



**ELF** EUROPEAN  
LOCATION  
FRAMEWORK

# RÚIAN, INSPIRE a interoperabilita veřejné správy v EU (ISA)

**Presentation to:** Den s INSPIRE

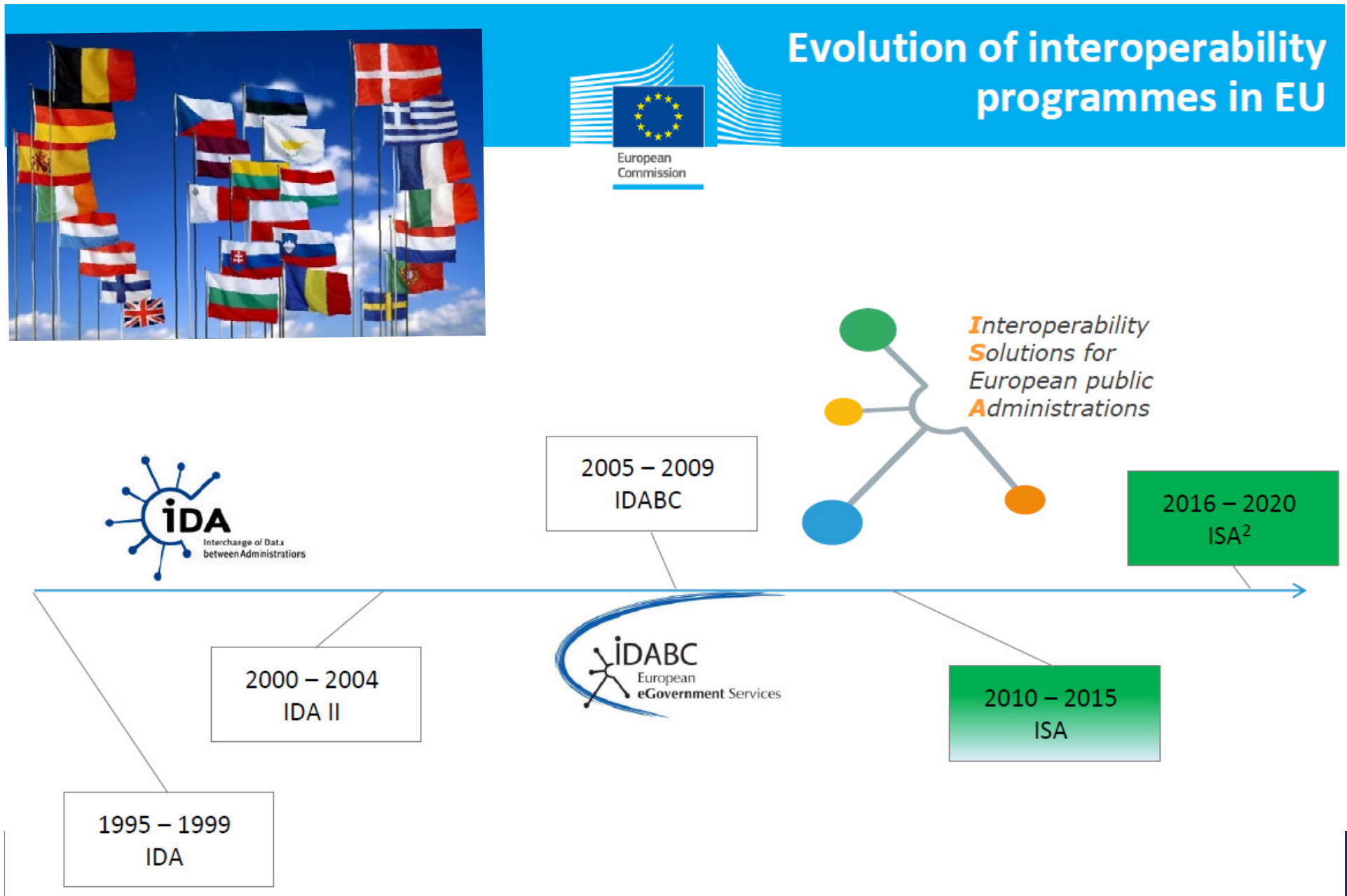
**Author:** Eva Pauknerová, Český úřad zeměměřický a katastrální (ČÚZK)

**Date:** 11.11.2016

## Témata prezentace

1. ISA2 interoperabilita veřejné správy v EU
2. Interoperabilita prostorových dat
3. Zapojení ČÚZK v projektu ELF

# 1. ISA – interoperabilita veřejné správy v EU



# Od ISA k ISA<sup>2</sup> – 2016 až 2020



European Interoperability Framework (EIF)

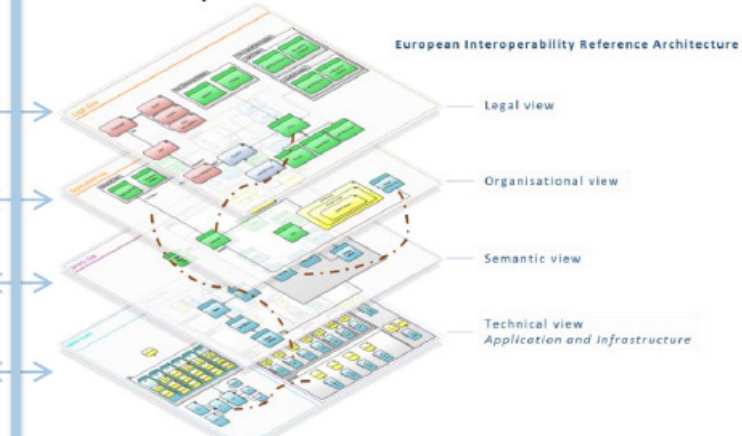
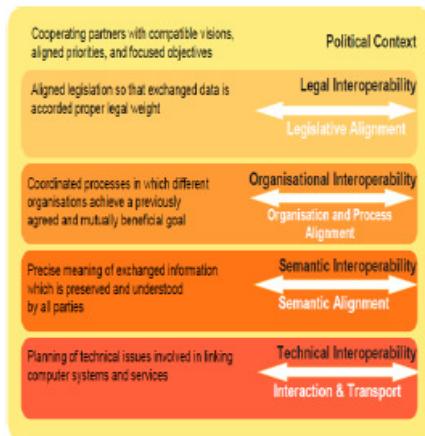
ΕΙΣΩΓΜΟΣ (EIF) ΠΡΟΒΛΕΨΗ ΕΠΙΧΕΙΡΗΣΙΑΚΩΝ

**EIRA**  
European Interoperability Reference Architecture

A reference architecture for delivering digital public services (across borders and sectors).

**EICart**  
European Interoperability Cartography

A mapping of IOP solutions to the Building Blocks of the EIRA.

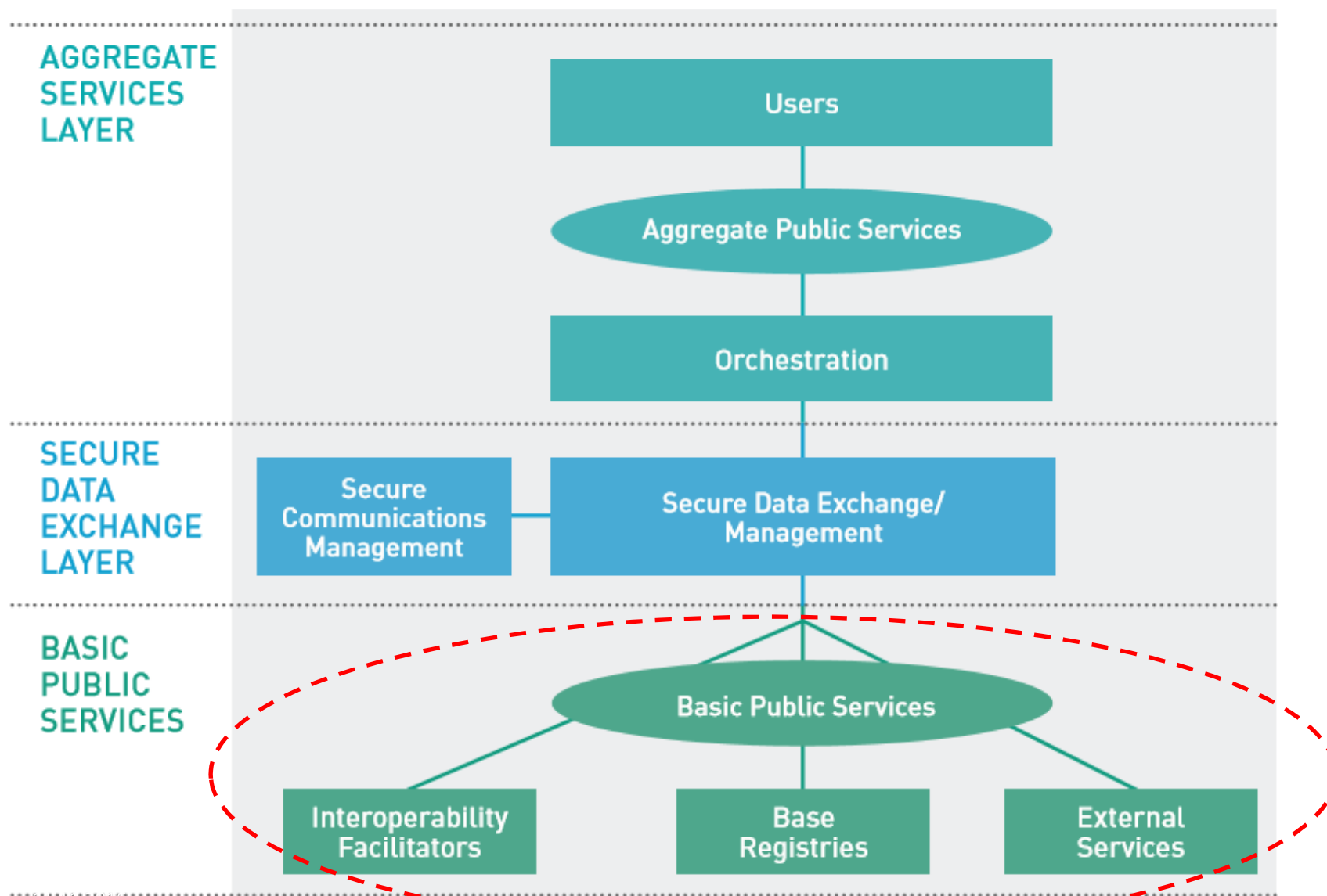


Interoperability Solution	Building Block		Building Block				Building Block			
	Interoperability Solution	Building Block	Building Block	Building Block	Building Block	Building Block	Building Block	Building Block	Building Block	
1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

