

Update on ECRM

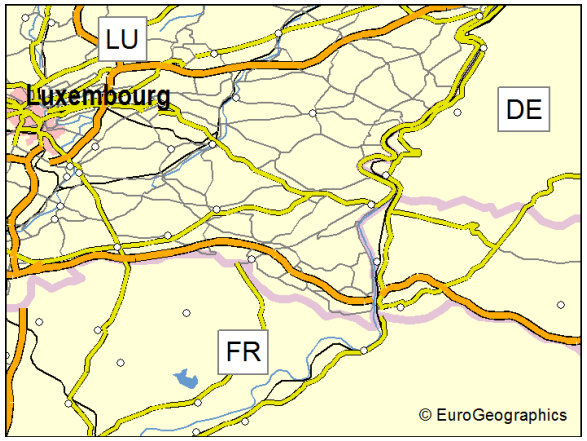
Content

1. ECRM at a glance
2. From national data to ECRM integration
3. Progress in 2026
4. Looking ahead: Extension plan

Copyright © 2026 EuroGeographics

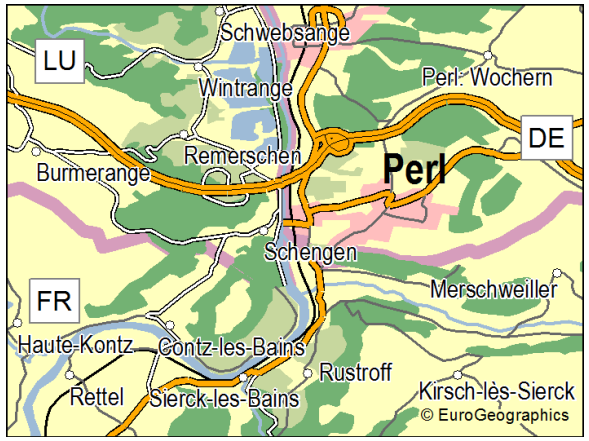
Extending EG topographic portfolio

EuroGlobalMap



small scale

EuroRegionalMap



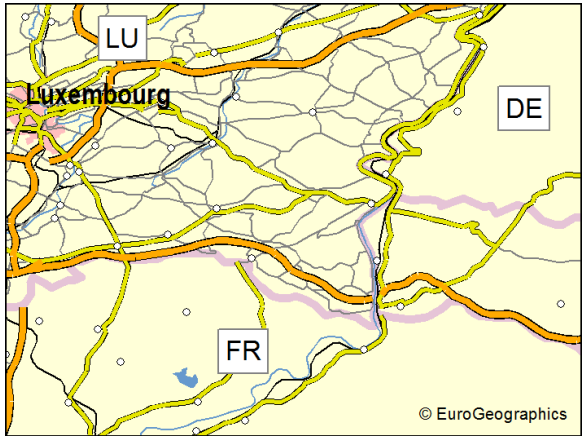
medium scale

large scale

Copyright © 2026 EuroGeographics

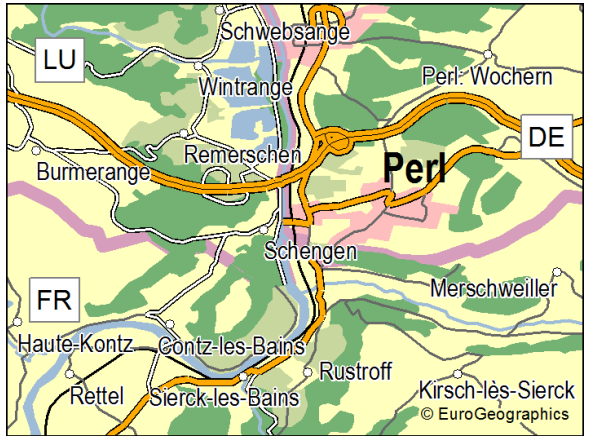
Extending EG topographic portfolio

EuroGlobalMap



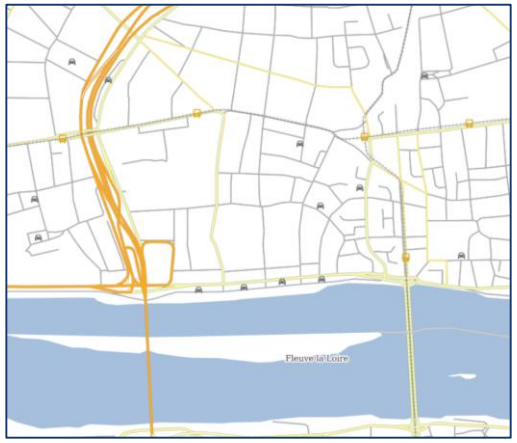
small scale

EuroRegionalMap



medium scale

