

The background of the slide is a topographic map of a mountainous region, likely the Alps, showing elevation contours and terrain features. The map is overlaid with a semi-transparent dark grey rectangle on the left side, which contains the title text. On the right side, there is a white geometric pattern of overlapping triangles, resembling a mesh or a stylized map projection.

Open Maps for Europe

**MIGT meeting 9/07/2021;
Nathalie Delattre (NGI-Belgium)**

Agenda

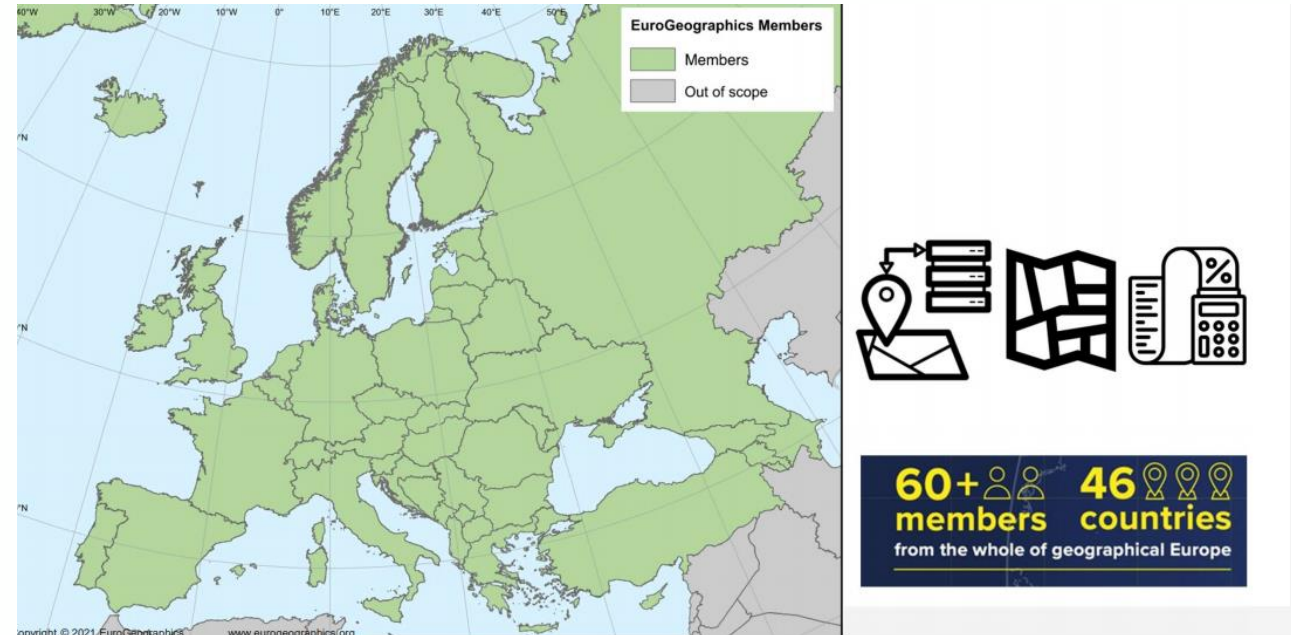
1. EuroGeographics
2. OpenMaps for Europe (OME)
3. Pan-European products
4. opening the authoritative datasets
5. OME geoportal
6. Conclusion

1. EuroGeographics

International ASBL

- Mapping agencies,
- Cadastral agencies
- Land registries agencies

Headquarters: Brussels



How we work...



Knowledge exchange



Voice the views



Data Access Facilitation

2.1. Open Maps for Europe: adapting to new landscape

- Providing **easy access to free** to use harmonised maps for Europe
- **Realising the benefits of the Open PSI Directive** by driving innovation, market development and growth to support the digital economy.
- Demonstrating how **NMCAs contribute** to the public good through unique international collaboration.
- Maintaining Open Maps for Europe **requires sustainable funding**



2.2. Open Maps for Europe: CEF project; bid- period: 2020 to 2022. (75% funding)

Activities

- Gaining permission to open up Pan European datasets
- Production of pan-European harmonised datasets
- Technical platform giving access to digital maps of Europe and pan-European datasets
- Dissemination, impact and sustainability

Partnerships

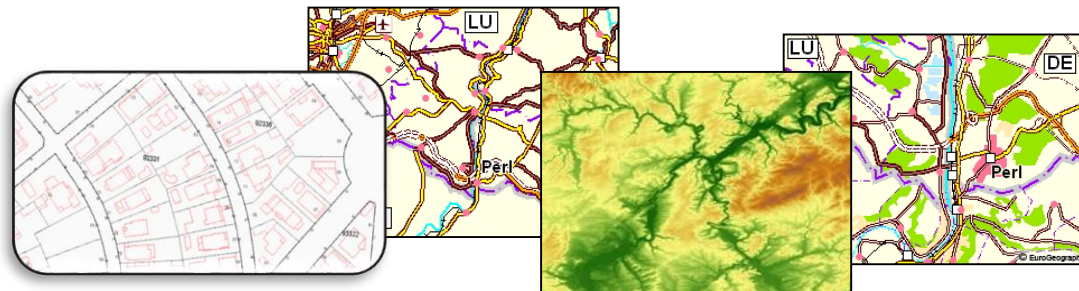
- IGNB: partner as legal and technical adviser.
- ThinkWhere : Technical platform implementation
- BKG-DE & IGN-France: data product managers

3. Production of open pan-European harmonised datasets

This activity includes work on **EGM, ERM, Regional Gazetteer, EuroDEM, New: Cadastral Index Map, Imagery**

The activity will result in the following outputs:

- Production and continued supply chain of the open datasets, ERM, EGM, and EuroDEM
- Increased coverage of the Regional Gazetteer
- A new supply chain to include Imagery and the Cadastral Index Map (CIM) :WMTS