**ISA<sup>2</sup> – klíčový nástroj pro vytvoření Digital Single Market v EU do r 2020**

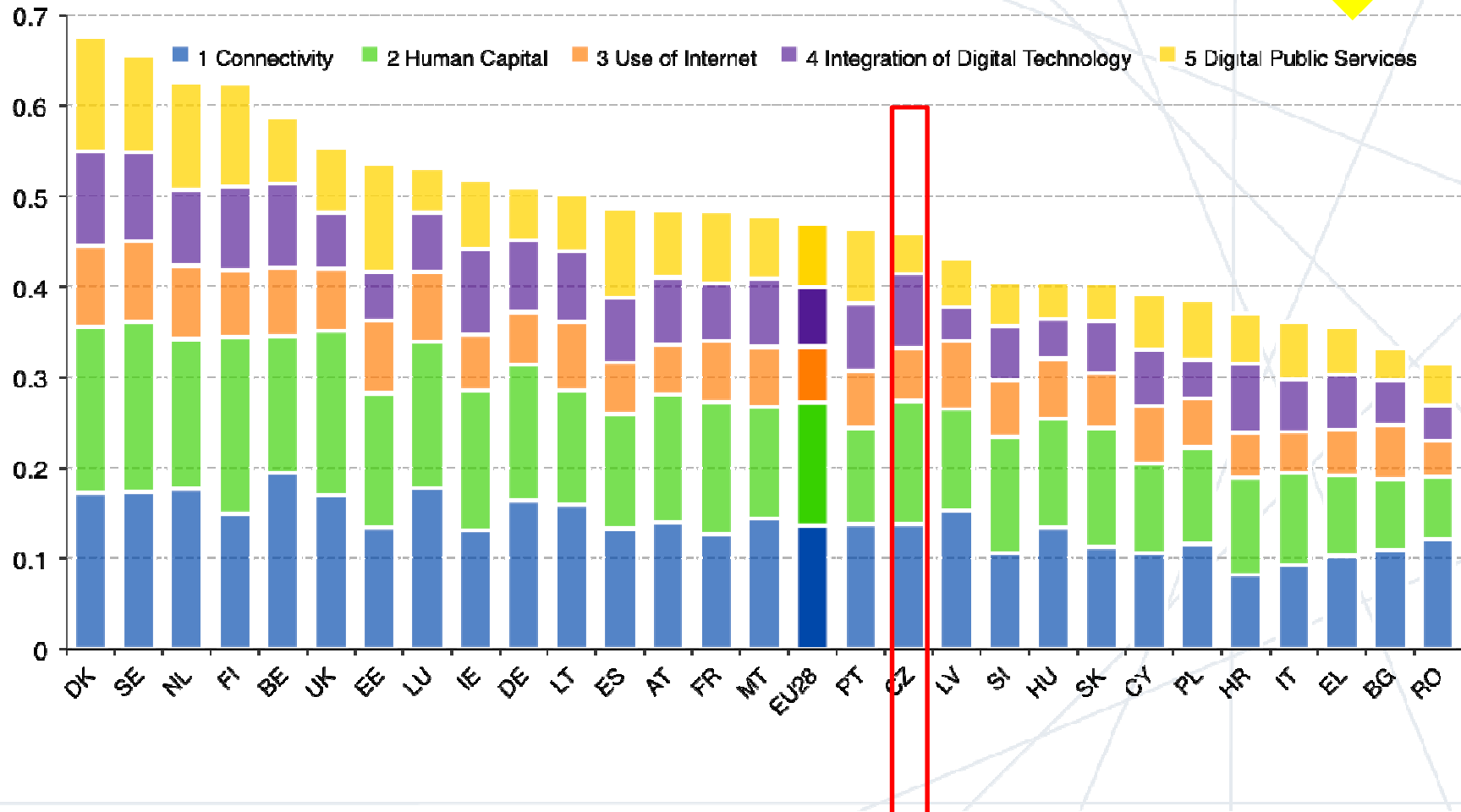
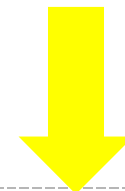


# EIF - Digitální konceptuální model



# Digital Single Market

## Srovnání zemí EU za rok 2015



# Rozdíl mezi stavem v ČR a mezinárodním hodnocením ... **Ize překonat**



European Commission - ISA Work Programme  
**EUROPEAN UNION LOCATION FRAMEWORK**

## ***RUIAN***

*good practices in the use and integration*  
*of*  
*location information within e-government*

[https://joinup.ec.europa.eu/sites/default/files/ckeditor\\_files/files/New%20EULF%20Factsheet%20RUIAN%20-%20CZ.pdf](https://joinup.ec.europa.eu/sites/default/files/ckeditor_files/files/New%20EULF%20Factsheet%20RUIAN%20-%20CZ.pdf)

## 2. Prostorová data - mezinárodní interoperabilita

- ★ Mezinárodní technické normy a standardy
  - ★ ISO, CEN, OGC, W3C aj.
- ★ Evropské právní předpisy
  - ★ Směrnice **INSPIRE** a její prováděcí předpisy
- ★ Koordinační aktivity EK
  - ★ JRC: MIG+MIF, monitoring a srovnávací zprávy
  - ★ DIGIT: EULF, ARE3NA, ISA-SIS WG, monitoring a srovnávací zprávy
- ★ Koordinace na úrovni států
  - ★ Národní kontaktní místa (INSPIRE, ISA aj.) a jejich role uvnitř
  - ★ Národní koordinační struktury (EK > CZ, uvnitř CZ, CZ > EK):
    - pro NGII/NSDI – Nemoforum, **KOVIN**, GeoInfoStrategie aj.
    - pro ZR ... eGovernment ???
- ★ Evropské projekty
  - ★ Zaměřené přímo na INSPIRE
  - ★ Zaměřené na ISA/eGovernment (např. PSP) a zohledňující INSPIRE (např. ELF)





You are here: [Data sets](#) / [Intro](#)

ČÚZK zodpovídá  
za mezinárodní  
harmonizaci  
základních  
prostorových dat

### Cadastré of Real Estate



Cadastré of Real Estate of the Czech Republic

### RÚIAN



Registry of Territorial Identification, Addresses and Real Estates

### ZABAGED®



The Fundamental Base of Geographic Data of the Czech Republic

### Altimetry



Altimetry of the Czech Republic

### Orthophoto



Orthophotographic Representation of the Czech Republic

### Maps



State map series

### Geodetic control



Database of geodetic control of the Czech Republic

### Geonames



Database of geographic names of the Czech Republic

### Aerial survey photos



Archival and the current aerial survey photos

### Archival documents



Archival documents of the Central Archives of Surveying, Mapping and Cadastre

### News on data sets

26.01.2016

Aktualizovaná data ortofota ČR  
V rozsahu 1/2 ČR - západní poloviny  
území - byl aktualizován produkt Ortofoto  
ČR.

[more](#)

20.01.2016

Aktualizace výstupů databáze Data200  
Byla provedena pravidelná roční  
aktualizace výstupů databáze Data200.

[more](#)

12.01.2016

ZABAGED® - průběžná aktualizace

[more](#)

12.01.2016

Aktualizace dokumentů pro vizualizaci  
ZABAGED®

Pro uživatele dat ZABAGED® byly  
aktualizovány mapové dokumenty MXD pro  
kartografickou vizualizaci dat  
ZABAGED® v prostředí ArcGIS for  
Desktop.

[more](#)

16.12.2015

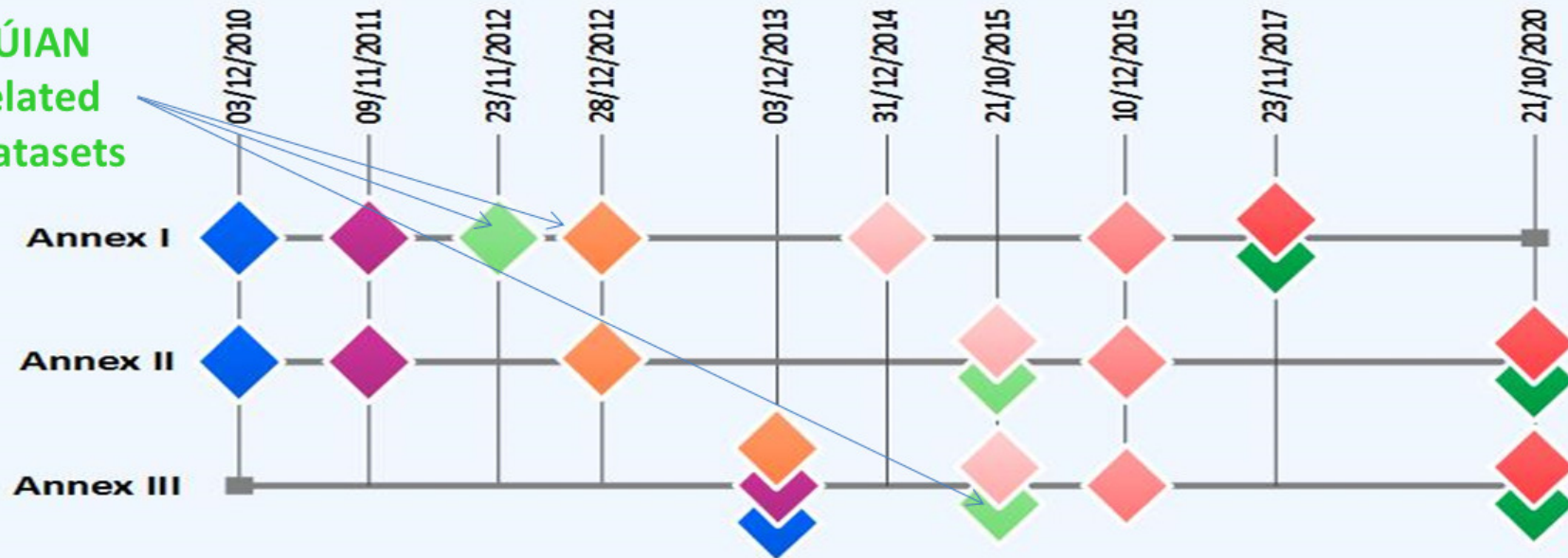
Poskytování nové datové sady INSPIRE  
pro téma Nadmořská výška (EL)  
V sekci Datové sady byly zveřejněny  
informace a detailní metadata o nové  
datové sadě pro INSPIRE téma Nadmořská  
výška (EL).

[more](#)

[News archive](#)

# INSPIRE Implementation Roadmap

RÚIAN related datasets



	<b>Discovery metadata</b> shall be available for spatial data sets and services		Spatial data sets shall be available for <b>discovery and view</b> from the INSPIRE geo-portal (data does not yet need to be conformant to IR-ISDSS)		Spatial data sets shall be available for <b>download and transformation</b> (whenever applicable <sup>1</sup> ) from the INSPIRE geo-portal (data does not yet need to be conformant to IR-ISDSS <sup>2</sup> )
	<b>Newly collected and extensively restructured spatial data sets</b> shall be conformant to IR-ISDSS (incl. metadata for interoperability) and available through network services		<b>All spatial data sets</b> shall be conformant to IR-ISDSS (incl. metadata for interoperability) and available through network services		<b>Invocable spatial data services related to newly collected and extensively restructured spatial data sets</b> shall be conformant to Annexes V, VI and (where practicable) VII of IR-ISDSS (incl. metadata)
	<b>Invocable spatial data services related to newly collected and extensively restructured spatial data sets</b> shall be conformant to Annexes V, VI and (where practicable) VII of IR-ISDSS (incl. metadata)		<b>All invocable spatial data services</b> shall be conformant to Annex V of IR-ISDSS (incl. metadata)		<b>All invocable spatial data services</b> shall be conformant to Annexes VI and (where practicable) VII of IR-ISDSS (incl. metadata)

