

Open European Location Services

Open ELS, ELS, Core Reference Dataset (CRD) – what contributions are needed and how those are interrelated

Saulius Urbanas, EuroGeographics

Webinar, 26th September 2018



Agenda of today's presentations

9:00 – 9:30 ELS, Open ELS, Core Reference Dataset (CRD) – to what contributions are needed and how those are interrelated (Saulius Urbanas)

9:30 – 10:40 Instructions and best practice in arranging data and services to the priority Open ELS products:

9:30 – 10:10 WFS of Addresses, Buildings, TN-Roads, TN-Rails (Marcin Grudzien)

10:10 – 10:30 Cadastral Index Map (Amalia Velasco),

10:30 – 10:40 GeoLocator and Regional Gazetteer (Saulius Urbanas)

10:40 – 11:00 ELS metadata requirements (Dorus Kruse)

11:00 – 11:20 ELS / Prospects prototyping the new Open ELS / ELS infrastructure (Jari Reini)

11:20 – 11:30 ELS Data Provider Agreement (Angela Baker)

11:30 – 11:40 Capacity strengthening opportunities for NMCAs arranging national data / services (Torsten Svard)

11:40 – 12:00 Questions and discussions

EuroGeographics' vision for future European Location Services



To provide the single access point for international users of harmonised, pan-European, authoritative geospatial information and services.

For National mapping, cadastral and land registry authorities to be recognised in our International effort to contribute to the wider public good.

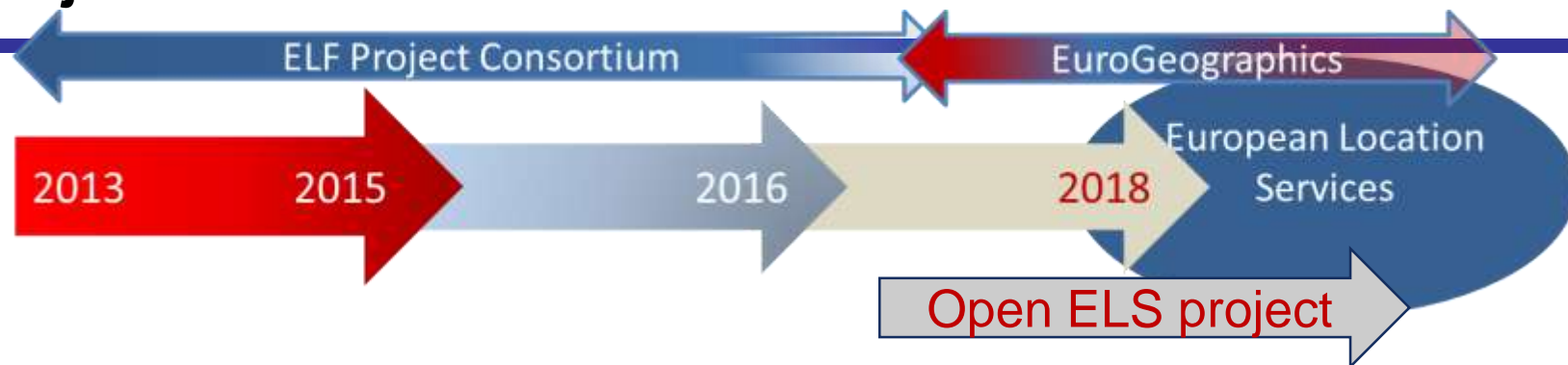
EuroGeographics' Programme aims to ...

- Develop a sustainable, operational service
- Build on the ELF project
- Develop and implement Open European Location Services (Open ELS)
- Deliver Pan-European authoritative geospatial data content and
- European Location Services as practical implementation of the INSPIRE Directive, bringing INSPIRE data and services together onto one platform as evidence of the rationale for INSPIRE.