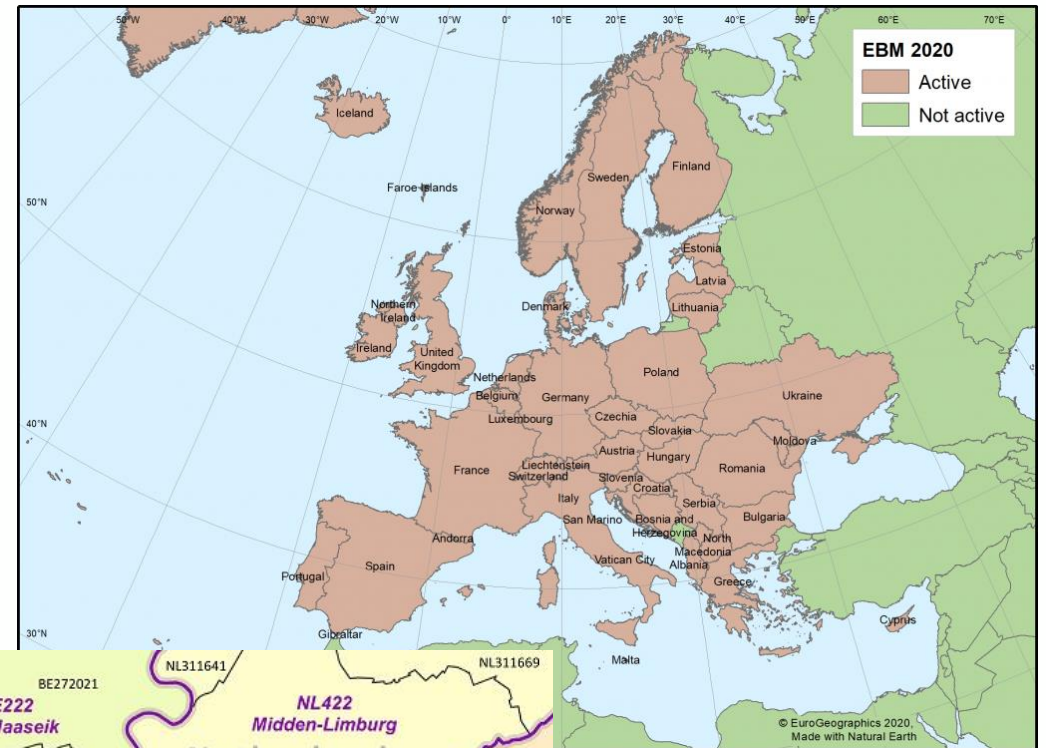


3.1 EuroBoundaryMap (not part of OME)

Input for ERM, EGM and the Regional Gazetteer

- 55 countries & territories
- Theme: administrative boundaries (names, codes) + statistical units (LAU, Nuts)
- Update: yearly
- Not open
- Contract with Eurostat
- Production coordinator : BKG-Germany

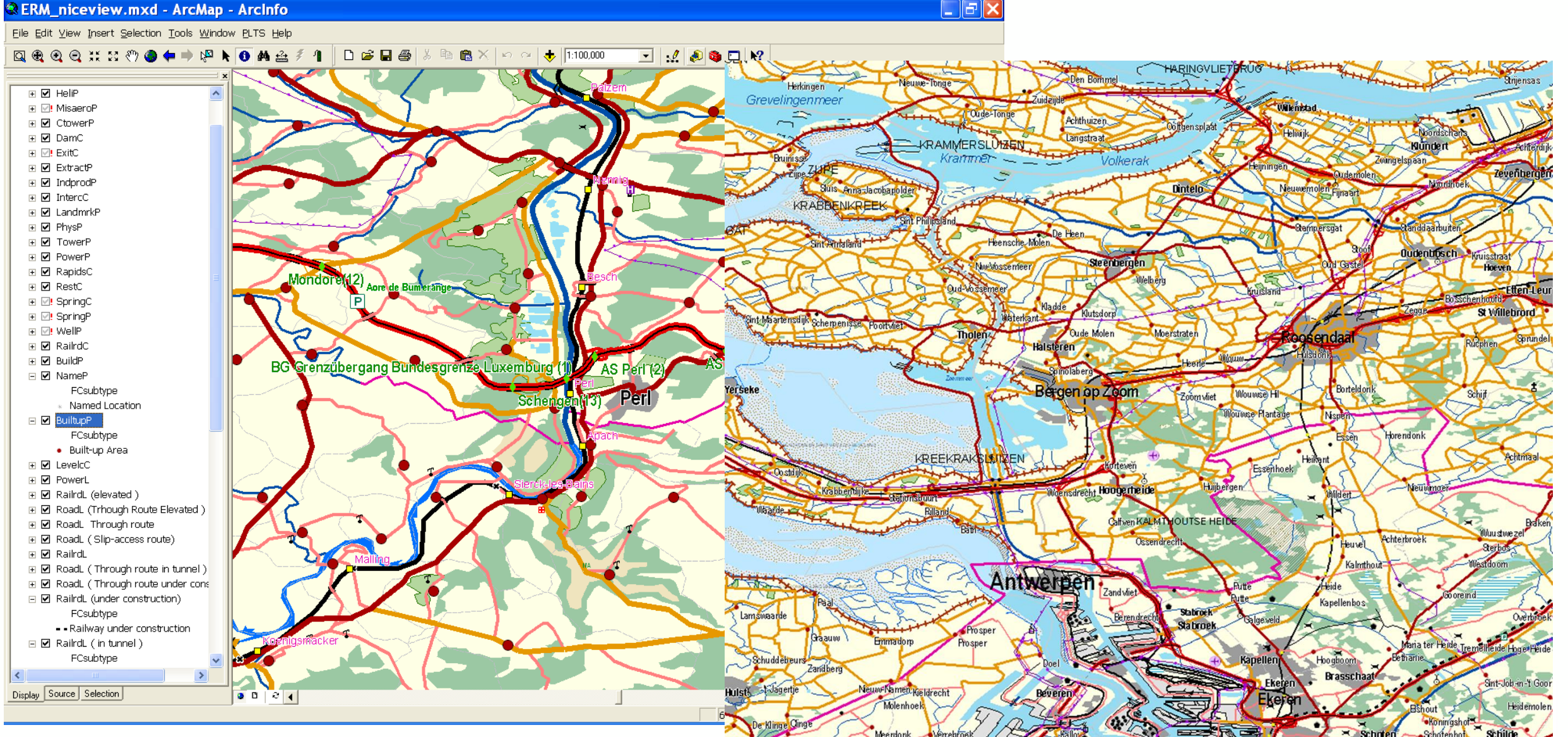
[EBM specifications](#)