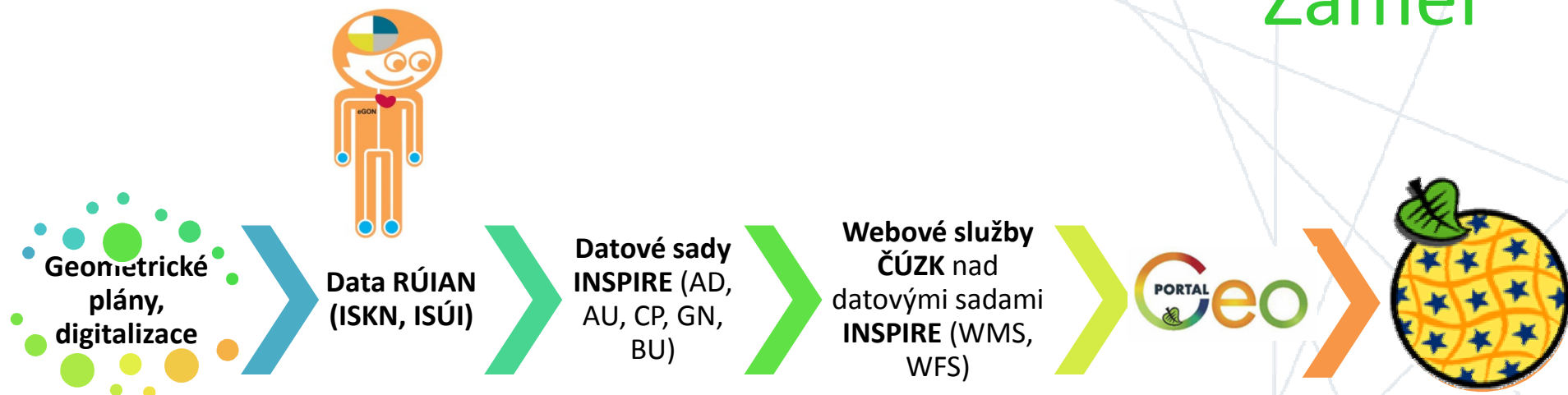
IR-ISDSS = Implementing Rules on interoperability of spatial data sets and services (Commission Regulation (EU) No. 1089/2010), including its amendments Regulations (EU) No. 102/2011, 1253/2013 and 1312/2014

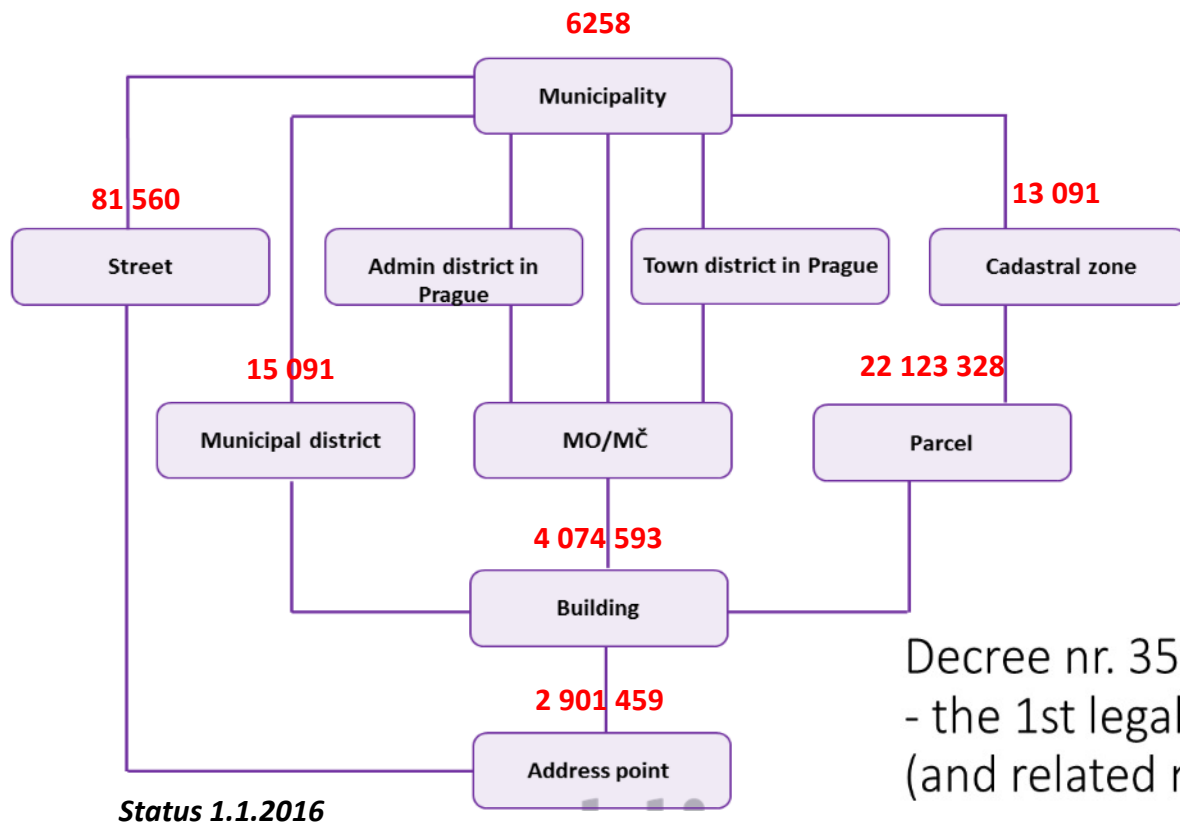
<sup>1</sup> Transformation Services only need to be provided if data sets are not made conformant with the IR-ISDSS by some other means (see Art. 7(3) of the INSPIRE Directive)

<sup>2</sup> With the exception of newly collected and extensively restructured Annex I data sets, which already have to be compliant with the IR-ISDSS by 23/11/2012

# Od dat o lokalitě přes RÚIAN k INSPIRE

## Záměr





Na tvorbě datové sady  
INSPIRE/ELF se podílejí  
v ČR tisíce editorů  
příkl.  
**RUIAN- ADRESY**

Decree nr. 359/111 on RUIAN Base Register  
- the 1st legal rule for specifying addresses  
(and related roles)



Eliščino nábřeží 375/1  
Věkoše  
50003 Hradec Králové



You are here: [Network services](#) / [Download services](#) / [Download Services for Harmonized Data of INSPIRE Sets](#)

## Download Services for Harmonized Data of INSPIRE Sets

### – Introduction:

<http://geoportal.cuzk.cz>

Download Services for on-line access to harmonized INSPIRE data sets are published according to the standard OGC WFS 2.0.0 and they enable download individual INSPIRE data themes harmonized according to the Directive 1089/2010/EC, in GML 3.2.1 format.

The services fulfil technical guidances for INSPIRE download services version 3.1.

The services for themes CP, AD, AU are provided **free-of-charge and without a need of registration for all types of user applications**. The services for themes GN, HY, TN are **charged**, access can be ordered using **e-shop**.

Examples of applications for exploitation of the services are listed [here](#).

#### List of WFS services:

- Download Services for INSPIRE theme Cadastral parcels (CP)  
<http://services.cuzk.cz/wfs/inspire-cp-wfs.asp>
- Download Services for INSPIRE theme Addresses (AD)  
<http://services.cuzk.cz/wfs/inspire-ad-wfs.asp>
- Download Services for INSPIRE theme Administrative Units (AU)  
<http://services.cuzk.cz/wfs/inspire-au-wfs.asp>
- Download Services for INSPIRE theme Buildings (BU)  
<http://services.cuzk.cz/wfs/inspire-bu-wfs.asp>
- INSPIRE download service for the theme Geographical Names (GN)  
[http://geoportal-inspirewfs.cuzk.cz/WFS\\_INSPIRE\\_GN/WFService.aspx?](http://geoportal-inspirewfs.cuzk.cz/WFS_INSPIRE_GN/WFService.aspx?)
- INSPIRE download service for the theme Hydrography (HY)  
[http://geoportal-inspirewfs.cuzk.cz/WFS\\_INSPIRE\\_HY/WFService.aspx?](http://geoportal-inspirewfs.cuzk.cz/WFS_INSPIRE_HY/WFService.aspx?)
- INSPIRE download service for the theme Transport Networks-AIR (TN\_AIR)  
[http://geoportal-inspirewfs.cuzk.cz/WFS\\_INSPIRE\\_TN\\_AIR/WFService.aspx?](http://geoportal-inspirewfs.cuzk.cz/WFS_INSPIRE_TN_AIR/WFService.aspx?)
- INSPIRE download service for the theme Transport Networks-CABLE (TN\_CABLE)  
[http://geoportal-inspirewfs.cuzk.cz/WFS\\_INSPIRE\\_TN\\_CABLE/WFService.aspx?](http://geoportal-inspirewfs.cuzk.cz/WFS_INSPIRE_TN_CABLE/WFService.aspx?)
- INSPIRE download service for the theme Transport Networks-RAIL (TN\_RAIL)  
[http://geoportal-inspirewfs.cuzk.cz/WFS\\_INSPIRE\\_TN\\_RAIL/WFService.aspx?](http://geoportal-inspirewfs.cuzk.cz/WFS_INSPIRE_TN_RAIL/WFService.aspx?)
- INSPIRE download service for the theme Transport Networks-ROAD (TN\_ROAD)  
[http://geoportal-inspirewfs.cuzk.cz/WFS\\_INSPIRE\\_TN\\_ROAD/WFService.aspx?](http://geoportal-inspirewfs.cuzk.cz/WFS_INSPIRE_TN_ROAD/WFService.aspx?)

Download Services for  
→ INSPIRE theme Cadastral  
Parcels (CP)

Download Services for  
→ INSPIRE theme Addresses  
(AD)

Download Services for  
→ INSPIRE theme  
Administrative Units (AU)

Download Services for  
→ INSPIRE theme Buildings  
(BU)

Download Services for  
→ INSPIRE theme  
Geographical Names (GN)

INSPIRE download service  
→ for the theme Hydrography  
(HY)

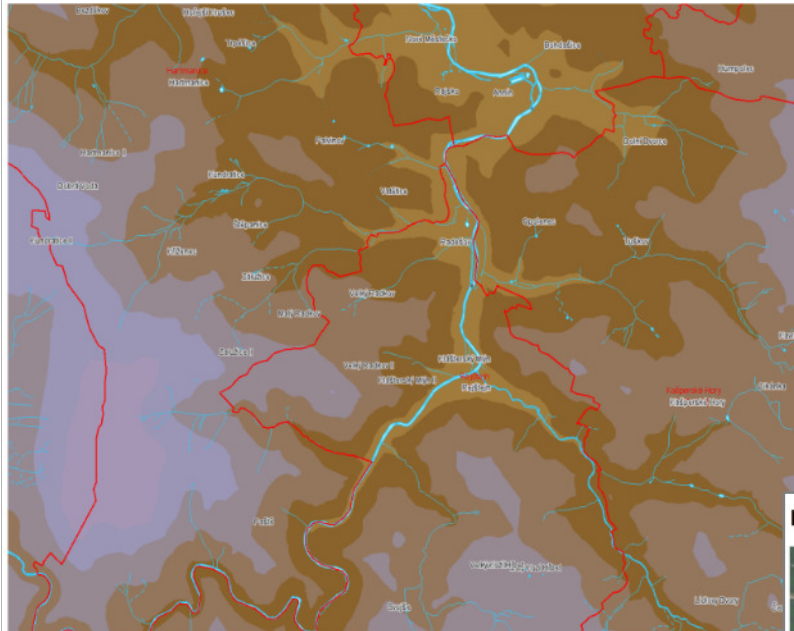
INSPIRE download service  
→ for the theme Transport  
Networks-AIR (TN\_AIR)