Developing the capability and capacity to meet potential commercial use of pan-European or Cross-border national data and services

European Location Services Transition Programme objectives



European Location Framework project

Established standards, tools, technical infrastructure and pilot services – the ELF Platform

Pilot products & services to defined standards (INSPIRE-compliant spatial reference data, harmonised at a cross-border and pan-European level)

Transition Programme (Oct 2016 – Oct 2018)

Build on ELF Platform and hand-over ownership of the ELF platform from ELF Consortium to EuroGeographics

Design and build operational and customer focused services with key partners (Kartverket, Kadaster, OSGB, NLSFI, BKG)

Establish the organisational model for operations

Operational European Location Services

Provide reliable and efficient products/services for pan-European users

Single point of access for licensing official data on European level

Business model and business case in place

Delivery organisation decided

Operational model implemented

Level of Details

LoD	Source data	Responsible to transform data and set up download service
ELF Global: 1:500 000 and smaller	European product (EGM)	Done centrally
ELF Regional: 1:100 000 - >1:500 000	European products (ERM - EBM)	Done centrally
ELF Master Level 2 (LoD2): 1:25 000 - >1:100 000	National data	Data providers (NMCA and other public authorities)
ELF Master Level 1 (LoD1): 1:5 000 - >1:25 000		
ELF Master Level 0 (LoD0): 1:5 000 and larger		

ELF/ELS showcase application

<https://demo.locationframework.eu>

The screenshot displays the ELF/ELS showcase application interface. The browser address bar shows <https://demo.locationframework.eu>. The interface includes a navigation menu on the left with options like SEARCH, MAP LAYERS, SELECTED LAYERS, MY DATA, CREATE EMBEDDED MAP, MAP LEGENDS, and USER GUIDE. Below the menu is a login section with fields for Username and Password, and a Login button. A language selector is set to English. The main map area shows a cadastral index map with buildings highlighted in pink. A 'Map Layers' panel on the left lists various layers with their respective counts: Addresses (6), Administrative units (20), Basemaps (1), Buildings (7), Cadastral parcels (14), Elevation (9), Geographical names (10), Geology (4), Hydrography (61), Land cover (9), Protected sites (4), Sea regions (7), and Transport networks (66). A 'Feature Data' popup window is open over a selected cadastral parcel, displaying the following information:

Feature Data

- ELF Cadastral Index Map (Cadastral Parcel)
- FEATUREINFOCOLLECTION - LAYER NAME: 'CP.CADASTRALPARCELELFCADASTRE'
- UniqueIdentifier: 1361707
- Value: 6089
- beginLifespanVersion: Null
- inspireId: 280306_2.0017.25/4
- inspireName: PLZIPRLN.0.LU

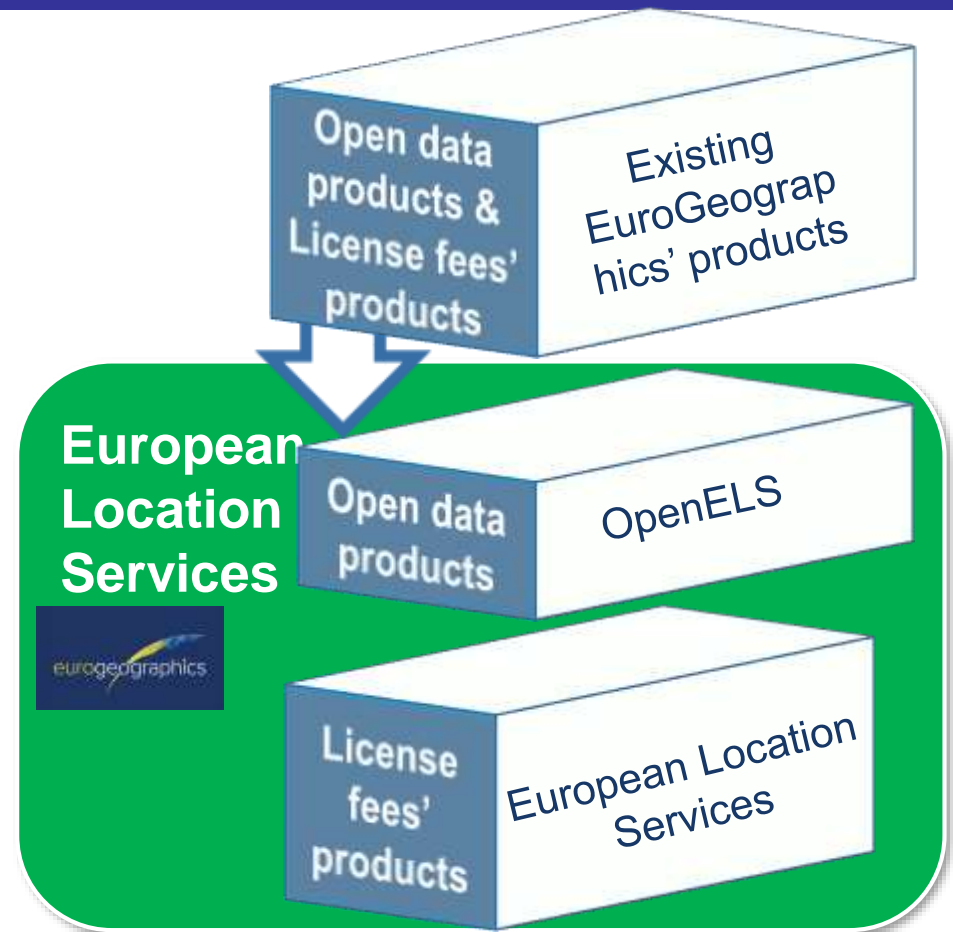
Open European Location Services (Open ELS) project