3.2 EuroRegionalMap

- 51 countries available
- Themes: administrative boundaries, water network, transport network, settlements, vegetation&soils, named locations, miscellaneous
- To open
- Update: every year (not all themes)
- Production coordinator : NGI-Belgium 2016 -> BKG-Germany
- Contract with Eurostat until 2018

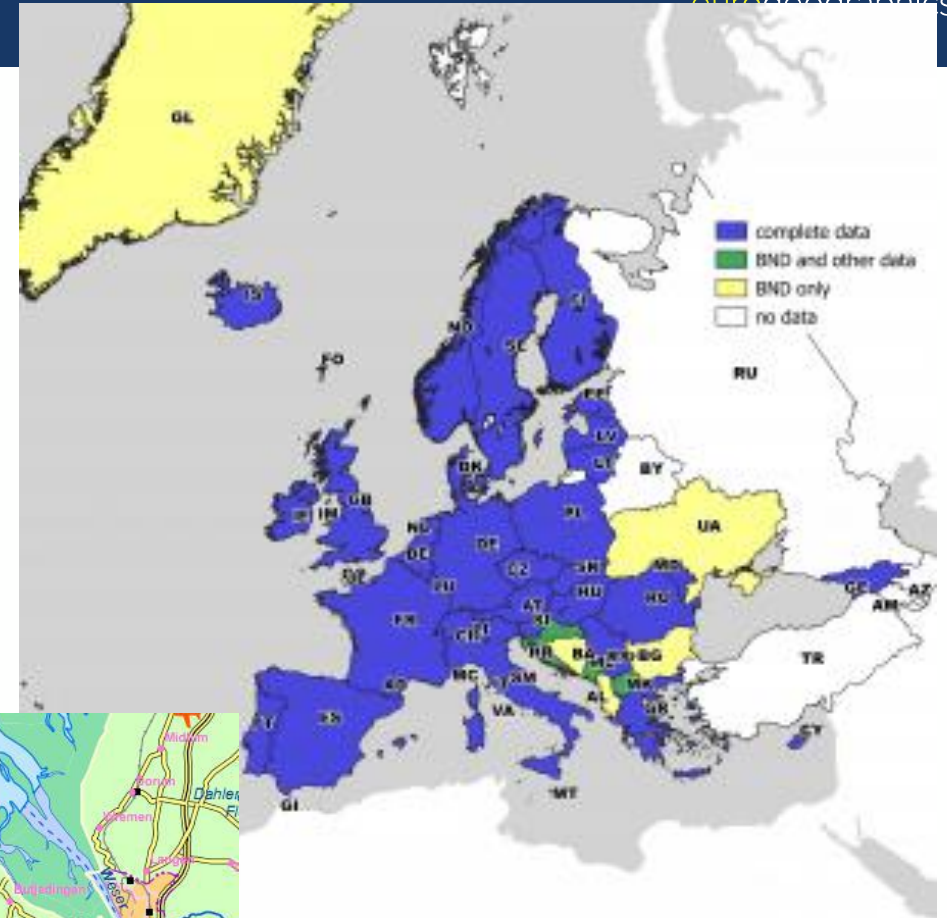





3.3 EuroGlobalMap

- 55 countries
- Themes: administrative boundaries, water network, transport network, settlements, named locations
- Update: every year
- Already open
- Production manager: IGN France

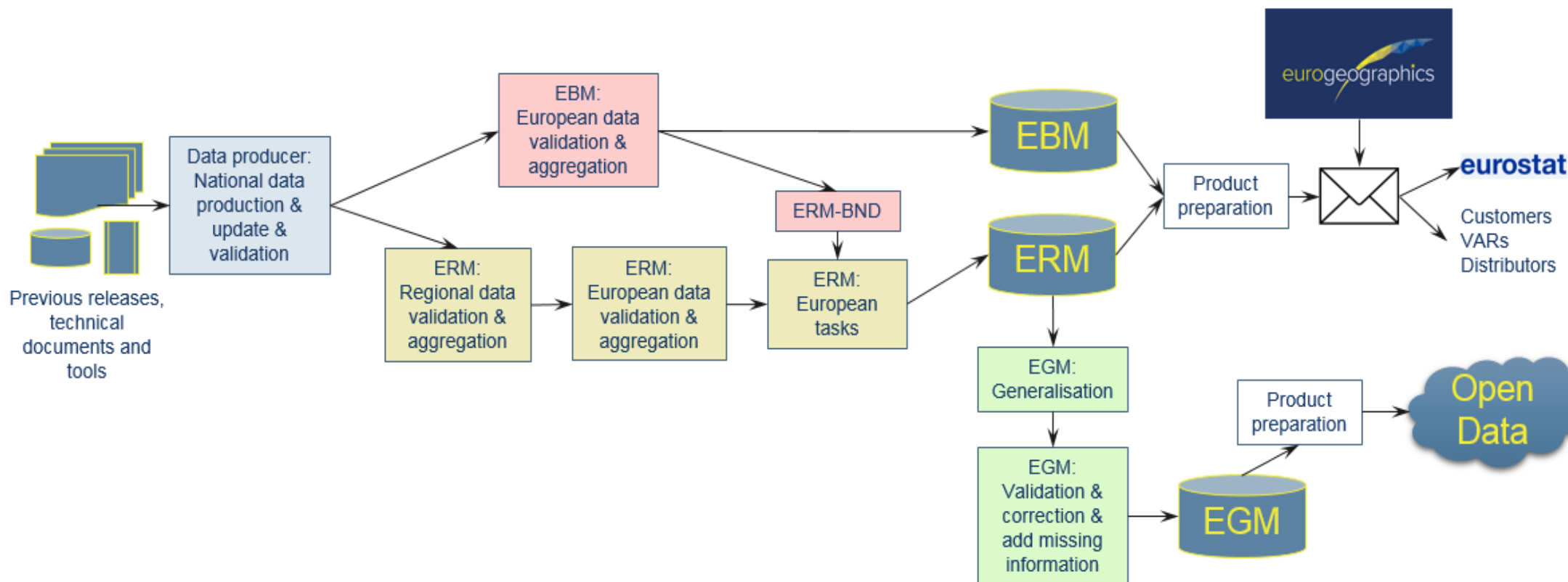
[EGM specifications](#)