INSPIRE download service  
for the theme Transport  
→ Networks-CABLE  
(TN\_CABLE)

INSPIRE download service  
→ for the theme Transport  
Networks-RAIL (TN\_RAIL)

INSPIRE download service  
for the theme Transport  
→ Networks-ROAD

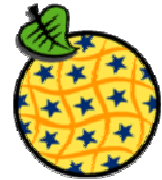
## INSPIRE AU, EL, GN, HY



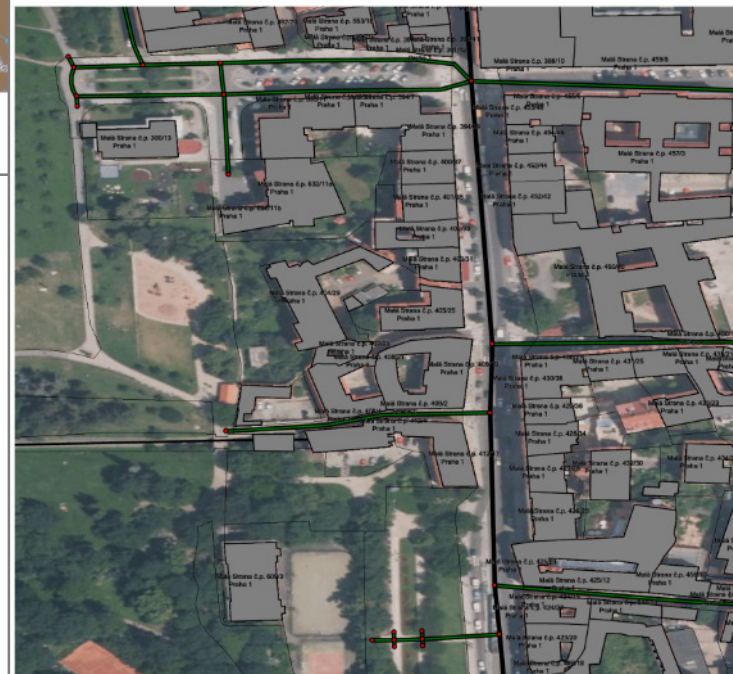
- INSPIRE Administrative Units:**
- Administrative Boundary 3rdOrder
- INSPIRE Hydrography:**
- Watercourse
  - Standing Water
- INSPIRE Elevation:**
- 500,0001 - 600,0000
  - 600,0001 - 700,0000
  - 700,0001 - 800,0000
  - 800,0001 - 900,0000
  - 900,0001 - 1000,0000
  - 1000,0001 - 1500,0000 m
- INSPIRE Geographical Names:**
- Jasová Named Place

SOURCE: [http://inspire.cuzk.cz/wms/inspire\\_AU/inspireServer/WMS/Server](http://inspire.cuzk.cz/wms/inspire_AU/inspireServer/WMS/Server)  
[http://geoportal.cuzk.cz/wms/inspire\\_EL/WMS/Service.aspx](http://geoportal.cuzk.cz/wms/inspire_EL/WMS/Service.aspx)  
[http://services.cuzk.cz/wms/inspire\\_GN/WMS.aspx](http://services.cuzk.cz/wms/inspire_GN/WMS.aspx)  
[http://geoportal.cuzk.cz/WMS\\_INSPIRE\\_HY/WMS/Service.aspx](http://geoportal.cuzk.cz/WMS_INSPIRE_HY/WMS/Service.aspx)

# Kombinace tematických INSPIRE-WMS resortu CUZK



## INSPIRE AD, BU, CP, OI, TN



- INSPIRE Addresses:**
- Addresses Text with postal descriptors, Address Numbers, Address Area Names
- INSPIRE Buildings:**
- Building
- INSPIRE Cadastral Parcels:**
- Cadastral Boundary
- INSPIRE Transport Networks:**
- Cableway Link
  - Railway Link
  - Road Link
  - Generic Transport Node

SOURCE: <http://services.cuzk.cz/wms/inspire-ad-wms.asp?>  
<http://services.cuzk.cz/wms/inspire-bu-wms.asp?>  
<http://services.cuzk.cz/wms/inspire-cp-wms.asp?>  
[http://geoportal.cuzk.cz/WMS\\_INSPIRE\\_ORTOFOTO/WMS/Service.aspx](http://geoportal.cuzk.cz/WMS_INSPIRE_ORTOFOTO/WMS/Service.aspx)  
[http://geoportal.cuzk.cz/WMS\\_INSPIRE\\_TN/WMS/Service.aspx](http://geoportal.cuzk.cz/WMS_INSPIRE_TN/WMS/Service.aspx)

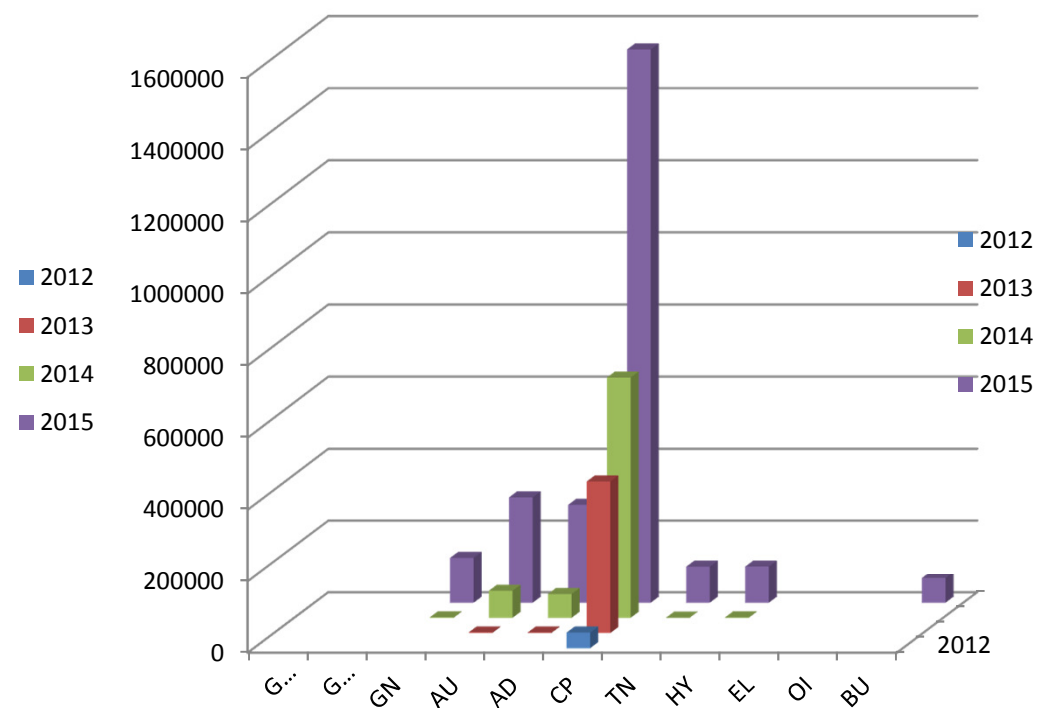
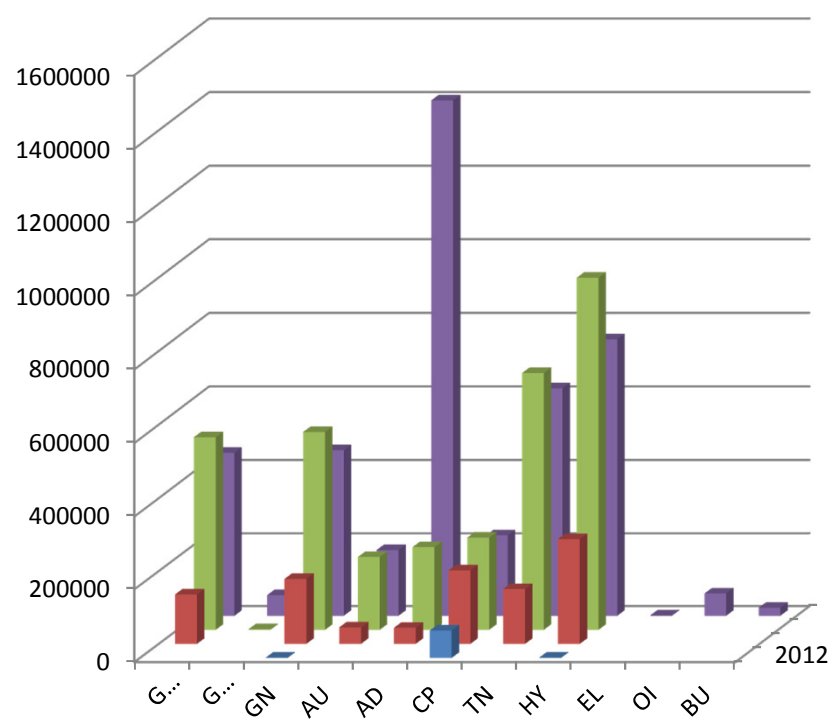


# Vývoj užívání INSPIRE-služeb resortu

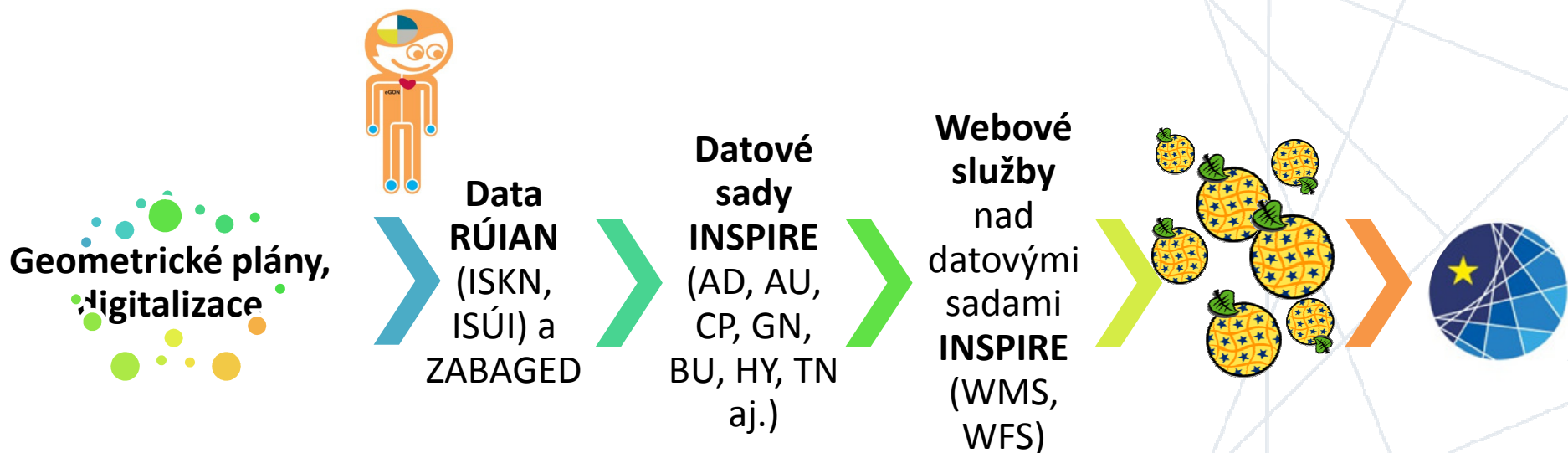
počty požadavků 2012 – 2015

**WMS (CUZK+ZU)**

**WFS (CUZK+ZU)**



# Zapojení resortu ČÚZK v projektu ELF - účast na vytváření interoperabilní evropské infrastruktury, vč. harmonizovaných datových produktů EU+







## 3. Projekt ELF

### ★ Stav

- ★ Evropský projekt (typu Pilot A)
- ★ Referenční data o území pro výkon veřejné správy (národní mapovací a katastrální úřady - NMCA)
- ★ Konsorcium ELF – 40 členů: NMCA, univerzity a vývojová pracoviště, OGC aj.
- ★ Od března 2013 do října 2016

### ★ Ukázky, výsledky, zkušenosti

## Cíle projektu ELF

- ★ Postupně zajistit bezešvé, aktuální datové sady a služby ELF založené na aktuálních referenčních prostorových datech evropských NMCA a 
- ★ udržitelným způsobem je poskytovat na platformě ELF.
- ★ Praktické užití těchto dat evropského rozsahu demonstrovat pomocí tematických aplikací dalších poskytovatelů (za účasti soukromého sektoru).
- ★ Jednotnou podobu dat a služeb v Evropě zajistit:
  - s užitím evropských právních předpisů a technických pravidel INSPIRE;
  - navázat na výsledky a nástroje vzešlé z evropských projektů ERM, EGM, EGN, ESDIN aj. 