EuroCoreReferenceMap



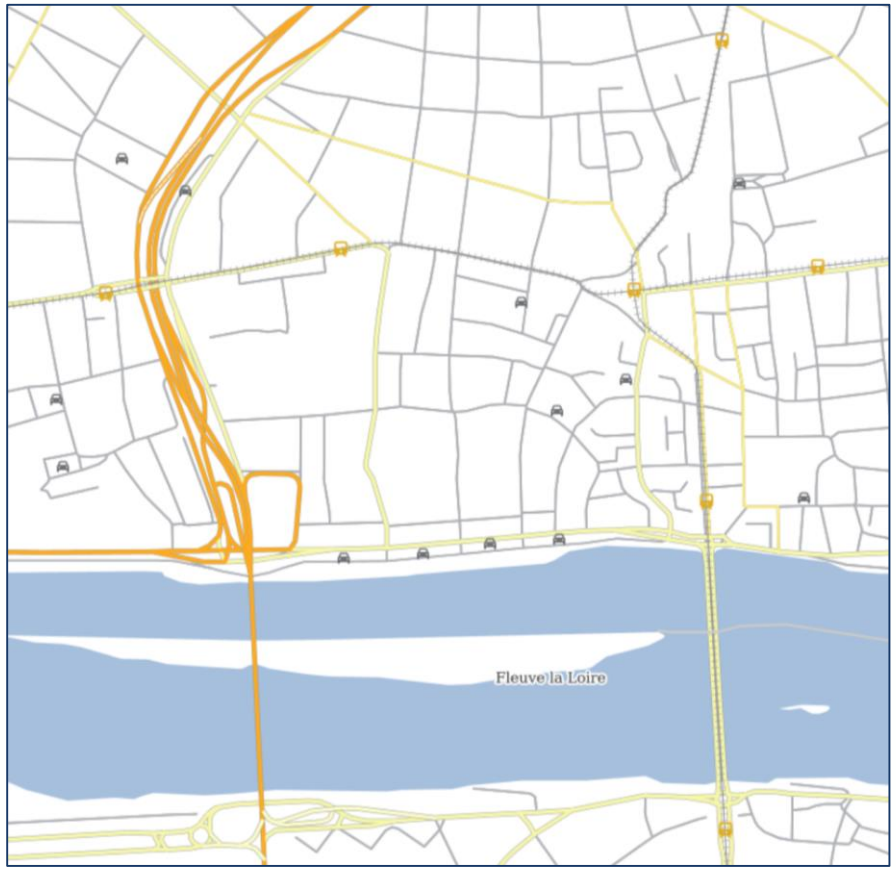
large scale

Copyright © 2026 EuroGeographics

ECRM at a glance

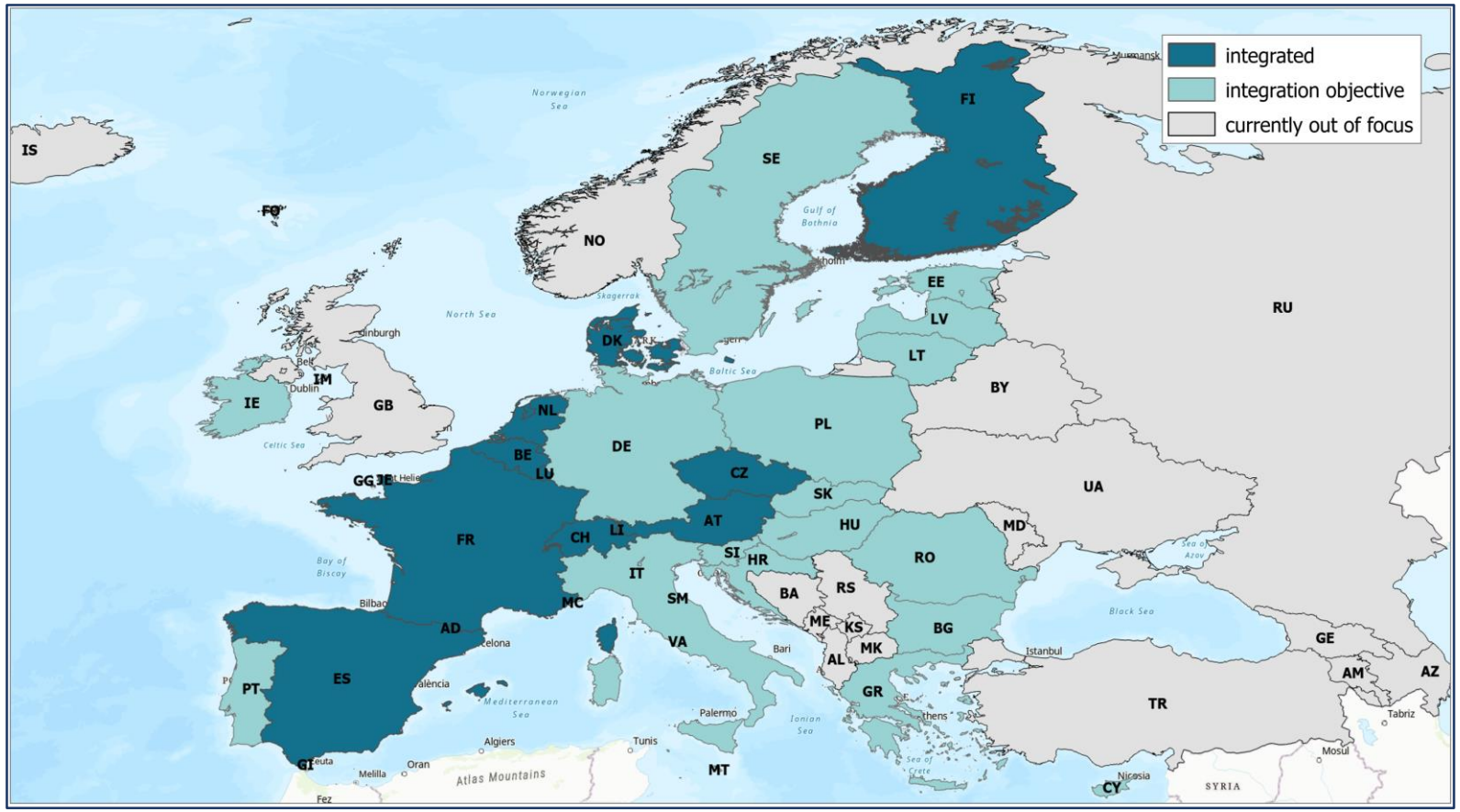
A pan-European, large-scale geospatial dataset

- Common data model
- Consistency across international borders
- Target scale: 1:10.000
- 3 core themes
  - Administrative Units
  - Hydrpgraphy
  - Transportation Networks
- Life-cycle management



Copyright © 2026 EuroGeographics

Coverage Objective



Project period: **2026 - 2028**

- Already Integrated:
  10 countries
- Minimum Objective:
  27 EU Member States +
  Switzerland
- Ambition of a wider
  European coverage