3.4 Common Harmonisation Characteristics

- **ERM/EGM:** [ERM specifications](#)
Nomenclatures (features&attributes) based on DIGEST FACC
- **EBM:** mix DIGEST/INSPIRE
 - INSPIRE compliant data model + features
 - Attributes DIGEST FACC
 - INSPIRE data
- **Harmonised data content :**
 - Selection criteria
 - Increased mandatory content
 - Edge-matched
 - European PIDs; national INSPIRE IDs
- **Production tools :** ESRI ARCGIS, FGDB
- Data available in FGDB and shapefiles  geopackage, shapefiles

3.5 Production processes



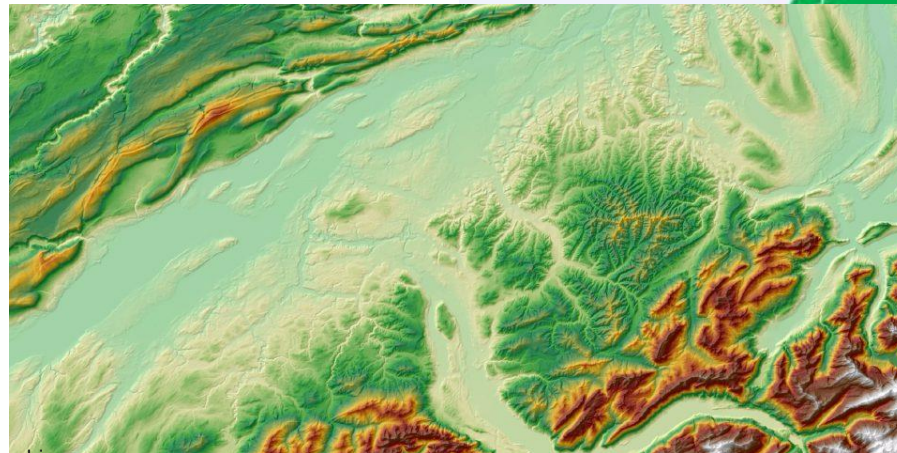
3.6 ERM Validator Tools

- ArcMap or ArcCatalog
- Checks data quality
 - Data model & attributes structure
 - Selection criteria
 - Topology
 - Attributes completion rates
 - Attributes homogeneity
 - Consistency with other themes
 - Specific to the theme
- Output: a Log file,
a GENERIC Results txt,
<Theme> Results txt,
<Theme> Results SUMMARY txt
Results database with error feature
classes (e.g. Hydro_ResultsA,
Hydro_ResultsL and Hydro_ResultsP).

	Validation code	Check	Implemented in ERM Validator 2021 tool?
General Data Delivery	T001	feature classes AIRFLDA, AIRFLDC, AIRFLDP, EXITC, FERRYC, FERRYL, HARBORA, HARBORC, HARBORL, HARBORP, HELIP, INTERCC, LEVELCC, MISAEROP, RAILRDC, RAILRDL, RESTC, ROADL, RUNWAYL	<input checked="" type="checkbox"/>
	T003	coordinate system (GEOGRAPHIC, decimal degrees)	<input checked="" type="checkbox"/>
	T004	map extent ($-25^\circ < \text{Lambda} < 40^\circ$ and $30^\circ < \text{Phi} < 80^\circ$)	<input checked="" type="checkbox"/>
	T005	AIRFLDA, AIRFLDC, AIRFLDP, FERRYC, FERRYL, HARBORA, HARBORC, HARBORP, INTERCC, LEVELCC, RAILRDC, RAILRDL, RESTC, ROADL, RUNWAYL must have features	<input checked="" type="checkbox"/>
	T006	Valid Geometry	<input checked="" type="checkbox"/>
Geometric resolution (Tested in projection ETRS89 LAEA)	T007	minimum allowed area size: 60 000m ²	<input checked="" type="checkbox"/>
	T008	minimum allowed distance between vertices of line and area features: 5m	<input checked="" type="checkbox"/>
	T009	minimum allowed length of a line segment: 50m	<input checked="" type="checkbox"/>
	T010	statistics of average distance between vertices	<input type="checkbox"/>
Geometric resolution (Tested in projection ETRS89 LAEA)	T011	The number of HARBORA areas less than 400 000m ²	<input checked="" type="checkbox"/>
	T012	The number of AIRFLDA areas less than 400 000m ²	<input checked="" type="checkbox"/>
	T013	The number of RAILRDL features less than 1600m	<input checked="" type="checkbox"/>
	T014	The number of FERRYL features less than 125m	<input checked="" type="checkbox"/>
Data Model and attributes structure	T015	geometrical definitions (polygon, polyline, point)	<input checked="" type="checkbox"/>
	T016	attributes: complete list, ordering, definition	<input checked="" type="checkbox"/>
	T017	attributes: have valid values (FCSubtype, F_CODE)	<input checked="" type="checkbox"/>
	T080	attributes: no NULL values	<input checked="" type="checkbox"/>
	T018	correct value of ICC (all FCs)	<input checked="" type="checkbox"/>
	T019	Name attribute: no special character in NAMA1 or NAMA2 (only ASCII)	<input checked="" type="checkbox"/>
	T081	Name attribute: only Unicode character in NAMN1 or NAMN2 (UTF-8)	<input checked="" type="checkbox"/>
	T021	allowed attribute values for AIRFLDA (IKO)	<input checked="" type="checkbox"/>
T022	allowed attribute values for AIRFLDP (CAA, EXS, FUC, IKO, TEN, TUC, USE, ZV3)	<input checked="" type="checkbox"/>	