Open ELS

- Strong user demand for “open and free” services
- Continuation of our approach to provide access to authoritative data – open and not open
- Developing a strategy and positioning of open data and the relationship with ELS and existing products

European Location Services

- Uniqueness in harmonising and licensing pan-European data
- Developing objectives and pricing strategy for each individual product proposition



Priority Open ELS products

- WFS:
 - Addresses,
 - Buildings,
 - Transport Network Rail,
 - Transport Road
- Cadastral Index Map
- Pan European Regional Gazetteer (GN)

- Prospect coverage / Data Providers:
 - Czech Republic, Denmark, Finland, Norway, Spain (CNIG), Spain (SDGC), The Netherlands, Belgium

- All are encouraged to join!

ELS, Open ELS, CRD – content's interrelation

ELS - services

- **GeoLocator (application, DB)**
 - **Geographical Names**, Admin Units, Addresses
- **Cadastral Index Map (WMS)**
 - **Cadastral Parcels, Buildings, Addresses**
- **TopoBaseMap (WMTS)**
- **Download services (WFS)**
 - Administrative Units
 - Geographical Names
 - **Buildings**
 - **Transport Networks (Road, Rail)**
 - **Hydrography (Physical Water)**
 - Cadastral Parcels
 - **Addresses**
 - Elevation
 - Land Cover
 - Hydrography (Network)
 - Transport Networks (Water, Air, Cable)
 - Protected Sites
 - Sea regions
 - Statistical Units

Open ELS - services

- **GeoLocator – **Regional Gazetteer****
 - **Geographical Names**, Admin Units, Addresses
- **Cadastral Index Map (WMS)**
 - **Cadastral Parcels, Buildings, Addresses**
- **TopoBaseMap (WMTS)**
- **Download services (WFS)**
 - Administrative Units
 - Geographical Names
 - **Buildings**
 - **Transport Networks (Road, Rail)**
 - Hydrography (Physical Water)
 - Cadastral Parcels
 - **Addresses**
 - Elevation
 - Land Cover
 - Hydrography (Network)
 - Transport Networks (Water, Air, Cable)
 - Protected Sites
 - Sea regions
 - Statistical Units

CRD - data

- **GeoLocator – **Regional Gazetteer****
 - Geographical Names, Admin Units, Addresses
- **Cadastral Index Map (WMS)**
 - Cadastral Parcels, Buildings, Addresses
- **TopoBaseMap (WMTS)**
- **Download services (WFS)**
 - Administrative Units
 - Geographical Names
 - Buildings
 - **Transport Networks (Road, Rail)**
 - **Hydrography (Physical Water)**
 - Cadastral Parcels
 - Addresses
 - Elevation
 - Land Cover
 - Hydrography (Network)
 - Transport Networks (Water, Air, Cable)
 - Protected Sites
 - Sea regions
 - Statistical Units

Link between ELS / Open ELS and CRD

- CRD is the channel to a broader ELS content.
- Simplified INSPIRE data delivery. The CRD composition is based on the INSPIRE requirements – flatten INSPIRE data model
- CRD v.1 due to the urgent demand of CLC-Backbone (Copernicus) will be compiled by manual data processing
 - TN and HY are priority themes, but more themes considered for the future
- No overlap between CRD and ELS/Open ELS
- CRD developments towards ELS / Open ELS
 - National (INSPIRE) services for maintenance / updates
 - Centralised offering to users – WFS, geopackaging

