



# GSEU

**GEOLOGICAL SERVICE | FOR EUROPE**

## GSEU & EU ICE SRM

**Snježana Miletić, Meta Dobnikar  
(Geological Survey of Slovenia)**

**Implementing the United Nations Framework  
Classification for Resources (UNFC) in Southeast Europe**

**Belgrade, 4-5 July, 2024**



**Funded by  
the European Union**



[www.geologicalservice.eu](http://www.geologicalservice.eu)





# Geological Service for Europe (GSEU) – overview

## Project Partners

The Geological Surveys of Europe have a long history of cooperation, both through their umbrella organisation EuroGeoSurveys - the project coordinator - and through numerous joint projects and programmes. While these collaborations have been crucial for joint innovation, the exchange of knowledge and expertise, and the development of data and information standards and harmonisation frameworks, the sustainable provision of a Geological Service for Europe requires that this cooperation goes a step further.

49

PARTNERS

36

COUNTRIES



- funded by the EU Horizon Europe programme
- coordinated by EuroGeoSurveys
- 5 years (2022 - 2027)
- 49 partners (European GSOs)

## Areas of Expertise



Raw Materials



GeoEnergy Resources



Groundwater Resources



Coast and Sea



Geological Framework Setup

## European Geological Data Infrastructure (EGDI)

The existing EGDI system will be taken to a new level by transforming the current data infrastructure into a **knowledge infrastructure**. EGDI will become a fundamental element of the GSEU, supporting the delivery of knowledge to policy makers and other stakeholders.

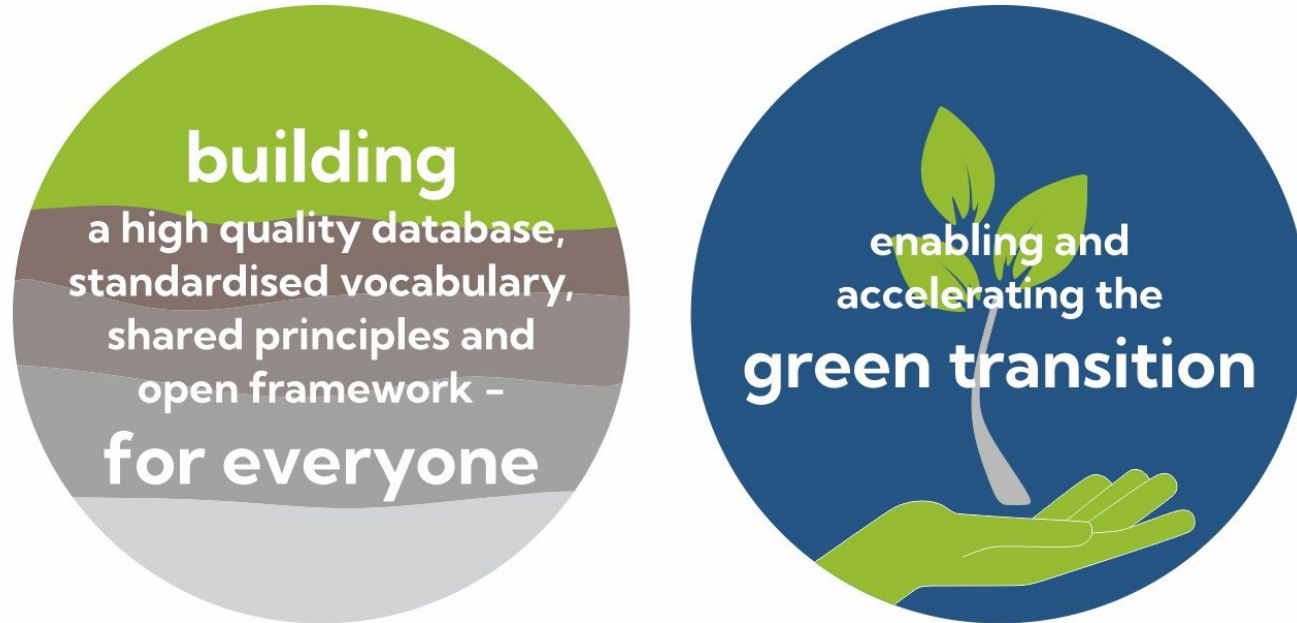
MORE

<https://www.geologicalservice.eu>



## Geological Service for Europe (GSEU) - objective

The overall objective of the **GSEU** project is to establish a **Geological Service for Europe** as a permanent **collaborative network of European geological survey organisations**.