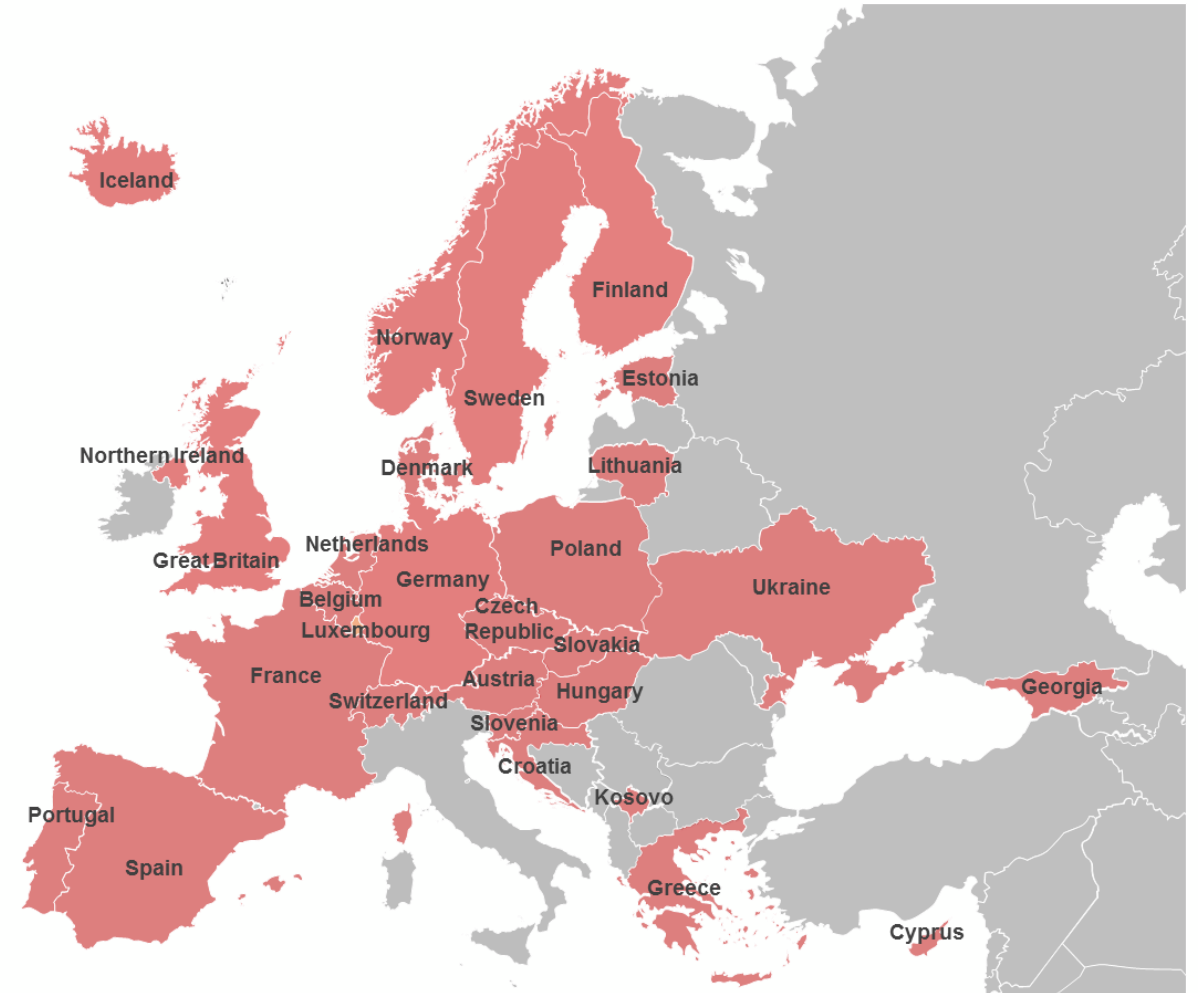
3.7 EuroDEM

- 38 countries
- DEM : around 60m, ETRS 89
- GRID ,GeoTIFF, GRID points
- Not updated
- To open



3.8 Regional Gazetteer

- 29 countries
- Theme : Geographical names from EBM/ERM
- Data specs : INSPIRE GN
- Update: yearly
- To open
- Production manager : BKG-Germany



3.9 Regional Gazetteer: data sources

NamedPlace localType (EBM/ERM)	NamedPlace type
Built-up Area / Populated Place (BuiltupP), Named Location (UrbanP)	populatedPlace
Airport / Airfield (AirfldP/C), Ferry Station (FerryC), Port (HarborP/C), Railway Station (RailrdC), Entrance / Exit (ExitC)	transportNetwork
AdministrativeUnit_x and designation	administrativeUnit
Lake /Pond /Reservoir (LakeresA), Island (IslandA), Watercourse (WatercrsL), Glacier / Snow Field / Ice Field (LandIceA)	hydrography
National Park / Nature Reserve (ParkA)	protectedSite