Copyright © 2026 EuroGeographics

From national data to ECRM integration



Copyright © 2026 EuroGeographics

Reduced workload for NMCAs

What we need from you

Access to national source data

Themes: Administrative Units
Hydrography
Transportation Network

Scale: 1:5.000 – 1:25.000

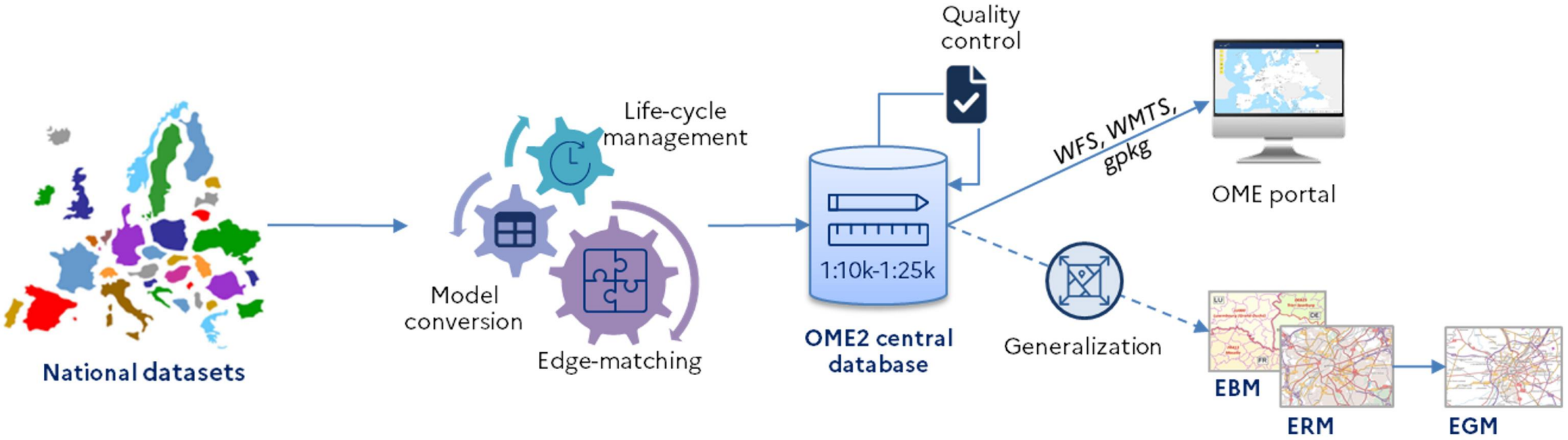
Completed mapping table

What we do

- Model conversion
- Edge matching
- Life-cycle management
- Quality control
- Update procedure

Copyright © 2026 EuroGeographics

Production process



Copyright © 2026 EuroGeographics

Completing the mapping table

OME2 Feature	OME2 Attribute	OME2 Value	OME2 Comment	National 1 Feature	National 1 Attribute	National 1 Value	National 1 Condition	National 1 Comment
watercourse_link	geom	<LineStringZ> (GM_curve)	2,5d data expected	AX_Gewaesserachse 44004	Shape			gew01_l
	objectid				OBJID			
	begin_lifespan_version				BEGINN			
	end_lifespan_version				ENDE			
	country					"DE" for all		
	level	on_ground_surface						
		suspended_or_elevated						
		underground					spatial join	spatial join: AX_Gewaesserachse WHERE (AX_Gewaesserachse WITHIN AX_BauwerkImGewaesserbereich AX_BauwerkImGewaesserbereich part of ver06_l or ver06_f
		void_unk				all others		
		void_[free text]						
	persistence	dry			HYD	3000		
		ephemeral						
		intermittent			HYD	2000		
		perennial				all others		
		void_unk						
		void_[free text]						
	tidal	true						not included in national data
		false						
		void_unk						
	flow_direction	both_directions						
		in_direction			FLR	1		
		opposite_direction				0		
		void_unk						
		void_[free text]						
	stream_order	<actual value string>			WDM	if 1310 or 1320 -> 1 if 1330 -> 2 if 1340 -> 3		
		void_unk				all others		
	hydro_identifier	<actual value string>			GWK	"N.DE.WATRCRS." + GWK		Create hydroId from prefix (N.DE.WATRCRS.) and GWK. If GWK is empty use an unique identifier instead.
		void_unk						

Copyright © 2026 EuroGeographics

Key factors for a high quality ECRM

Our shared goal

Represent each countries data as complete as possible in ECRM to **unlock** their **potential**

FACTOR 1

Source data

Prioritise source datasets that match best ECRM requirements in terms of scale, features and attributes

Lessons learned: National data models often have a higher information density as INPIRE data

FACTOR 2

Mapping table

Complete the mapping table as thoroughly as possible to maximise the national data representation in ECRM

Lessons learned: Close collaboration between NMCAs and the ECRM consortium is essential

The outcome

A comprehensive, information-rich pan-European dataset

Copyright © 2026 EuroGeographics

What is in for you?