What resources are required

- **Data** corresponding to the ELS (INSPIRE) data themes
 - 12 data themes: Administrative Units, Geographical Names, Buildings, Transport Networks (Road, Rail, Water, Air, Cable), Hydrography, Elevation, Land Cover, Cadastral Parcels, Addresses, others
- **Hardware and software** for
 - Data processing (transforming) to ELS products specifications
 - Edge-matching
 - Arranging and hosting web-services (WMS, WFS, ATOM)
 - Quality test and validation
- **Competent staff members or contractors**
 - Ability to analyze the INSPIRE (ELS) requirements
 - Data modelling skills - data transformation to ELS spec and ELS data model
 - Data harmonization and edge-matching
 - Validation of data content
 - Composition of web-services

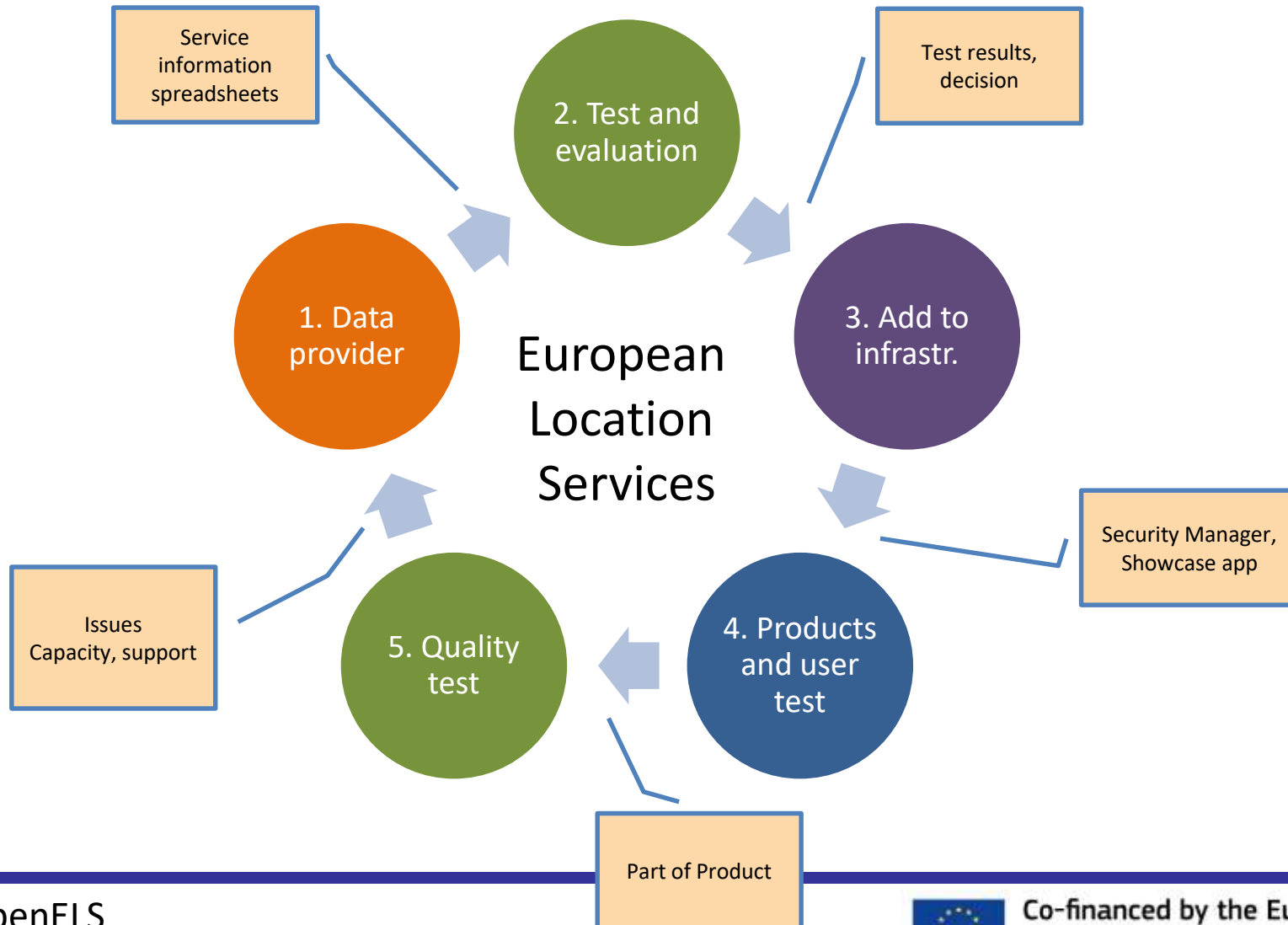


Capacity building,
training,
consultation
and
support from
Open ELS

What resources are required

- Initial investment
 - Hardware: 1-2 PC for data processing; 1 server
 - Software: GIS desktop (ArcGIS Desktop or QGIS...), ETL software (FME, Hale Studio or Snowflake...), web-service hosting software (GeoServer, MapServer, Degree, ArcGIS for INSPIRE...)