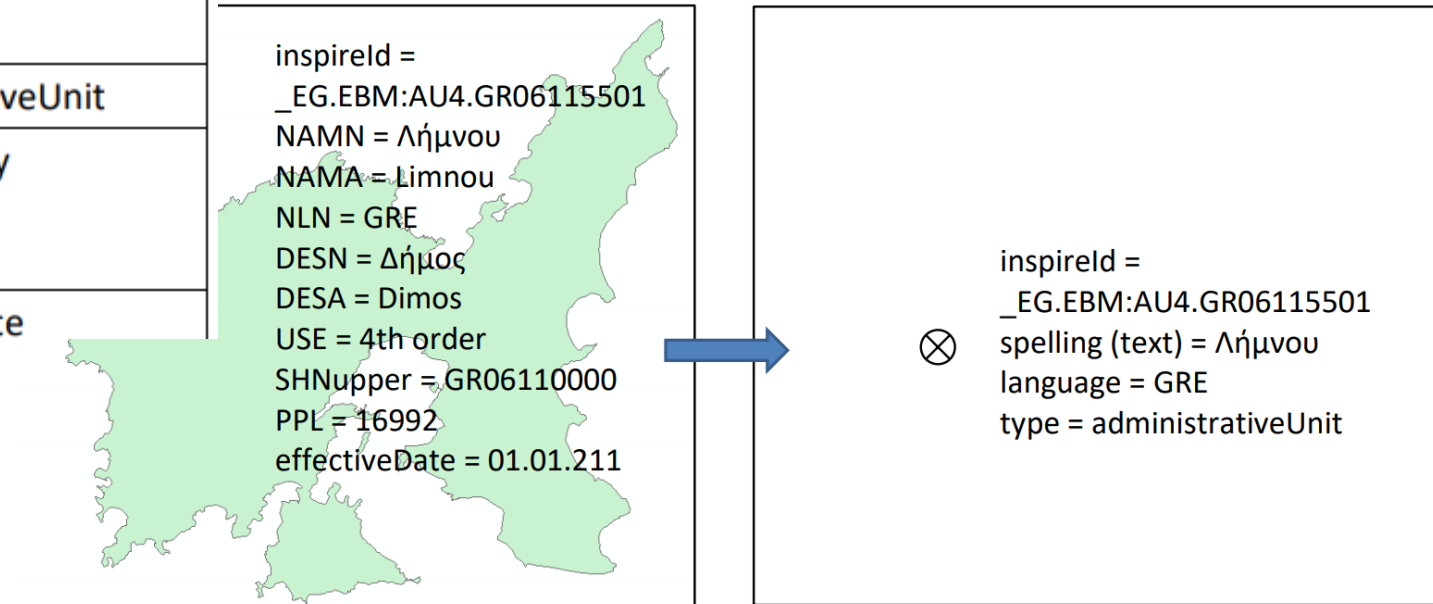


Figure 1: Transformation of an administrative unit from EBM into a named place point in the Open Regional Gazetteer

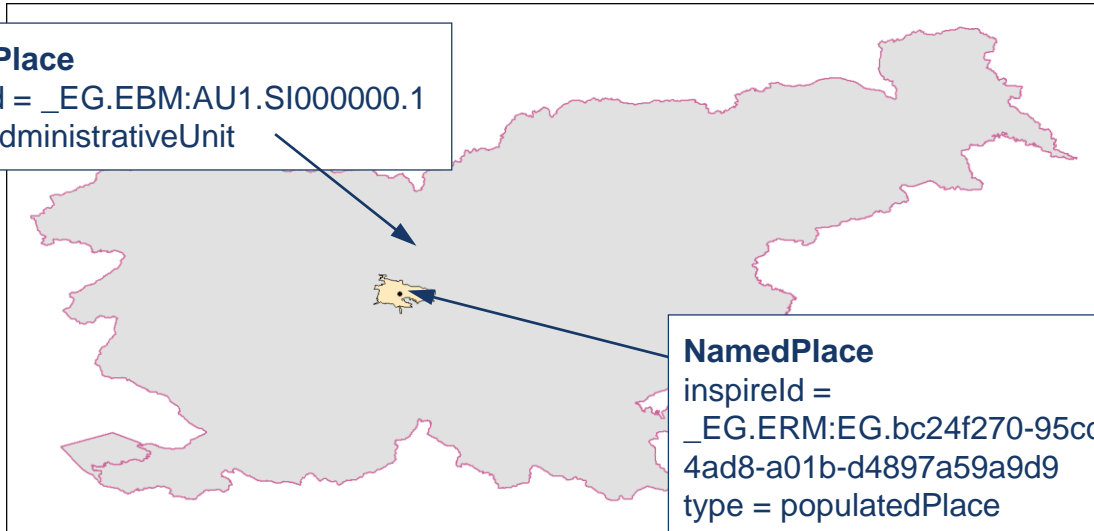
3.10 Regional Gazetteer: + exonyms

- Exonyms in common use
 - Endonym (Italian): Roma
 - Exonym (English, French, Dutch, ...): Rome
 - Exonym (German, Danish, ...): Rom
- Work by geographical name expert
 - text = **Athína**
 - script = Latn (Latin)
 - transliterationSchema = ELOT 743
- GeographicalName (2)
 - language = eng (English)
 - nativeness = exonym
 - SpellingOfName
 - text = **Athens**
 - script = Latn (Latin)
- GeographicalName (3)
 - language = geo (Georgian)
 - nativeness = exonym
 - SpellingOfName
 - text = **ათენი**
 - script = Geor (Georgian)

3.11 Regional Gazetteer : point based feature

NamedPlace

inspireId = _EG.EBM:AU1.SI000000.1
type = administrativeUnit



NamedPlace

inspireId =
_EG.ERM:EG.bc24f270-95cc-
4ad8-a01b-d4897a59a9d9
type = populatedPlace