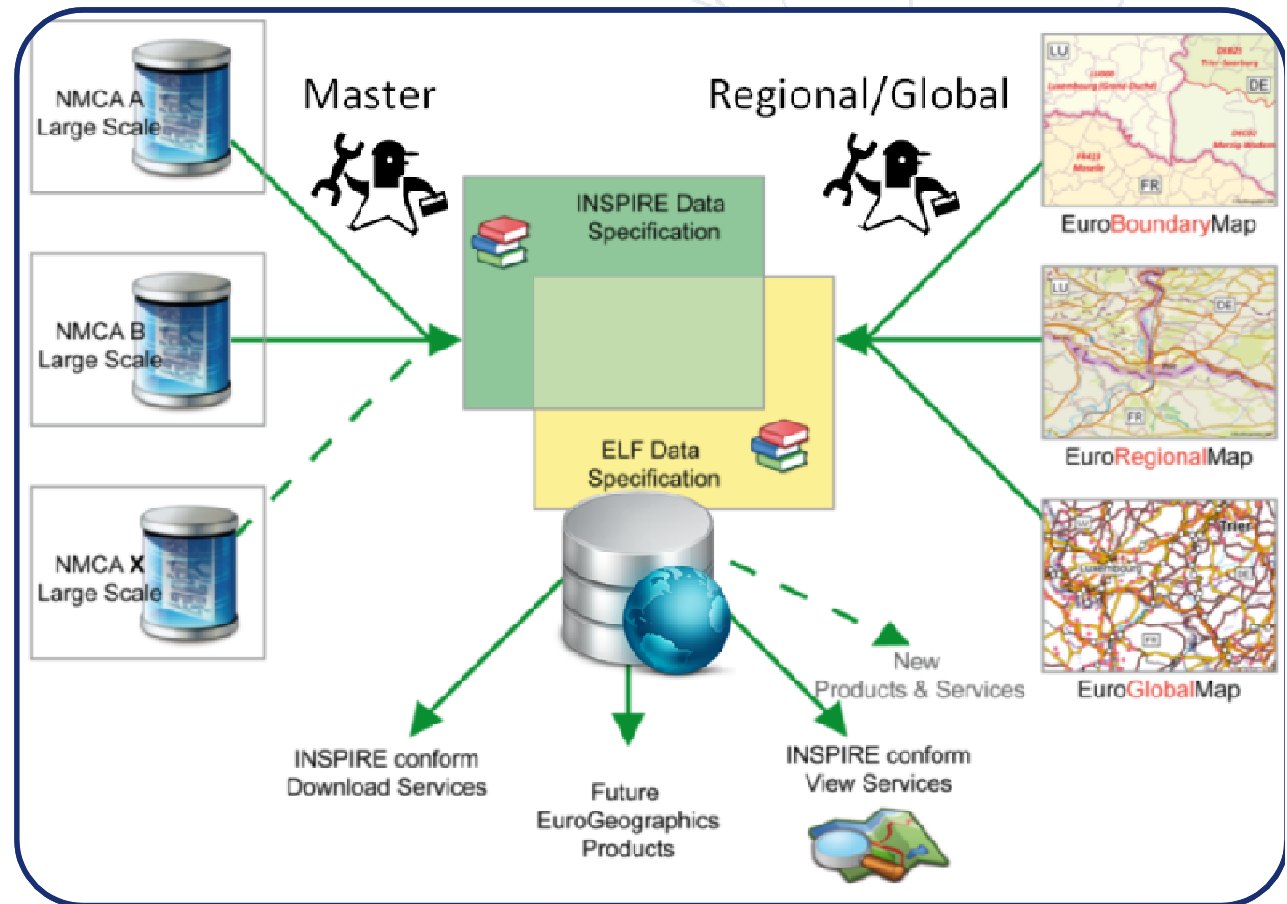
# Zájmová data projektu ELF

## členění podle témat a úrovně detailu (LoD)

MASTER LoDO	Master LoD1/2	REGIONAL	GLOBAL
Cadastral Parcels (CP)	Administrative Units (AU)	Administrative Units (AU): AU & NUTS	Administrative Units (AU)
Addresses (AD)	Hydrography (HY)	Hydrography (HY): HY & SR	Hydrography (HY): HY & SR
	Sea Regions (SR)		
	Transport Networks (TN)	Transport Networks (TN)	Transport Networks (TN)
Geographical Names (GN)	Geographical Names (GN)	Geographical Names (GN): GN & POP	Geographical Names (GN): GN & POP
Elevation (EL)	Elevation (EL)	Elevation (EL)	Elevation (EL)
	Land Cover (LC)	Land Cover (LC): POP & VEG	Land Cover (LC): POP
Buildings (BU)	Buildings (BU)	Buildings (BU)	
	Protected Sites (PS)	Protected Sites (PS)	

# Specifikace ELF

- ★ Specifikace pro data
  - ★ INSPIRE východiskem
  - ★ Datové profily NMCA- pro INSPIRE
- ★ Specifikace pro zpracování a správu dat
  - ★ Pro zajištění interoperability referenčních dat
- ★ Specifikace pro služby zpřístupnění dat
  - ★ Zajistit snadný přístup k referenčním datům



# ELF services – přehled (říjen 2016)

	BE	CZ	DK	FI	FR	GE	HU	IS	IE	LV	LT	NL	NO	PL	PT	RS	SL	ES	SE	GB		
	Belgium	Czech Rep.	Denmark	Finland	France	Germany	Hungary	Iceland	Ireland	Latvia	Lithuania	Netherlands	Norway	Poland	Portugal	Serbia	Slovenia	Spain	Sweden	GB		
ELF Basemap - regional/global	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	+
ELF Basemap - master	Green	Green	Green	Green	Green	Blue	Green	Yellow	Yellow	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green
ELF Cadastral Index Map	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Yellow	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green
Geolocator	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	+
ELF Regional Themes	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	+
<b>Addresses</b>	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green
<b>Administrative Units</b>	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green
<b>Buildings</b>	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green
<b>Cadastral Parcels</b>	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green
<b>Elevation</b>	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Yellow	Green
<b>Geographical Names</b>	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Yellow	Green
<b>Geology</b>	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
<b>Hydrography</b>	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
<b>Land Cover</b>	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green
<b>Protected Sites</b>	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green
<b>Sea regions</b>	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
<b>Transport Networks</b>	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Green
	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	<span style="background-color: green; border: 1px solid black; display: inline-block; width: 15px; height: 10px; vertical-align: middle;"></span> = available <span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px; vertical-align: middle; margin-left: 20px;"></span> = will be implemented by project end <span style="background-color: blue; border: 1px solid black; display: inline-block; width: 15px; height: 10px; vertical-align: middle; margin-left: 20px;"></span> = implemented, but restricted for consortium use only																					

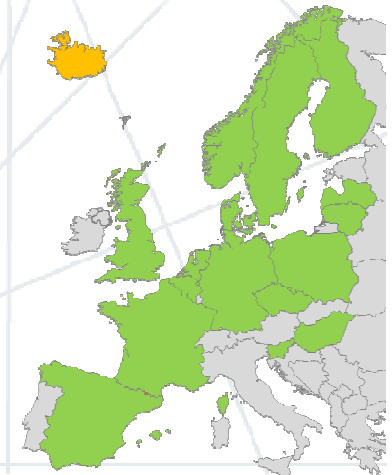
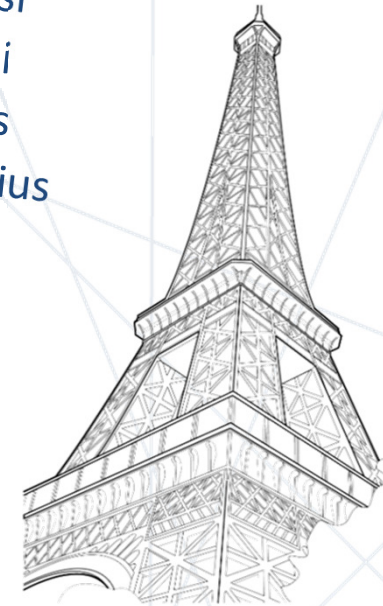
## ELF výstupy

- **ELF Basemap** – administrativní a topografická
- **Cadastral Index Map (CIM)** – jednotný WMS produkt ELF založený na harmonizaci dat témat AD, BU a CP, včetně vyhledávání popisné informace z příslušných WFS
- **ELF platforma** – společné přístupové místo, vč. správy zabezpečení a licencí
- **ELF stahovací služby** – národní a kaskádované
- **Vyhledávače:** ELF GeoLocator a Geo Product Finder
- **GeoTools** – podpůrné nástroje pro: *stykování, generalizace, validace, vizualizace, transformace aj.*

# Geocator

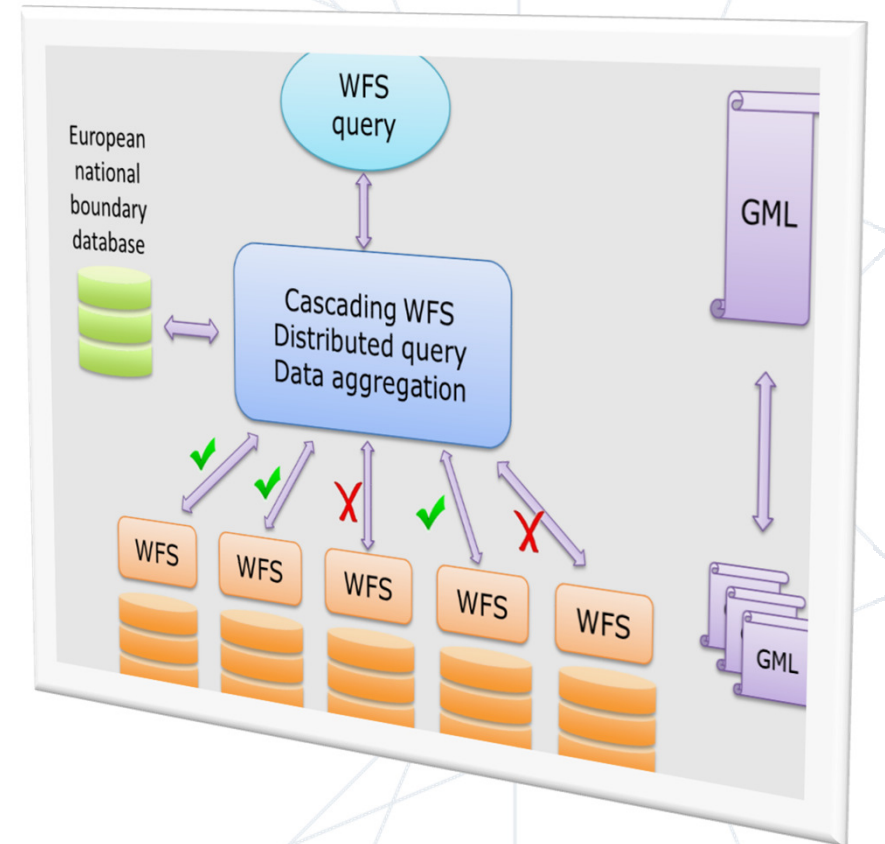
- European gazetteer++ service including place names, **addresses and administrative units**
- Exonym database included
- Candidate for the common EU Gazetteer proposed in ELISE ( ISA<sup>2</sup>-action)