Reach more users

Make your national data accessible to key users across Europe

Gain harmonised data

Benefit from a harmonised, edge-matched version of your data

Enable cross-border use

Support applications that require consistent data across borders



… and all that with
little work on your part

Progress in 2026

Copyright © 2026 EuroGeographics

Updated data model

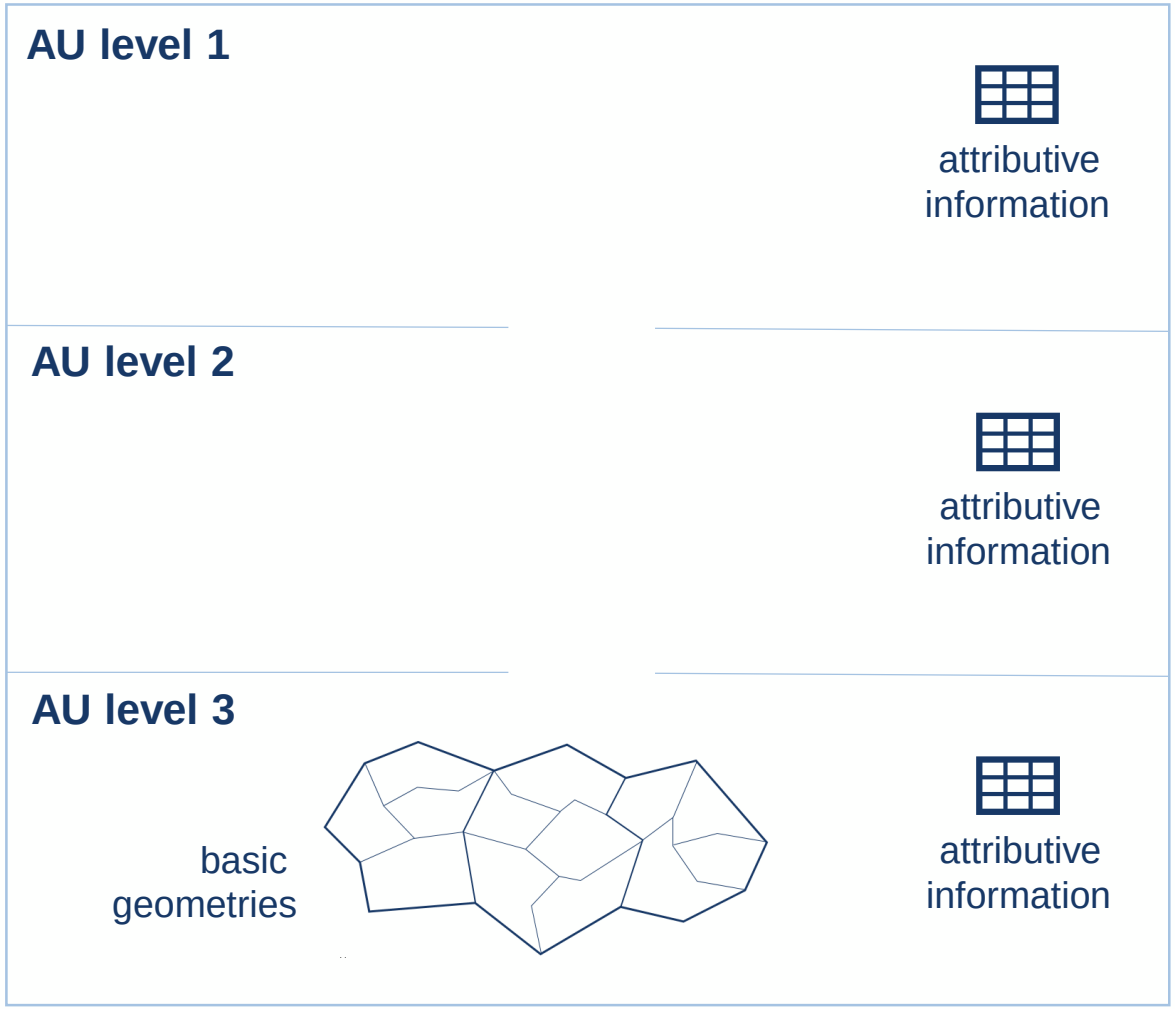
Hydrography

Transportation Networks

minor updates

Administrative Units

- Inclusion of statistical units
- Derivation of geometries from the lowest level to achive topological consistency