 - Time: 1-4 weeks per product
- Ongoing maintenance
 - 1-3 hours / week for monitoring the web-services
 - 2 days / month for solving issues
- Staff skills
 - 1-2 GI operators - basic GIS data production skills
 - 1 data analyst - data modelling and transformation skills
 - 1 administrator - skills to arrange and host spatial web-services, manage security settings (authentication)

Loop of Data Supply processes



How to contribute to ELS / Open ELS – steps forward

1. Join the ELS Service Supply basecamp
2. Sign the ELS / Open ELS [Data provider agreement](#)
3. Arrange your data and services according to the ELS requirements

Specifications, guidance, documentation: <http://elfproject.eu/documentation>

4. Agree (edge-match) the connecting features along borders

Guidance on implementation of cross-border harmonization (to be published soon)

5. Run compliancy and performance test:

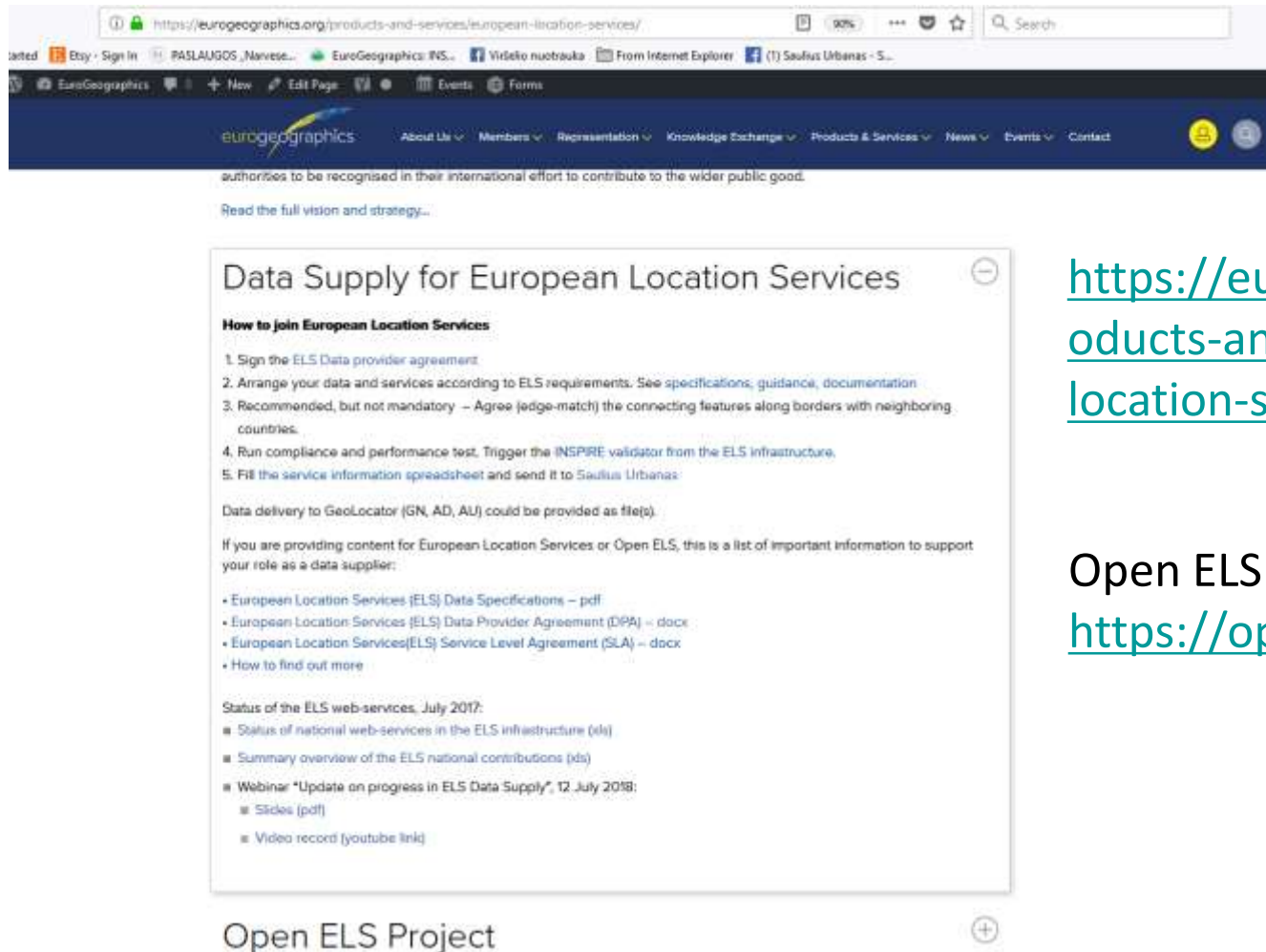
Trigger the INSPIRE validator from the ELS infrastructure