Pariisi  
Parísi  
Párizs  
Paryžius  
Parīze  
Paríž  
Pariz  
Parigi  
Παρίσι  
Paříž  
París  
París  
Parijs  
Pariis  
Parys  
Pariz  
Pariz



## Kaskádované služby

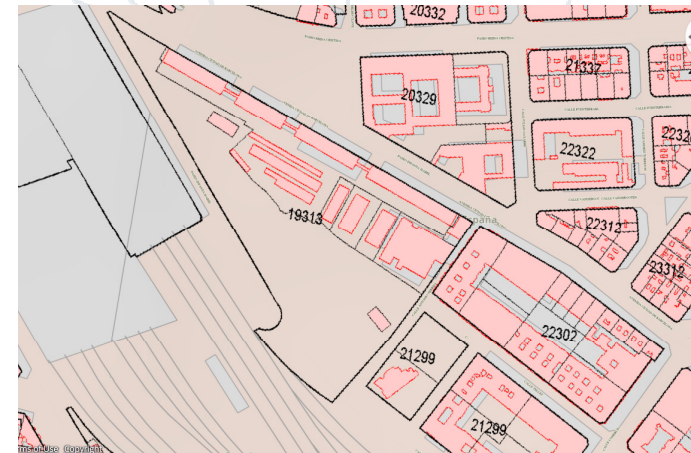
- Stahování strukturovaných dat „přes státní hranice“
- Jedno přístupové místo, společné vyhledávání a transparentní přístupové podmínky
- Používání národních služeb v reálném čase



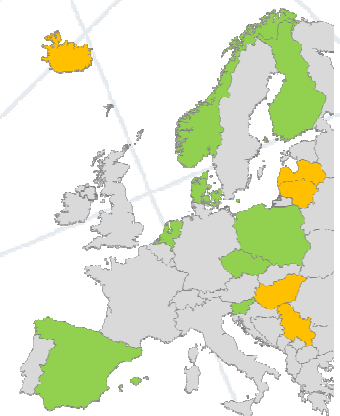


# CIM - Cadastral Index Map

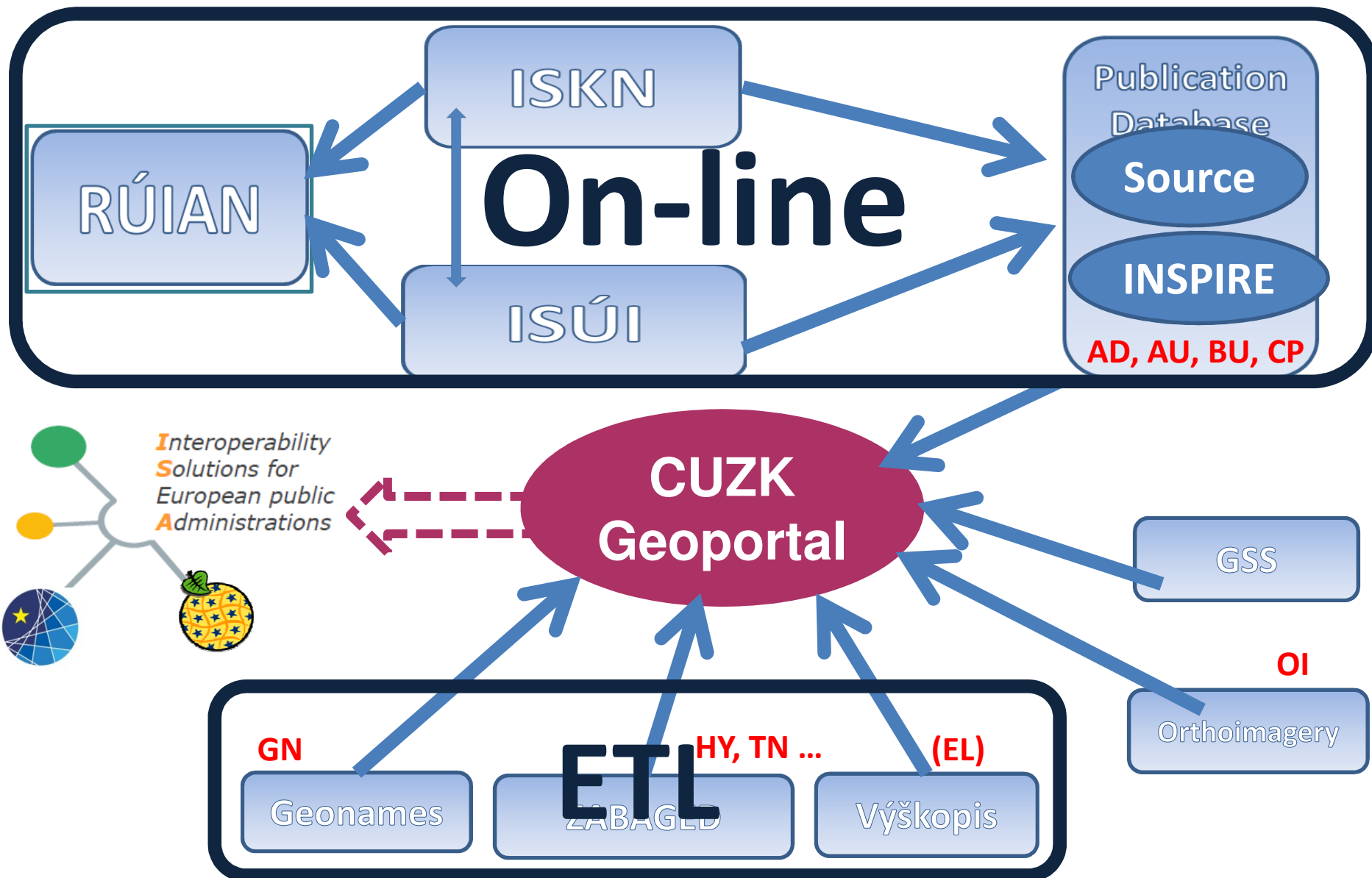
- První panevropská mapa ukazující katastrální parcely, adresy a budovy
- Zatím 8 zemí, v přípravě další
- Tuto službu mohou zajišťovat jedině NMCA!



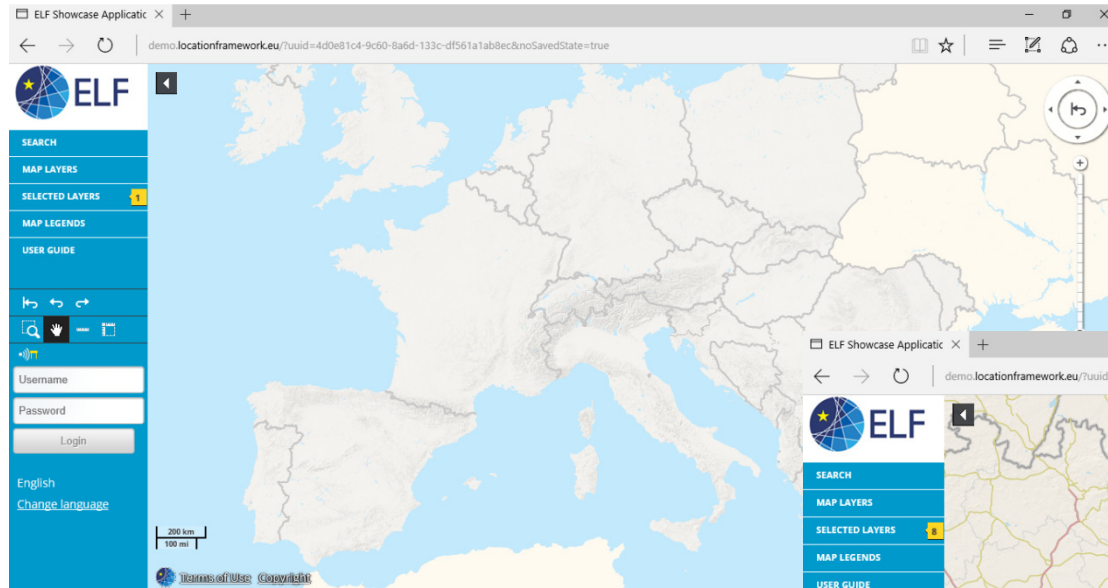
Fragment from Madrid, Madrid Atocha station area