Copyright © 2026 EuroGeographics

Updated data model

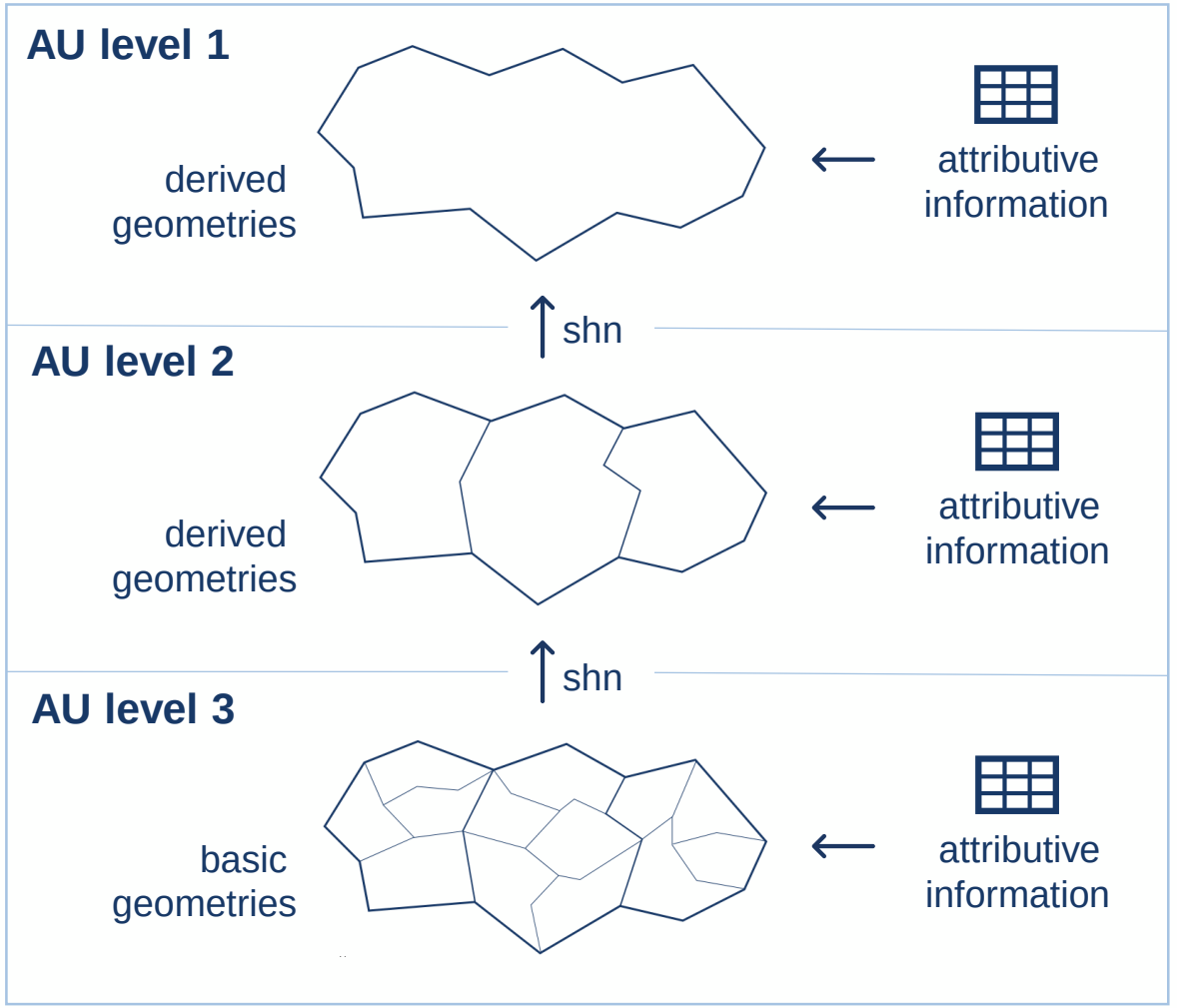
Hydrography

Transportation Networks

minor updates

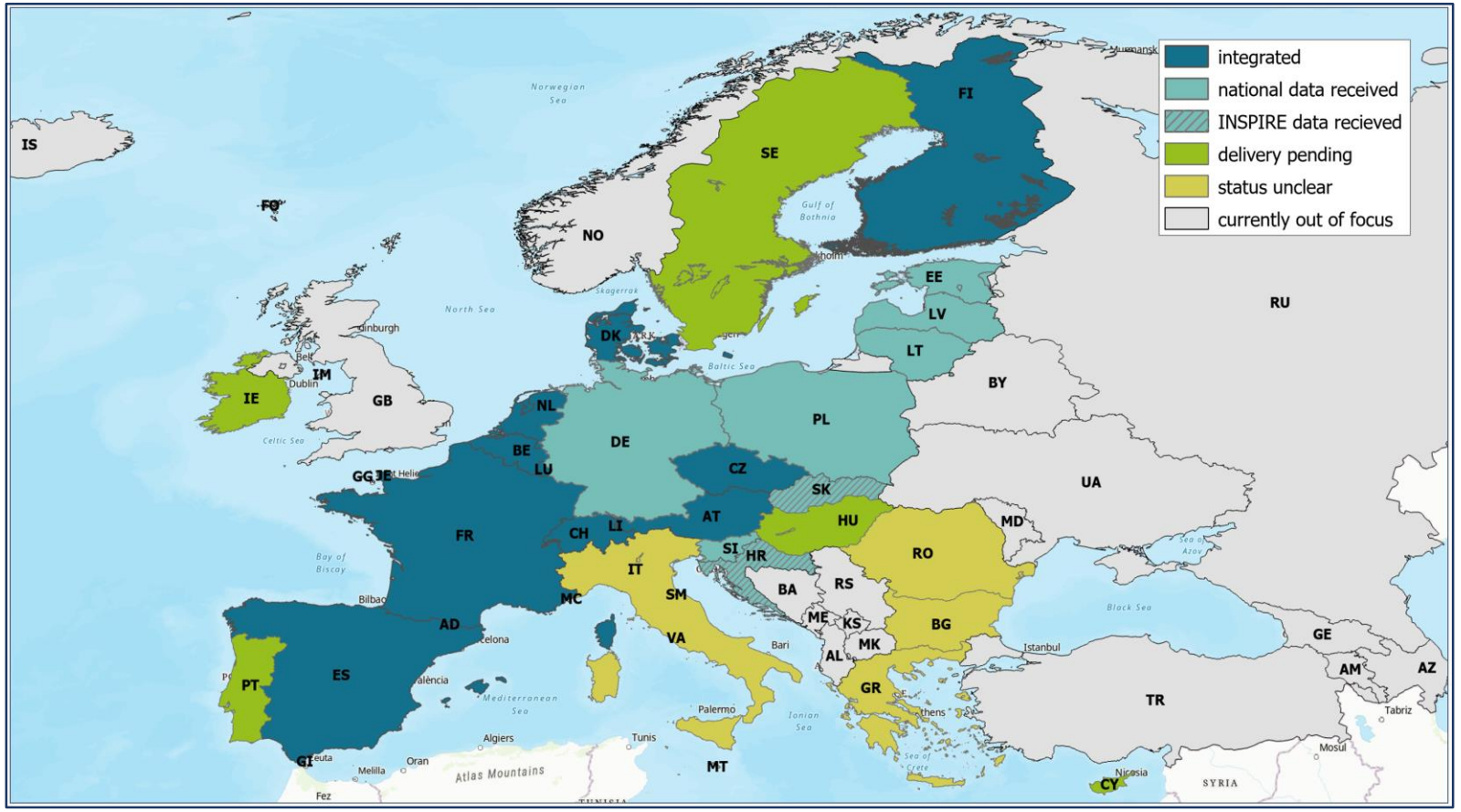
Administrative Units

- Inclusion of statistical units
- Derivation of geometries from the lowest level to achive topological consistency