<http://validator.locationframework.eu/etf-webapp/>

6. Fill the [service information spreadsheet](#), attach the compliancy test reports and send to Saulius Urbanas (saulius.urbanas@eurogeographics.org)



ELS in the EuroGeographics website



The screenshot shows a web browser displaying the EuroGeographics website. The address bar shows the URL: <https://eurogeographics.org/products-and-services/european-location-services/>. The page content includes a navigation menu with items like 'About Us', 'Members', 'Representation', 'Knowledge Exchange', 'Products & Services', 'News', 'Events', and 'Contact'. Below the navigation, there is a section titled 'Data Supply for European Location Services' with a minus sign icon in the top right corner. This section contains a list of steps for joining European Location Services, information about data delivery to GeoLocator, and a list of links for data specifications, provider agreements, and service level agreements. At the bottom of the section, there is a plus sign icon and the text 'Open ELS Project'.

authorities to be recognised in their international effort to contribute to the wider public good.
Read the full vision and strategy...

Data Supply for European Location Services

How to join European Location Services

1. Sign the ELS Data provider agreement
2. Arrange your data and services according to ELS requirements. See specifications, guidance, documentation
3. Recommended, but not mandatory – Agree (judge-match) the connecting features along borders with neighboring countries.
4. Run compliance and performance test. Trigger the INSPIRE validator from the ELS infrastructure.
5. Fill the service information spreadsheet and send it to Saulius Urbanas

Data delivery to GeoLocator (GN, AD, AU) could be provided as file(s).

If you are providing content for European Location Services or Open ELS, this is a list of important information to support your role as a data supplier:

- European Location Services (ELS) Data Specifications – pdf
- European Location Services (ELS) Data Provider Agreement (DPA) – docx
- European Location Services(ELS) Service Level Agreement (SLA) – docx
- How to find out more

Status of the ELS web-services, July 2017:




- Status of national web-services in the ELS infrastructure (xls)
- Summary overview of the ELS national contributions (xls)
- Webinar “Update on progress in ELS Data Supply”, 12 July 2018:
 - Slides (pdf)
 - Video record (youtube link)