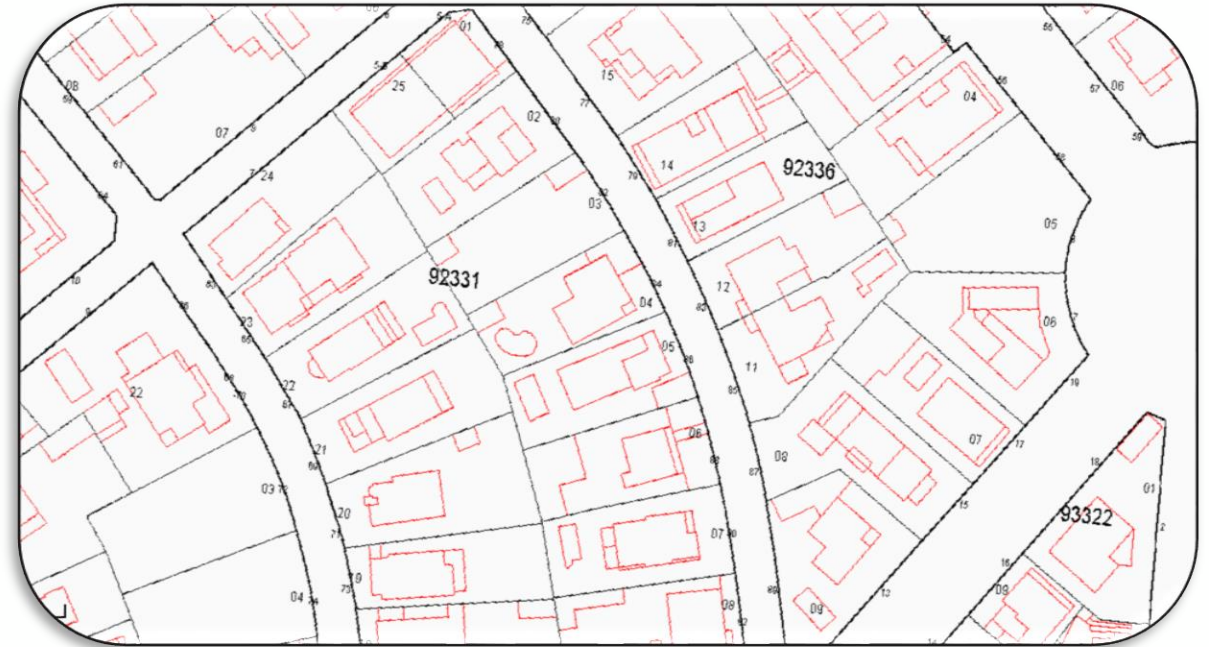
INSPIRE compliant , geopackage



Co-financed by the European Union
Connecting Europe Facility

3.12 Raster data available (WMTS): new supply chains for

- **Cadastral index map** : cadastral parcels, buildings and addresses
- **Imagery** : sentinel data harmonised across border



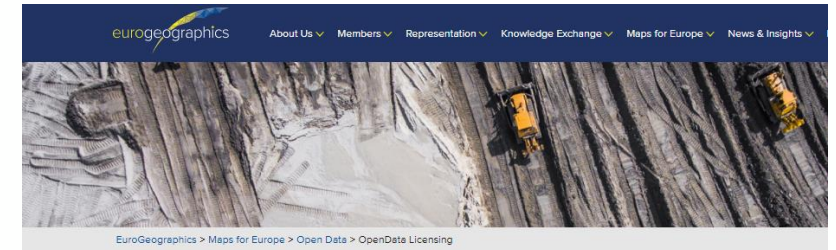
4. Opening the authoritative datasets (current status)

Making ERM and EuroDEM available as open datasets from **31st August 2021**

- Gaining members' permission
- Concluding existing customer contracts

Coverage for the datasets for the first release:

- ERM – 31 data providers
- EuroDEM - 33 data providers of which 7 are already infilled by SRTM data
- Gazetteer - 35 data providers
- We will continue to work with EuroGeographic members to increase this coverage for future releases



OpenData Licensing

EuroGeographics Open Data Licence

This licence governs your access to and use of EuroGlobalMap made available at <https://eurogeographics.org/maps-for-europe/open-data/topographic-data/> by EuroGeographics. EuroGeographics AISBL is an international non-profit association under Belgian law, with registered offices at Rue du nord/Noordstraat 76, 1000 Brussels, Belgium.

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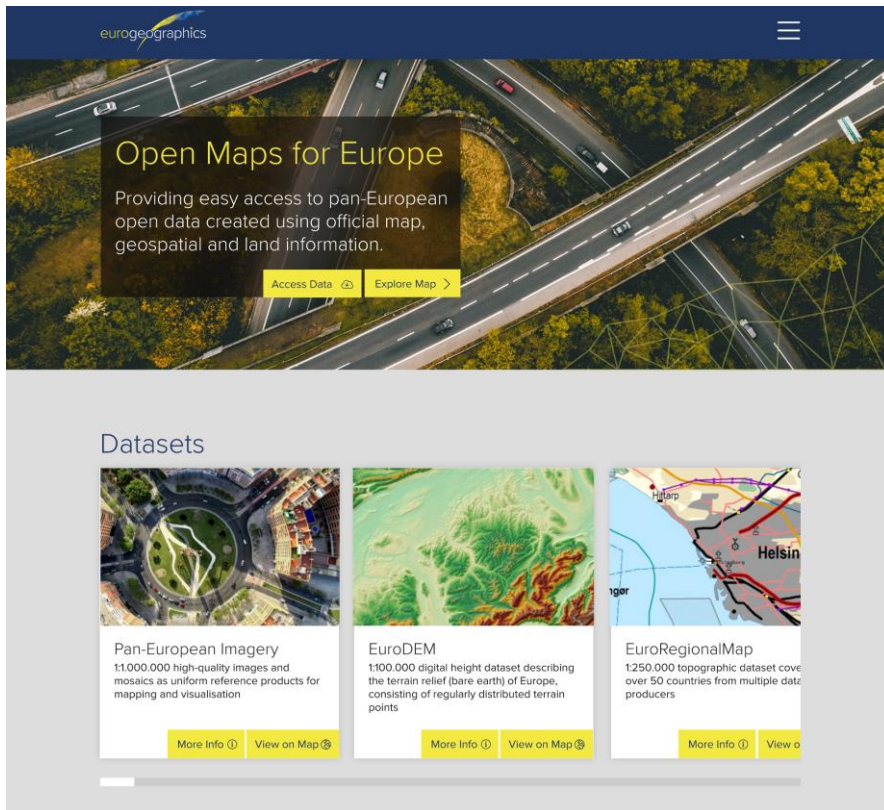
Definitions

In this licence, the terms below have the following meanings:

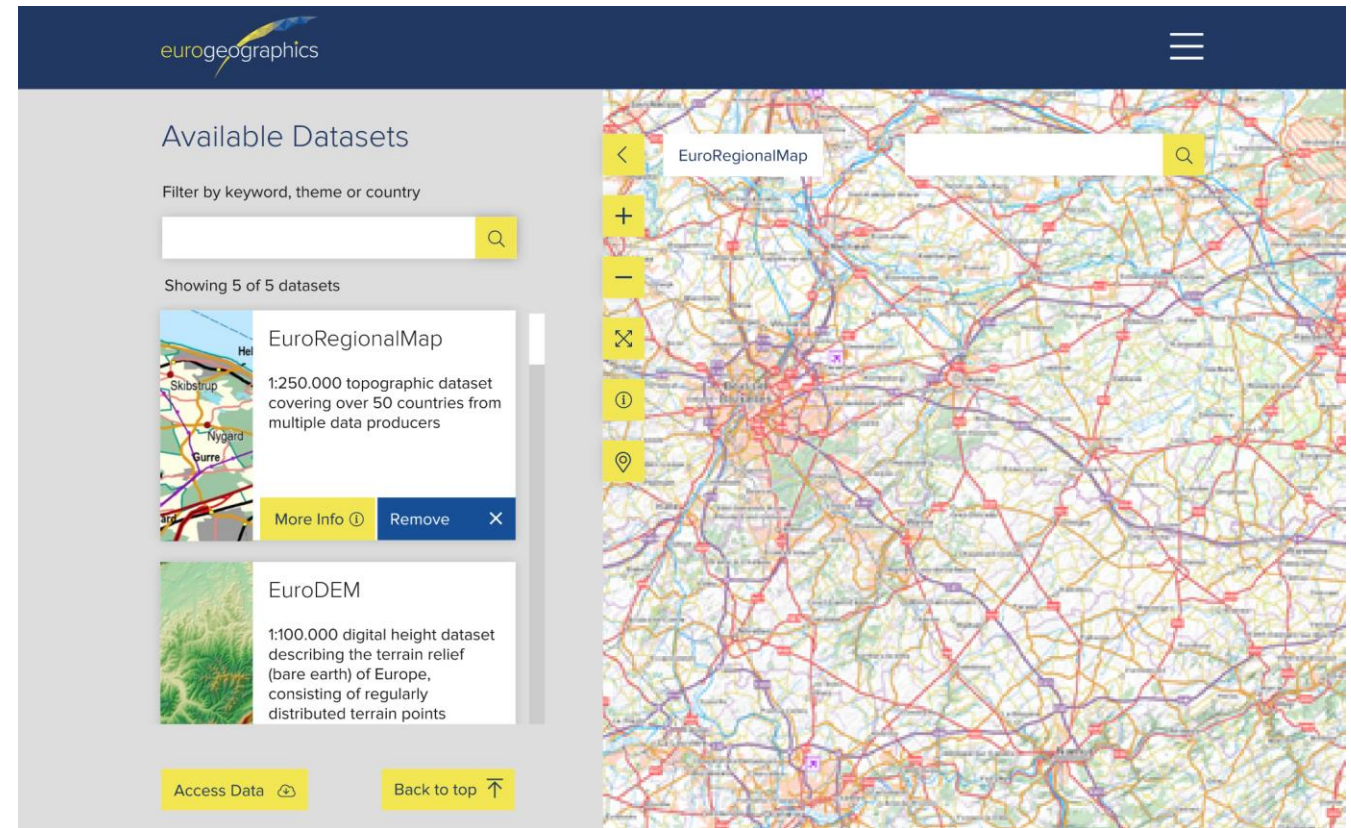
- The "Product" means the EuroGlobalMap and the associated data, protected by international copyright and/or the

5. Gateway for data access: Open Data&PSI compatible

Geocatalogue and discovery service harvested by the European data portal



MapViewer + elaborated view of ERM/EGM (Basemap)



View + Download services

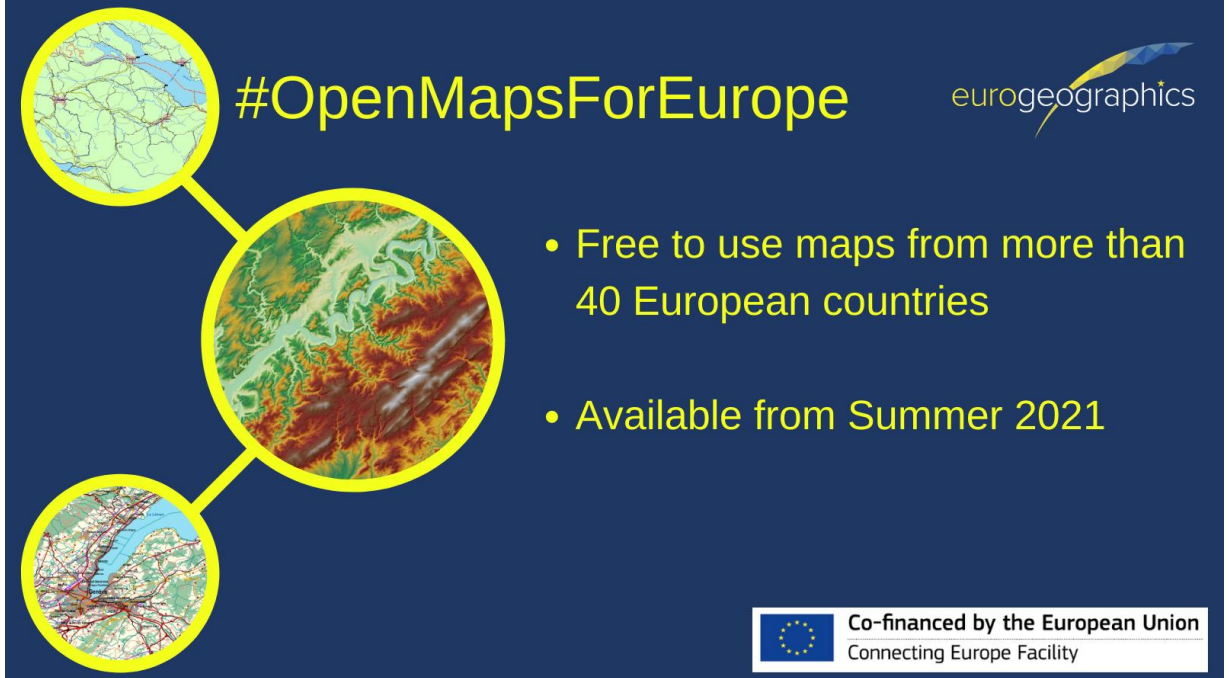
6. To conclude

Pan-European products of EG have been existing for a while , but

POOR accessibility

Realise the benefits of the Open PSI Directive with the aim to increase the use of our members data

OME is the STEP for
connecting them to the European network



#OpenMapsForEurope

- Free to use maps from more than 40 European countries
- Available from Summer 2021

Co-financed by the European Union
Connecting Europe Facility

An aerial photograph of a multi-lane highway interchange. A white grid of lines is overlaid on the right side of the image, representing a geospatial grid or mesh. The text "Open for" is written in white on a semi-transparent dark grey rectangular background on the left side of the image.

Open for

questions

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