Copyright © 2026 EuroGeographics

Current status of data deliveries



10 Countries integrated

8 Data received

5 Awaiting data delivery

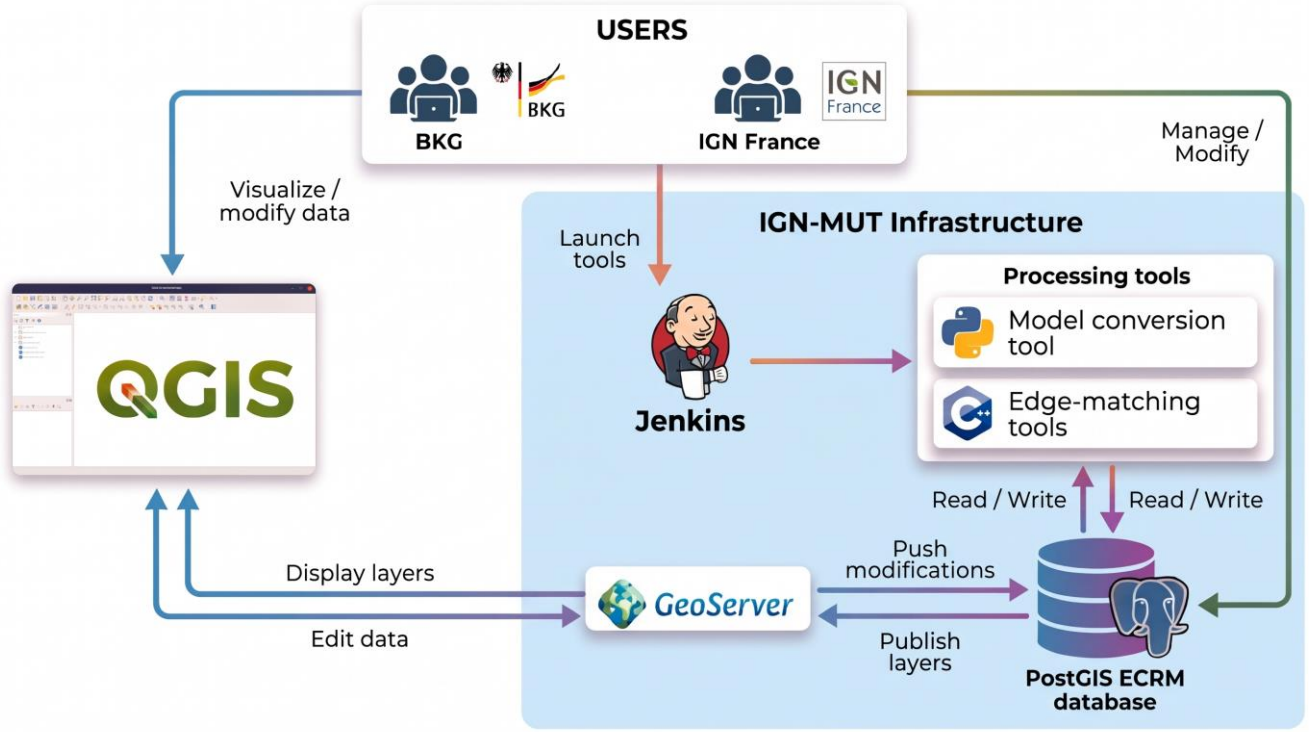
5 Pending clarification

Copyright © 2026 EuroGeographics

Update on the infrastructure

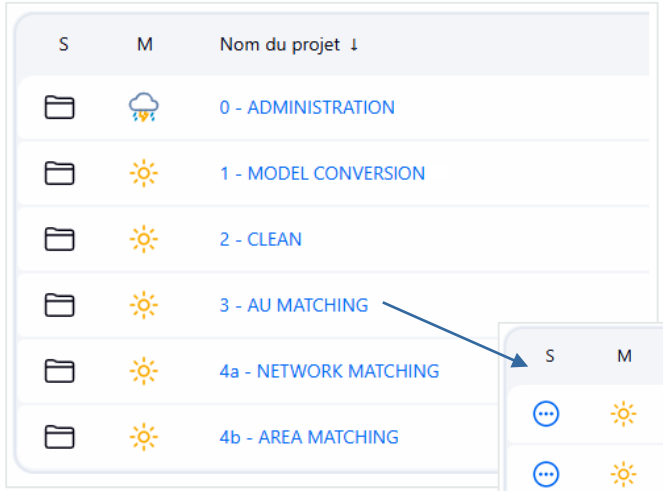
Infrastructure setup

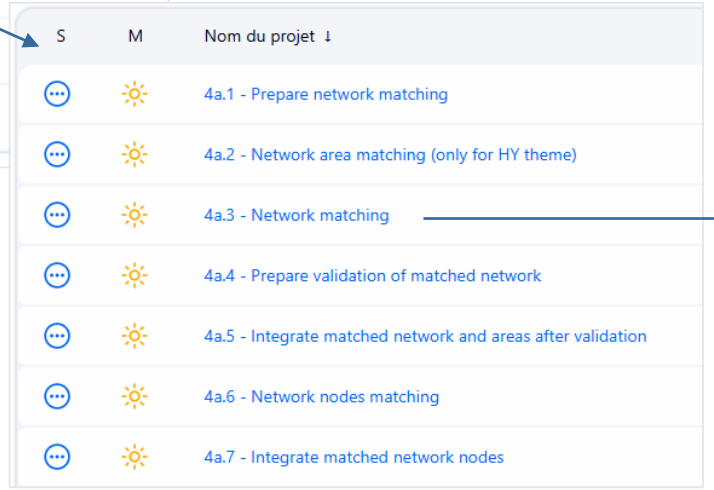
- Cloud environment
- Access to BKG
- PostGIS/pgAdmin to manage the ECRM database
- Jenkins instance to orchestrate the tools
- Geoserver instance to publish layers and correct them with QGIS
- Adaptations to allow several users at the same time