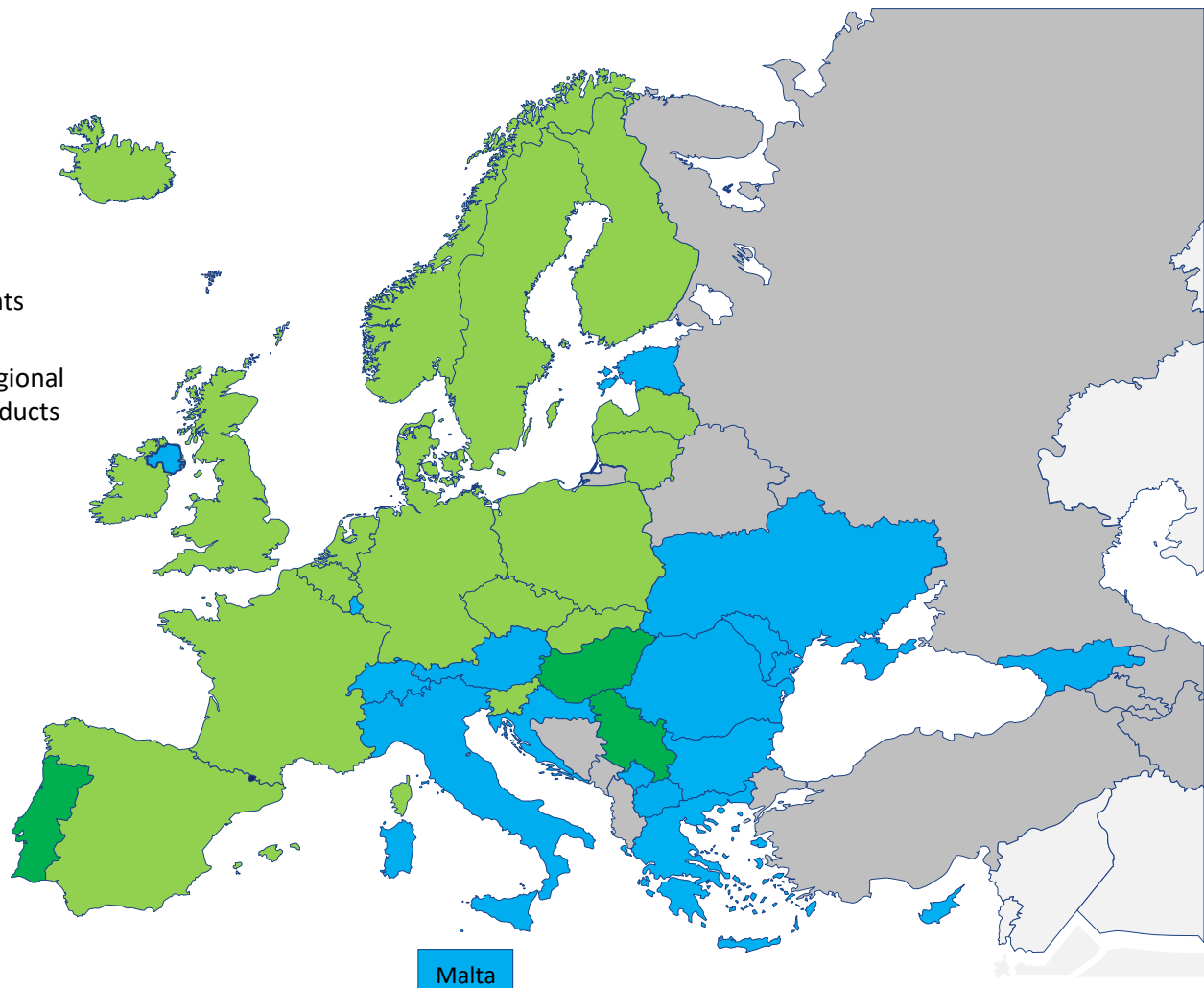
Open ELS Project

<https://eurogeographics.org/products-and-services/european-location-services/>

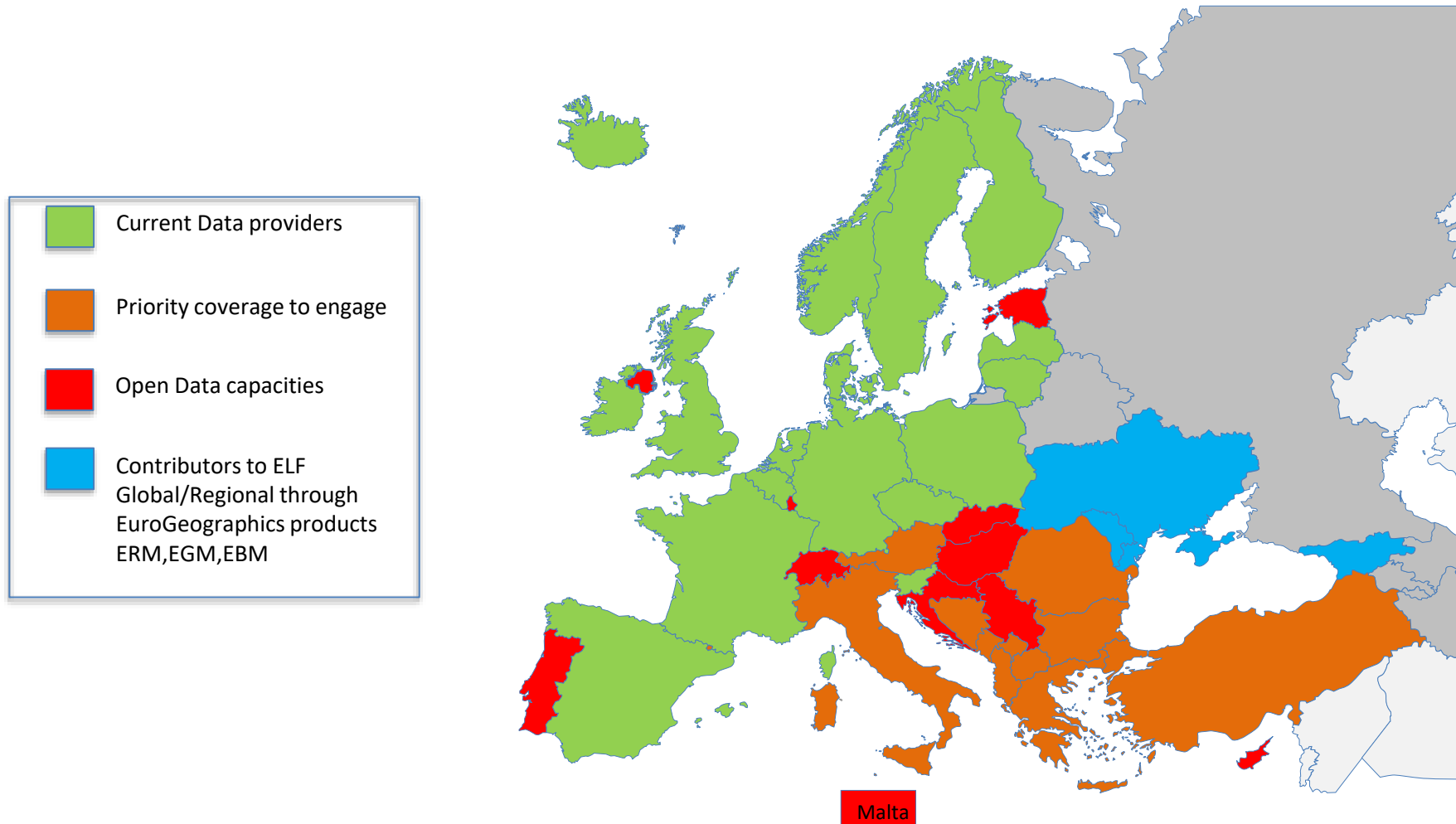
Open ELS website:
<https://openels.eu/>

Coverage of current ELS data providers

-  Data service providers
-  Services are under improvements (not ready yet)
-  Contributors to ELF Global/Regional through EuroGeographics products ERM,EGM,EBM



Priority to engage for Data providers contributions



ELS Data Supply: Help Desk at Open ELS website

<http://openels.eu/help-desk/>

Home | OpenELS

openels.eu

OpenELS European Location Services

HOME ABOUT PRODUCTS EVENTS LATEST HELP DESK

OPEN EUROPEAN LOCATION SERVICES

European open geospatial sources

Need to open a support ticket?

Please complete and submit this form...

Name

Organisation (optional)

Email address

Type of Enquiry

Type of Enquiry

- I have a general question about the Open ELS Project
- I'm interested in evaluating or using services
- I need assistance with existing evaluation
- I'm an NMCA interested in contributing data or other services
- I'm an NMCA already providing services and need help
- Other (please explain clearly below)

0 of 140 max characters

Message (500 chars)

0 of 500 max characters

Saulius Urbanas, EuroGeographics
saulius.urbanas@eurogeographics.org