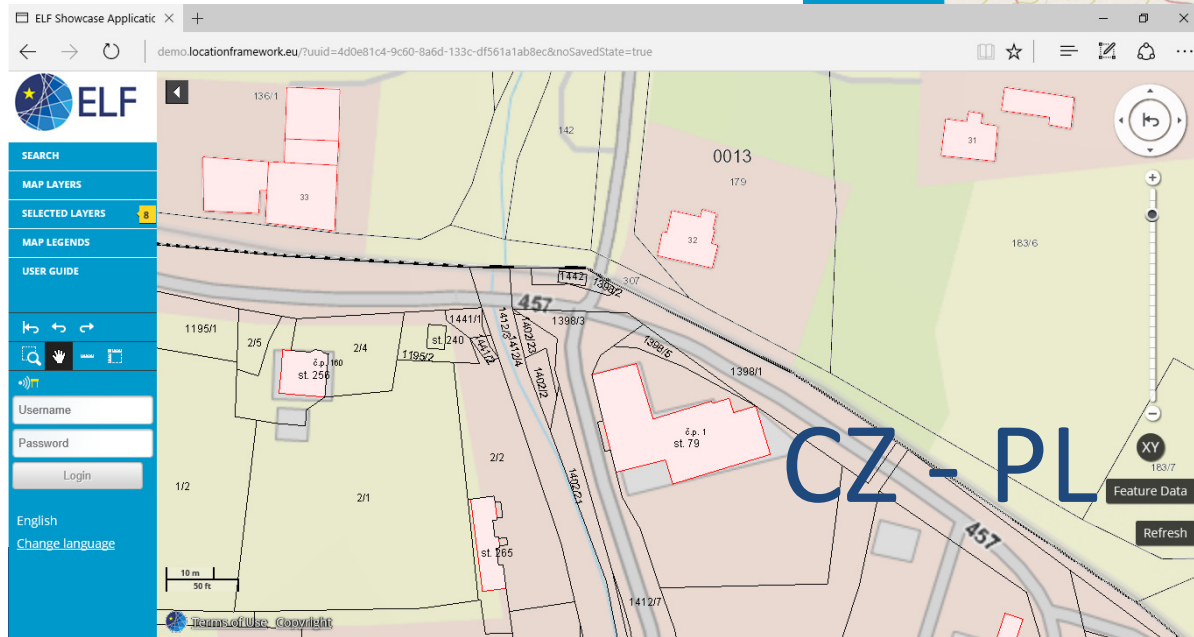
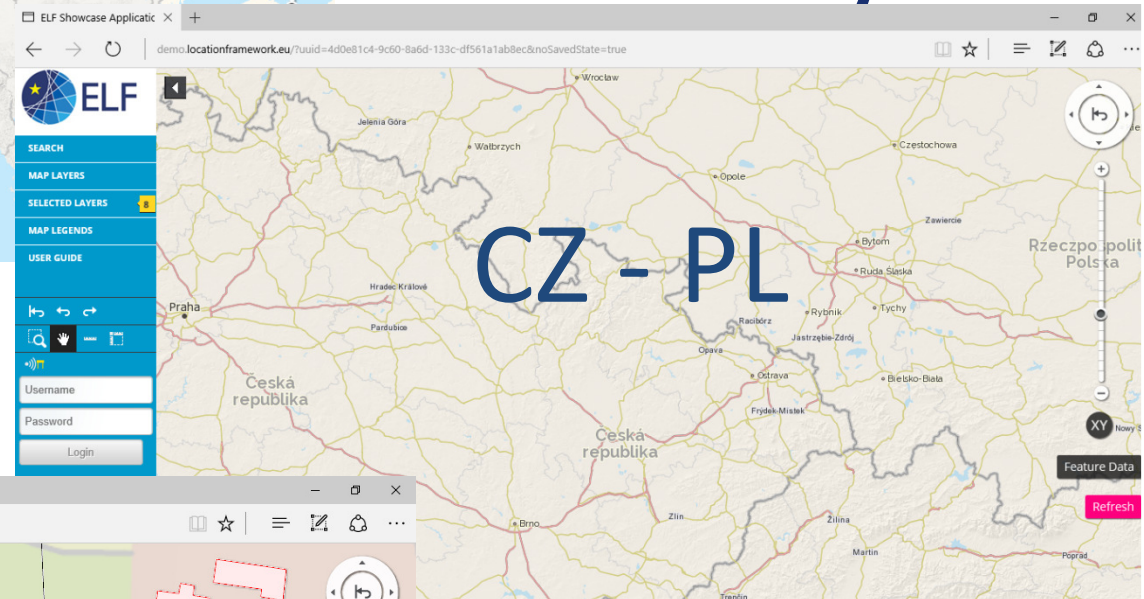
# Datové zdroje resortu ČÚZK a publikování služeb INSPIRE/ELF



# Lokální data jako součást evropské infrastruktury



Od klastrů k celku



Testování prototypů,  
př.  
Cadastral Index Map



SEARCH

MAP LAYERS

SELECTED LAYERS

MY DATA

CREATE EMBEDDED MAP

MAP LEGENDS

USER GUIDE

Username

Password

Login

English

Change language

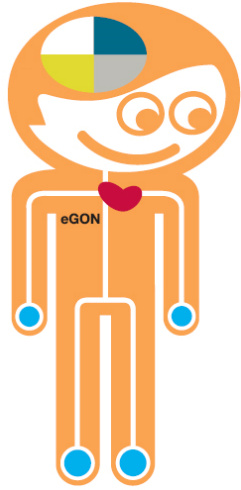
# Lokální data součástí interoperabilní ESDI

Feature Data

**Building (CZ)**

currentUse_title	2004-10-20T00:00:00
nativesness_href	CollectiveResidence
numberOfFloorsAboveGround_nilReason	numberOfFloorsAboveGround_nilReason.0 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a> numberOfFloorsAboveGround_nilReason.1 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a> numberOfFloorsAboveGround_nilReason.2 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a>
heightAboveGround_nilReason	<a href="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated">http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated</a>
floorDistribution_nilReason	<a href="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated">http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated</a>
SpellingOfName_text	<a href="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated">http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated</a>
id	numberOfFloorsAboveGround_nilReason.0 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a> numberOfFloorsAboveGround_nilReason.1 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a> numberOfFloorsAboveGround_nilReason.2 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a>
id.0	č.p. 1259
id.1	Praha
id.2	Košíře
dateOfConstruction_nilReason	<a href="https://security.locationframework.eu/wss/service/CZ_BU/https?service=WFS&amp;VERSION=2.0.0&amp;request=GetFeature&amp;StoredQuery_id=urn:ogc:def:query:OGC-WFS::GetFeatureById&amp;id=BP.10463076.3576435">https://security.locationframework.eu/wss/service/CZ_BU/https?service=WFS&amp;VERSION=2.0.0&amp;request=GetFeature&amp;StoredQuery_id=urn:ogc:def:query:OGC-WFS::GetFeatureById&amp;id=BP.10463076.3576435</a>
beginLifespanVersion	2015-10-09T15:14:27
elevation_nilReason	<a href="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated">http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated</a>
percentage_nilReason	<a href="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown">http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown</a>
officialValue_nilReason	<a href="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated">http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unpopulated</a>
ExternalReference_informationSystem	numberOfFloorsAboveGround_nilReason.0 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a> numberOfFloorsAboveGround_nilReason.1 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a> numberOfFloorsAboveGround_nilReason.2 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a>
id.0	č.p. 1259
id.1	Praha
id.2	Košíře
ExternalReference_informationSystem.0	<a href="http://vdp.cuzk.cz/">http://vdp.cuzk.cz/</a>
ExternalReference_informationSystem.1	<a href="http://nahizenidokn.cuzk.cz/">http://nahizenidokn.cuzk.cz/</a>
conditionOfConstruction_href	<a href="http://inspire.ec.europa.eu/codelist/ConditionOfConstructionValue/functional/functional.en.xml">http://inspire.ec.europa.eu/codelist/ConditionOfConstructionValue/functional/functional.en.xml</a>
buildingNature_nilReason	<a href="http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown">http://inspire.ec.europa.eu/codelist/VoidReasonValue/Unknown</a>
nameStatus_href	numberOfFloorsAboveGround_nilReason.0 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a> numberOfFloorsAboveGround_nilReason.1 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a> numberOfFloorsAboveGround_nilReason.2 <a href="http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym">http://inspire.ec.europa.eu/codelist/NativenessValue/endoronym</a>
id.0	č.p. 1259
id.1	Praha
id.2	Košíře
ExternalReference_informationSystem.0	<a href="http://vdp.cuzk.cz/">http://vdp.cuzk.cz/</a>
ExternalReference_informationSystem.1	<a href="http://nahizenidokn.cuzk.cz/">http://nahizenidokn.cuzk.cz/</a>
nameStatus_href.0	<a href="http://inspire.ec.europa.eu/codelist/NativenessValue/official">http://inspire.ec.europa.eu/codelist/NativenessValue/official</a>
nameStatus_href.1	<a href="http://inspire.ec.europa.eu/codelist/NativenessValue/official">http://inspire.ec.europa.eu/codelist/NativenessValue/official</a>
nameStatus_href.2	<a href="http://inspire.ec.europa.eu/codelist/NativenessValue/official">http://inspire.ec.europa.eu/codelist/NativenessValue/official</a>
horizontalGeometryReference_href	<a href="http://inspire.ec.europa.eu/codelist/HorizontalGeometryReferenceValue/footPrint/footPrint.en.xml">http://inspire.ec.europa.eu/codelist/HorizontalGeometryReferenceValue/footPrint/footPrint.en.xml</a>

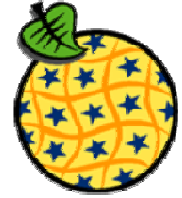




Geometrický plán, digitalizace

Data RÚIAN (ISKN, ISÚI)

Datové sady a služby INSPIRE



Národní webové služby ELF

Navazující datové sady a služby sousedících států

*Přeshraniční tematické aplikace*

Bezešvé datové sady a služby ELF pro EU+ (pomocí platformy ELF)



*Tematické aplikace v rozsahu Regionů a EU+*

Global and regional level reference data is currently available along with a showcase application demonstrating search and selection options. You can also access the ELF ArcGIS online platform. More functionality and content will be added in the coming months.

The service is jointly funded by the European Commission's Competitiveness and Innovation Framework Programme and the Project Partners.

For more information about the ELF Project, please visit [www.elfproject.eu](http://www.elfproject.eu).

Showcase Applications



ELF in ArcGIS Online



Documentation



Registration



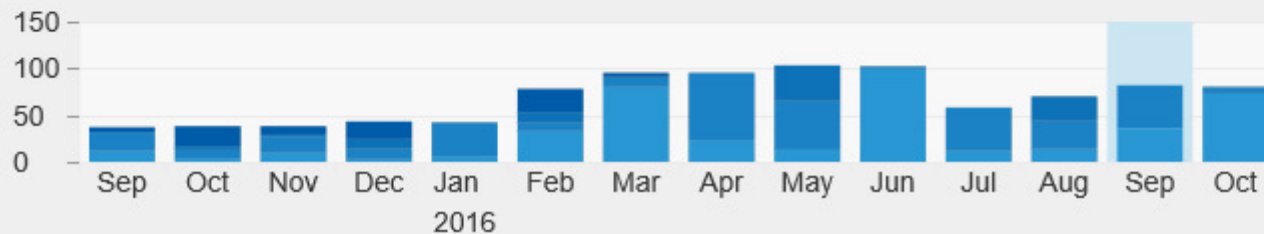
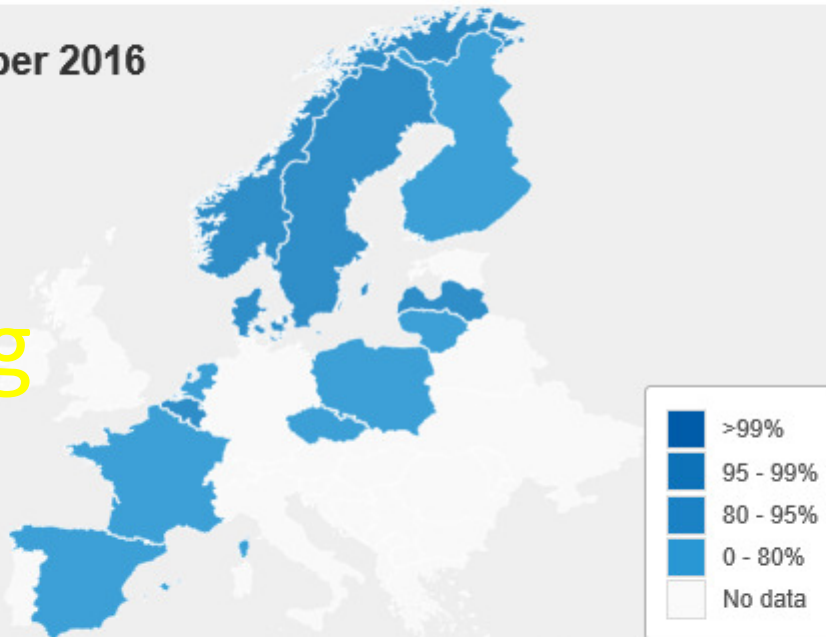
Thematic: Online service availability

All themes & spatial object types



September 2016

# Průběžný monitoring služeb



## Twitter Feeds

EuroGeographics



We've had a great day at #INTERGEO with BKG. More pictures over on Facebook  
<https://t.co/gwt4aJntbc>  
<https://t.co/bxzaOwC59b>  
 — 3 days 12 hours ago

more >



Welcome to the European Location Framework (ELF) service - a single point of access for harmonised reference data from National Mapping, Cadastre and Land Registry Authorities.