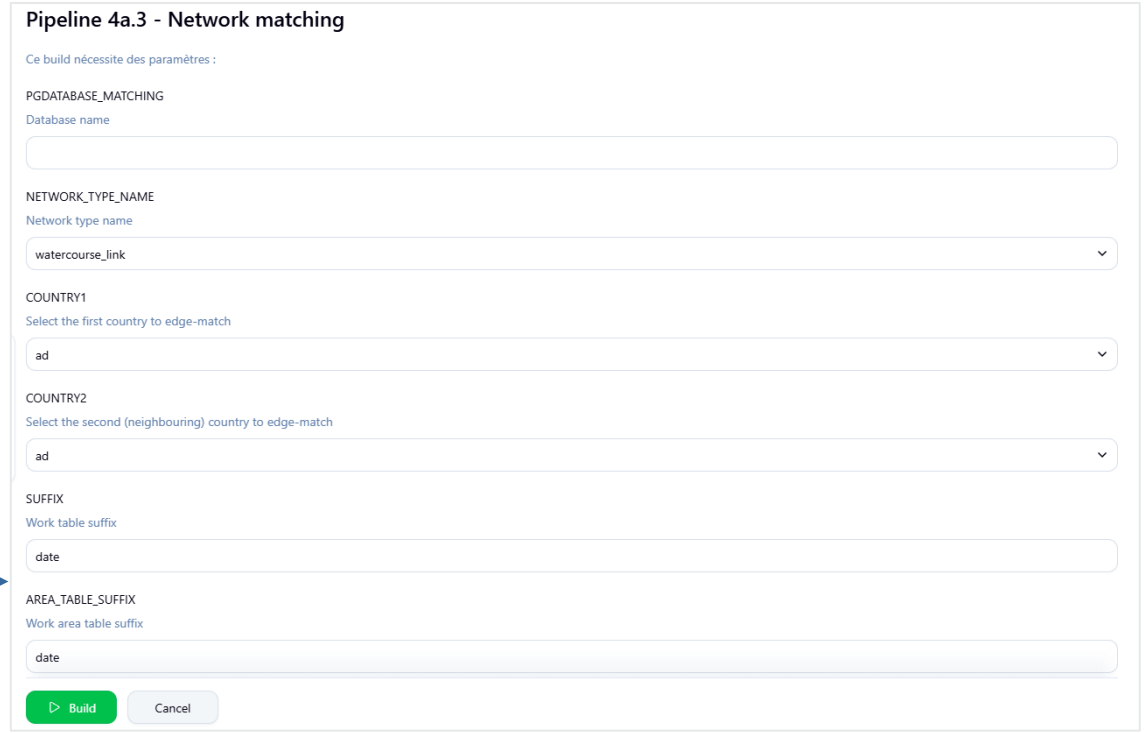


Copyright © 2026 EuroGeographics

Jenkins interface







Copyright © 2026 EuroGeographics

Update on tools

Model conversion

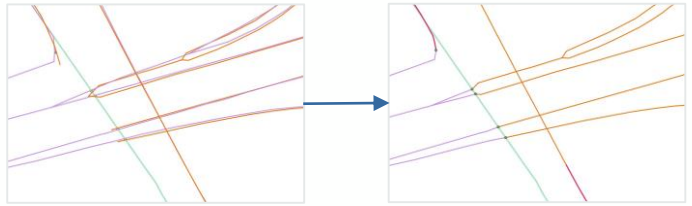
Convert national data to the ECRM model

Progress:

- Configuration for DE
- Beginning adaptation to the new AU data model

Edge-matching

Ensure cross-border consistency and continuity



Progress:

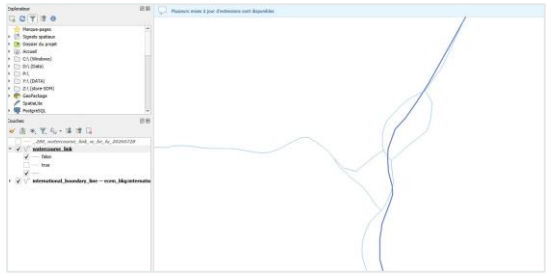
- In-dispute areas management
- Improvement of edge-matching at the junction between 3 countries
- Beginning of tool adaptation to the new AU data model

Copyright © 2026 EuroGeographics

Progress in 2026: Tools

Manual corrections

Enable manual corrections on ECRM: no direct access to the database from QGIS and life-cycle management system to accomodate



Progress:

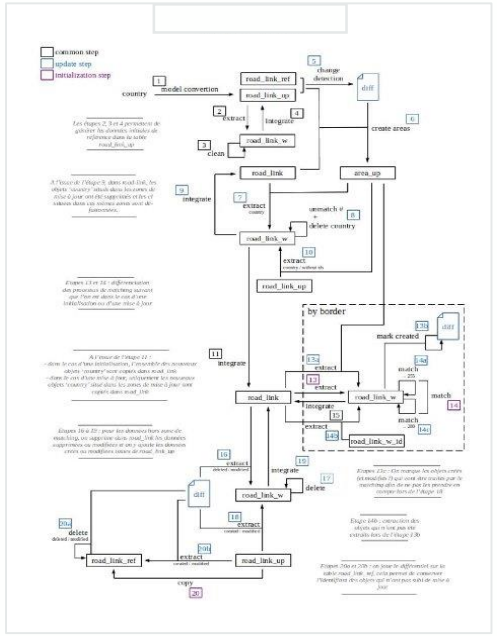
- Geoserver and WFS configuration
- Process to modify data in compliance with the life-cycle management system :

Extract → **Modify** → **Integrate**

- Triggers to correct Z on 3D data

Update tool

Integrate only real updates and try to preserve previous edge-matching results



Progress:

- Process definition
- First implementation (POC)

