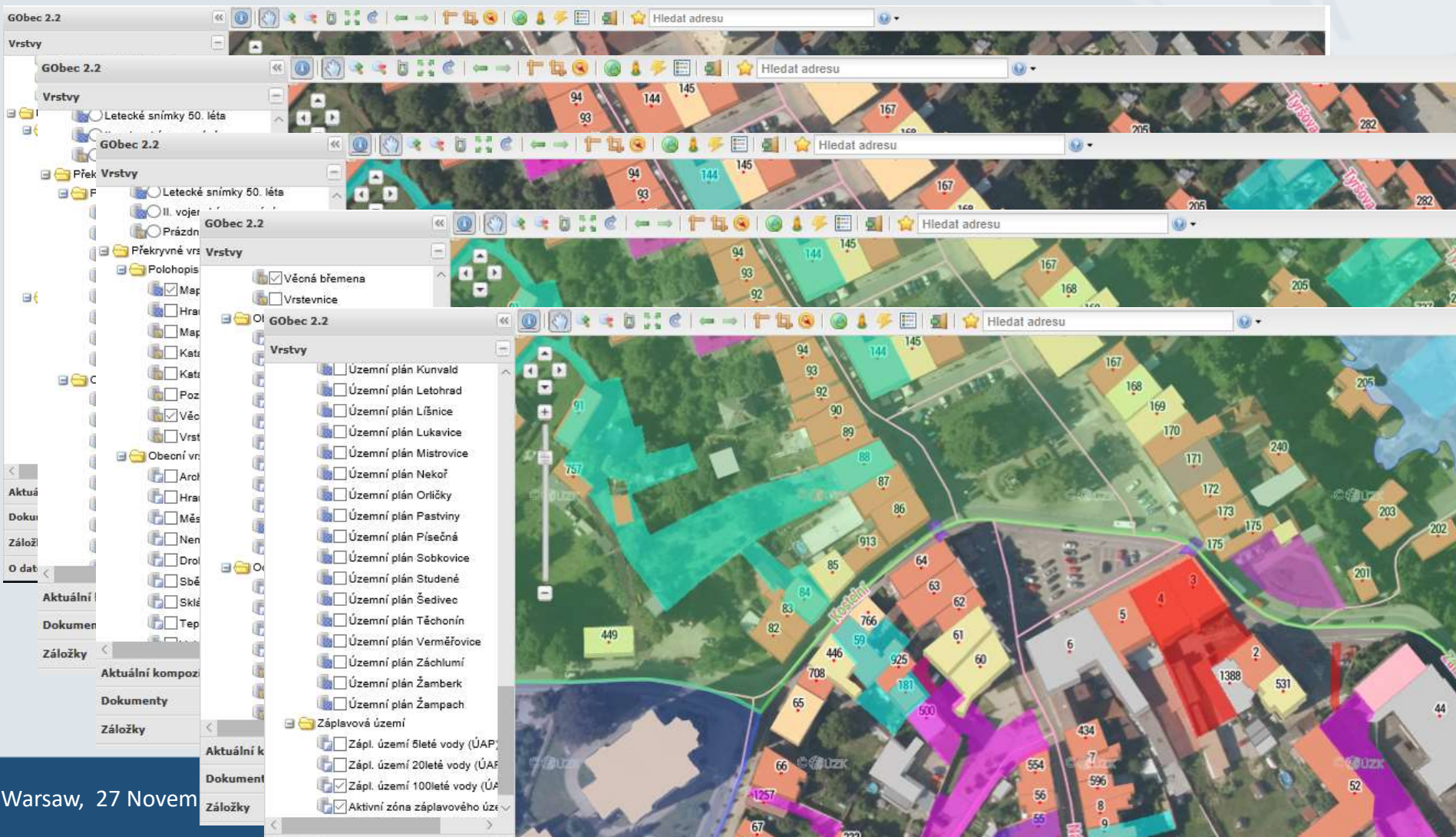
<https://dotekomanie.cz/2018/07/americke-ministerstvo-dopravy-chce-pouzivat-data-z-waze-k-predikci-nehod/>

Application „BIMtools“



<https://bimtech.cz/bimtech-tools-pro-projektanty/>

Geoportal of municipality



Conclusion

- Even we have viewing and downloading services for all harmonized datasets, EU geoportal is not presenting connected components together
- Harmonized datasets are published as part of data-series with general WMS and WFS services
 - Not valid with the requirements to have one services for one dataset
 - Because of infrastructure limits, there were not technical way to achieve the requirements
- Amount of users is growing year to year
 - Grow of usages of online services is reason to finding new ways, like ATOM or pre-generated data

Thank you for your attention

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