This website is being developed as part of the ELF Project to create the technical infrastructure for delivering authoritative, interoperable, cross-border geospatial reference data.

Global and regional level reference data is currently available along with a showcase application demonstrating search and selection options. You can also access the ELF ArcGIS online platform. More functionality and content will be added in the coming months.

The service is jointly funded by the European Commission's Competitiveness and Innovation Framework Programme and the Project Partners.

For more information about the ELF Project, please visit [www.elfproject.eu](http://www.elfproject.eu).

See the power of  
ELF

Showcase  
Applications



ELF in ArcGIS  
Online



Documentation

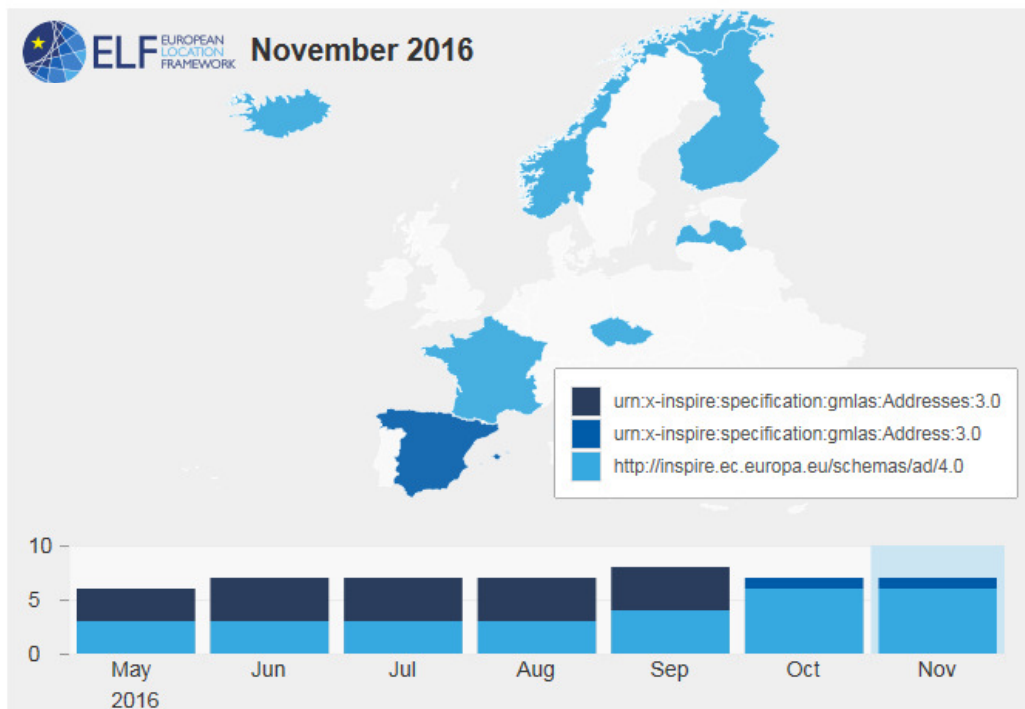


Registration



Thematic: Latest schema version

INSPIRE: Address information



### Twitter Feeds

EuroGeographics



We spot

@BartDeLathouwer on the  
#geobim2016 agenda!  
<https://t.co/6cjrgMpvml>  
<https://t.co/ID2MRmCP30>  
— 19 hours 17 min ago

more >

# Průběžný monitoring služeb



## WFS services

Test	Test started	GetFeature					GetCapabilities					DescribeFeatureType					Report
		Requests	Success	Fail	Timeout	Avg. resp. time	Requests	Success	Fail	Timeout	Avg. resp. time	Requests	Success	Fail	Timeout	Avg. resp. time	
BE-AU	2016-08-30T06:06:45.282Z	1928	1928	0	0	0.251	241	241	0	0	0.316	241	241	0	0	0.253	<a href="#">pdf-file</a>
BE-BU	2016-08-30T06:12:36.425Z	1928	1928	0	0	0.250	241	241	0	0	0.314	241	241	0	0	0.254	<a href="#">pdf-file</a>
BE-GN	2016-08-30T06:17:50.705Z	1928	1928	0	0	0.250	241	241	0	0	0.313	241	241	0	0	0.254	<a href="#">pdf-file</a>
BE-HY	2016-08-30T06:23:02.430Z	1928	1928	0	0	0.250	241	241	0	0	0.331	241	241	0	0	0.253	<a href="#">pdf-file</a>
BE-TN	2016-08-30T06:30:57.756Z	1928	1928	0	0	0.249	241	241	0	0	0.363	241	241	0	0	0.258	<a href="#">pdf-file</a>
CZ-AD	2016-10-10T04:25:01.599Z	1928	1928	0	0	0.272	241	241	0	0	0.373	241	241	0	0	0.407	<a href="#">pdf-file</a>
CZ-AU	2016-10-10T04:44:10.986Z	1928	1928	0	0	0.266	241	241	0	0	0.415	241	241	0	0	0.312	<a href="#">pdf-file</a>
CZ-BU	2016-10-10T04:50:38.666Z	1928	1928	0	0	0.272	241	241	0	0	0.411	241	241	0	0	0.274	<a href="#">pdf-file</a>
CZ-CP	2016-10-10T05:01:38.295Z	1928	1928	0	0	0.264	241	241	0	0	0.415	241	241	0	0	0.313	<a href="#">pdf-file</a>
CZ-GN	2016-10-10T05:10:53.513Z	1928	1928	0	0	0.788	241	241	0	0	0.512	241	241	0	0	0.722	<a href="#">pdf-file</a>
CZ-HY	2016-10-10T05:25:05.775Z	1928	1928	0	0	0.805	241	241	0	0	0.551	241	241	0	0	0.751	<a href="#">pdf-file</a>
CZ-TN_AIR	2016-10-10T05:42:47.853Z	1928	1928	0	0	0.796	241	241	0	0	0.575	241	241	0	0	0.726	<a href="#">pdf-file</a>
CZ-TN_CABLE	2016-10-10T05:54:22.811Z	1928	1928	0	0	0.807	241	241	0	0	0.504	241	241	0	0	0.738	<a href="#">pdf-file</a>
CZ-TN_RAIL	2016-10-10T06:17:38.587Z	1928	1928	0	0	0.857	241	241	0	0	0.576	241	241	0	0	0.788	<a href="#">pdf-file</a>
CZ-TN_ROAD	2016-10-10T06:34:11.656Z	1928	1928	0	0	0.949	241	241	0	0	0.599	241	241	0	0	0.869	<a href="#">pdf-file</a>
CZ-TN_WATER	2016-10-10T06:44:12.640Z	1928	1928	0	0	0.817	241	241	0	0	0.514	241	241	0	0	0.755	<a href="#">pdf-file</a>
Cas1_address1_	2016-11-07T05:28:26.085Z	1928	1928	0	0	0.316	241	241	0	0	0.492	241	241	0	0	0.232	<a href="#">pdf-file</a>
Cas1_AdmBound1_	2016-11-07T13:07:53.774Z	1928	1928	0	0	0.359	241	241	0	0	0.493	241	241	0	0	0.229	<a href="#">pdf-file</a>
Cas1_AdmUnit1_	2016-11-07T06:00:06.189Z	1928	1928	0	0	0.303	241	241	0	0	0.499	241	241	0	0	0.234	<a href="#">pdf-file</a>
Cas1_CadBound1_	2016-11-07T06:09:47.501Z	1928	1928	0	0	0.320	241	241	0	0	0.500	241	241	0	0	0.279	<a href="#">pdf-file</a>
Cas1_CadParcel1_	2016-11-07T06:59:53.731Z	1928	1928	0	0	0.318	241	241	0	0	0.497	241	241	0	0	0.277	<a href="#">pdf-file</a>
Cas1_ContLine1_	2016-11-07T07:38:43.613Z	1928	1928	0	0	0.363	241	241	0	0	0.494	241	241	0	0	0.231	<a href="#">pdf-file</a>
Cas1_DamOrWeir1_	2016-11-07T09:00:06.300Z	1928	1928	0	0	0.400	241	241	0	0	0.463	241	241	0	0	0.222	<a href="#">pdf-file</a>

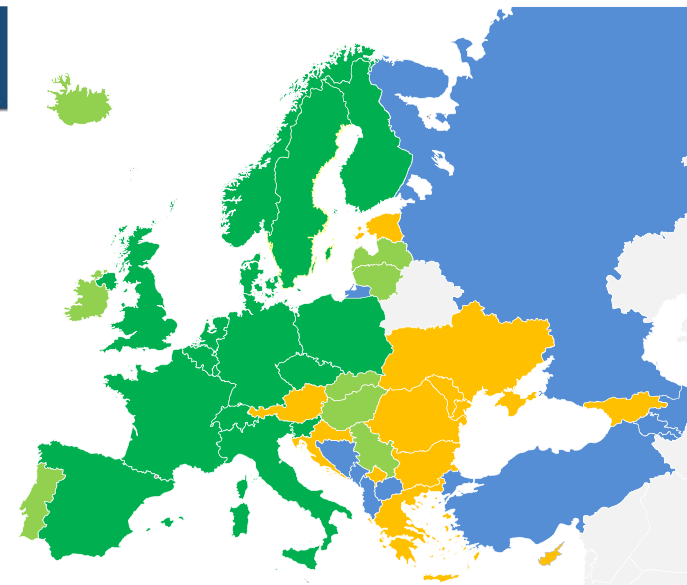


# Poznátky

- ★ Zapojení a srovnání v projektu ELF ukazuje, že v ČR jsou technicky zdatní odborníci i konkurence schopná technická řešení. **České základní registry a implementaci INSPIRE Příloh I a II lze vidět jako ÚSPĚCH.**
- ★ Mezinárodní projekt zviditelňuje národní zdařilá řešení; přináší podněty pro zvyšování kvality dat, prezentace služeb aj.
- ★ **Datové sady generované z RUIAN** (průběžně aktualizované obcemi, StÚ, aj.) **se vzápětí stávají věrohodnou součástí interoperabilní infrastruktury pro prostorové informace v EU+.** V oblasti ELF, INSPIRE stav SDI v ČR prezentujeme úspěšně.

ALE

- ★ **V oblasti eGovernment (ISA) vnější obraz ČR neodpovídal domácí realitě.**
  - ★ Lze změnit, ale vyžaduje systematickou práci a zohlednění srovnávacích kritérií (zpráva o stavu ZR v létě 2016 – MV a ČÚZK).
  - ★ Chápat význam monitoringu a koordinovaného reportingu za ČR a věnovat mu v rámci organizací pozornost a kapacitu(!) na odborné i manažerské úrovni.



**Děkuji za pozornost**

[Eva.Pauknerova@cuzk.cz](mailto:Eva.Pauknerova@cuzk.cz)

<http://www.elfproject.eu>

<http://demo.locationframework.eu>



ČESKÝ ÚŘAD ZEMEMĚŘICKÝ A KATASTRÁLNÍ  
CZECH OFFICE FOR SURVEYING, MAPPING AND CADASTRE  
TSCHECHISCHES AMT FÜR LANDESVERMESSUNG UND KATASTER