Copyright © 2026 EuroGeographics

Update on tools

Generalization

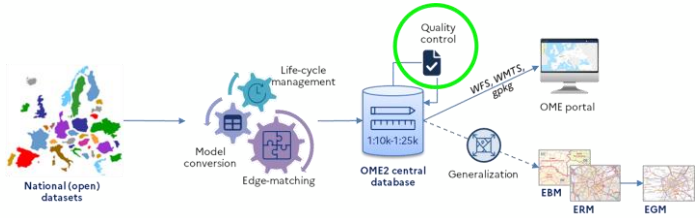
Develop a new automatic generalisation process

Progress:

- Local infrastructure set up
- Initial framework established

Quality control

Validate and ensure the data quality of ECRM



Progress:

- Added checks for the Hydro theme
- Conceptualizing an initial quality-results dashboard

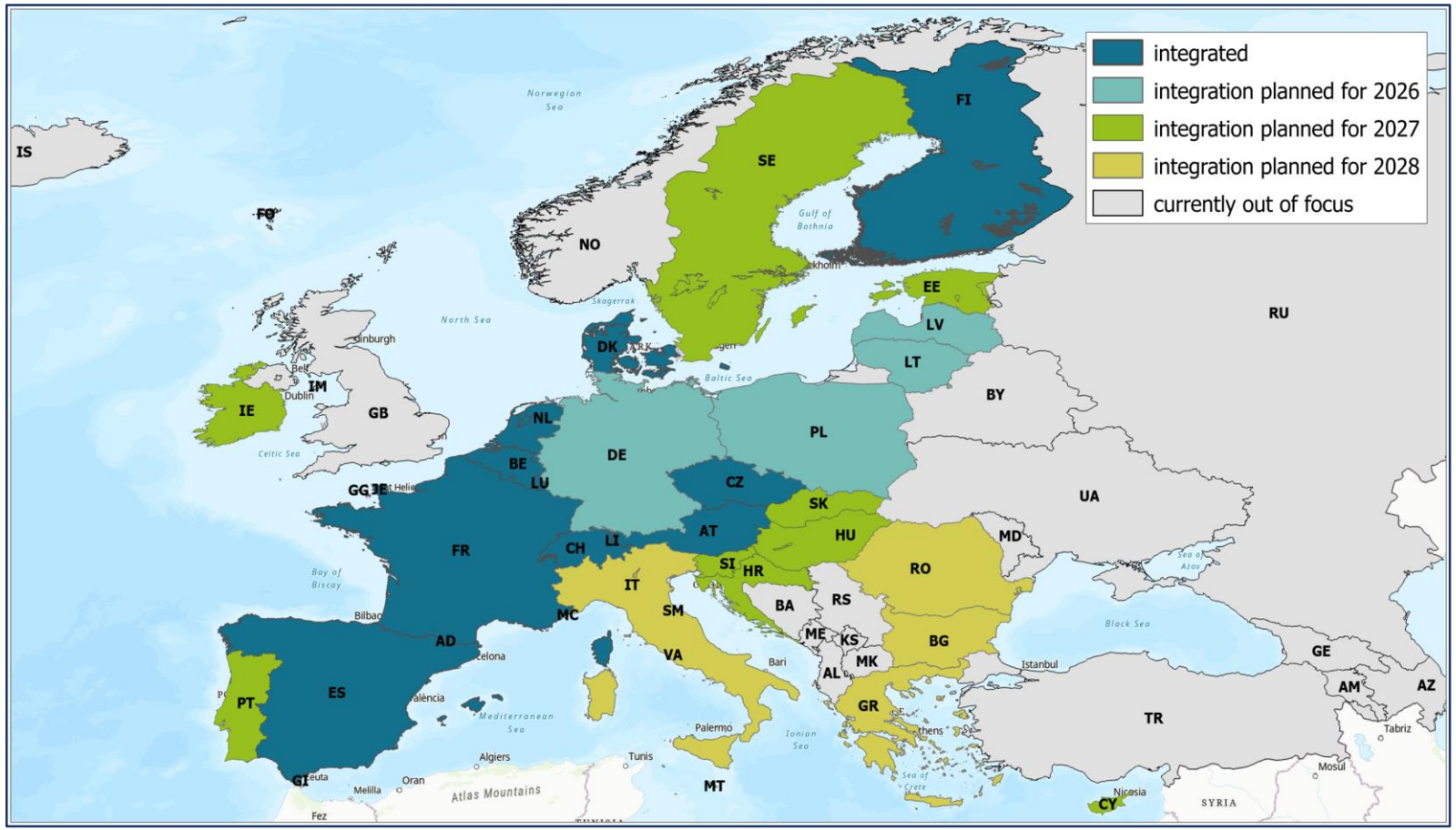
Copyright © 2026 EuroGeographics

Looking ahead: Extension plan



Copyright © 2026 EuroGeographics

Extension plan



2026:
Integrate 4 new countries

2027:
Integrate 10 new countries

2028:
Integrate 4 new countries
+ update all countries

Copyright © 2026 EuroGeographics

Extension plan

2026	2027	2028
Initialisation Phase: Establishment of infrastructure, interfaces, processes and communication with NMCAs	EE Estonia	RO Romania
	SK Slovakia	BG Bulgaria
	SI Slovenia	GR Greece
	HU Hungary	IT Italy
	IE Ireland	Update Phase: Updating of countries already integrated
	PT Portugal	
DE Germany	SE Sweden	
PL Poland	HR Croatia	
LT Lithuania	CY Cyprus	
LV Latvia	MT Malta	

Copyright © 2026 EuroGeographics

Your contribution matters



Building ECRM together

By combining our knowledge, experience, and expertise, we can create a valuable European reference dataset together

Thank you for being part of this journey

Let‘s stay in touch

ECRM@bkg.bund.de

Copyright © 2026 EuroGeographics