**GSEU** will structurally address specific challenges in the **sustainable management of the subsurface** at EU and national level.



# Geological Service for Europe (GSEU) – project structure



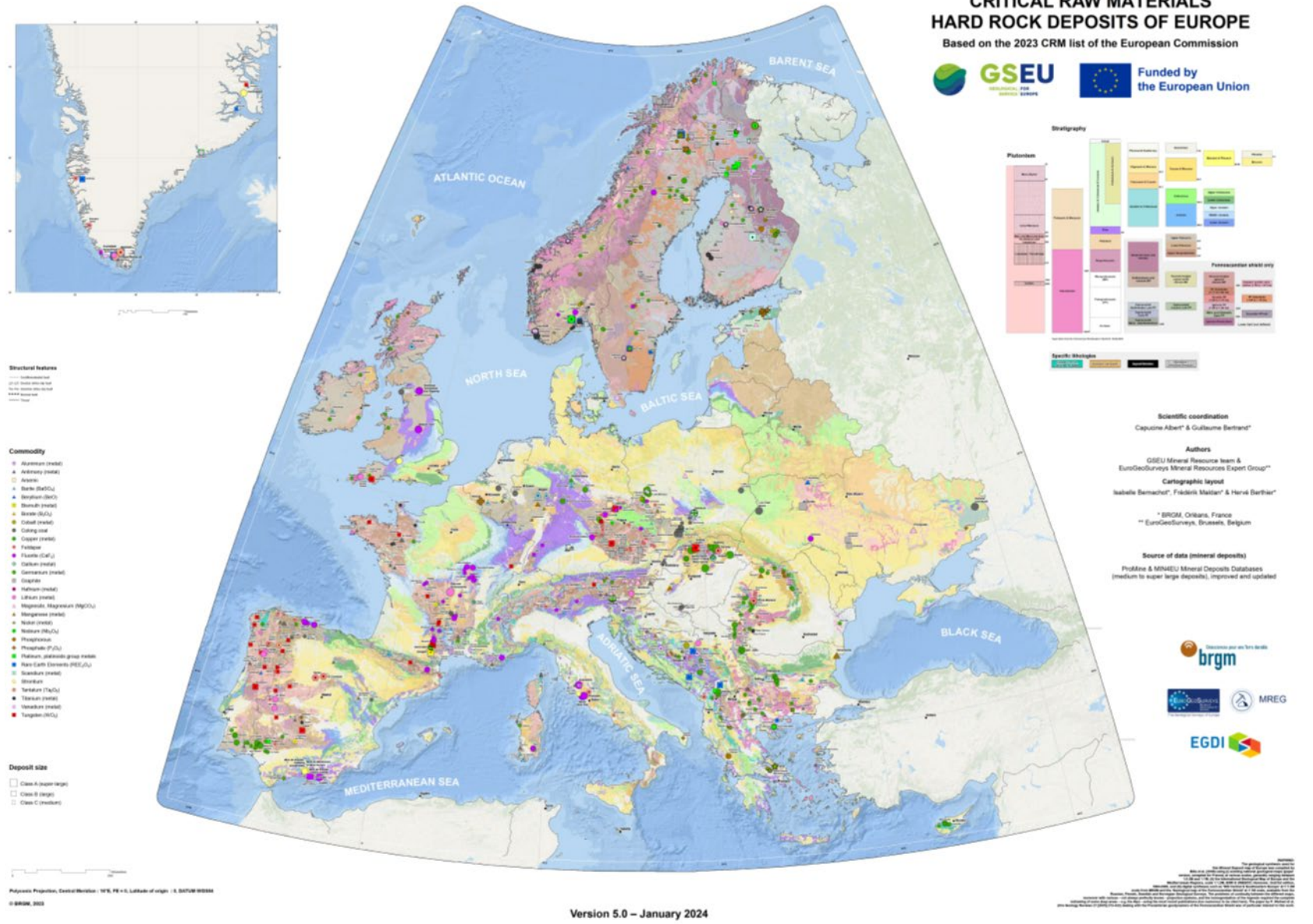
From Geological Data to Policy Support





# Raw Materials

## WP2 Lead: BRGM





# Raw Materials

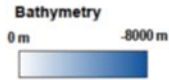
## WP2 Lead: BRGM

### CRITICAL RAW MATERIALS OFFSHORE OCCURRENCES OF EUROPE

Based on the 2023 CRM list of the European Commission



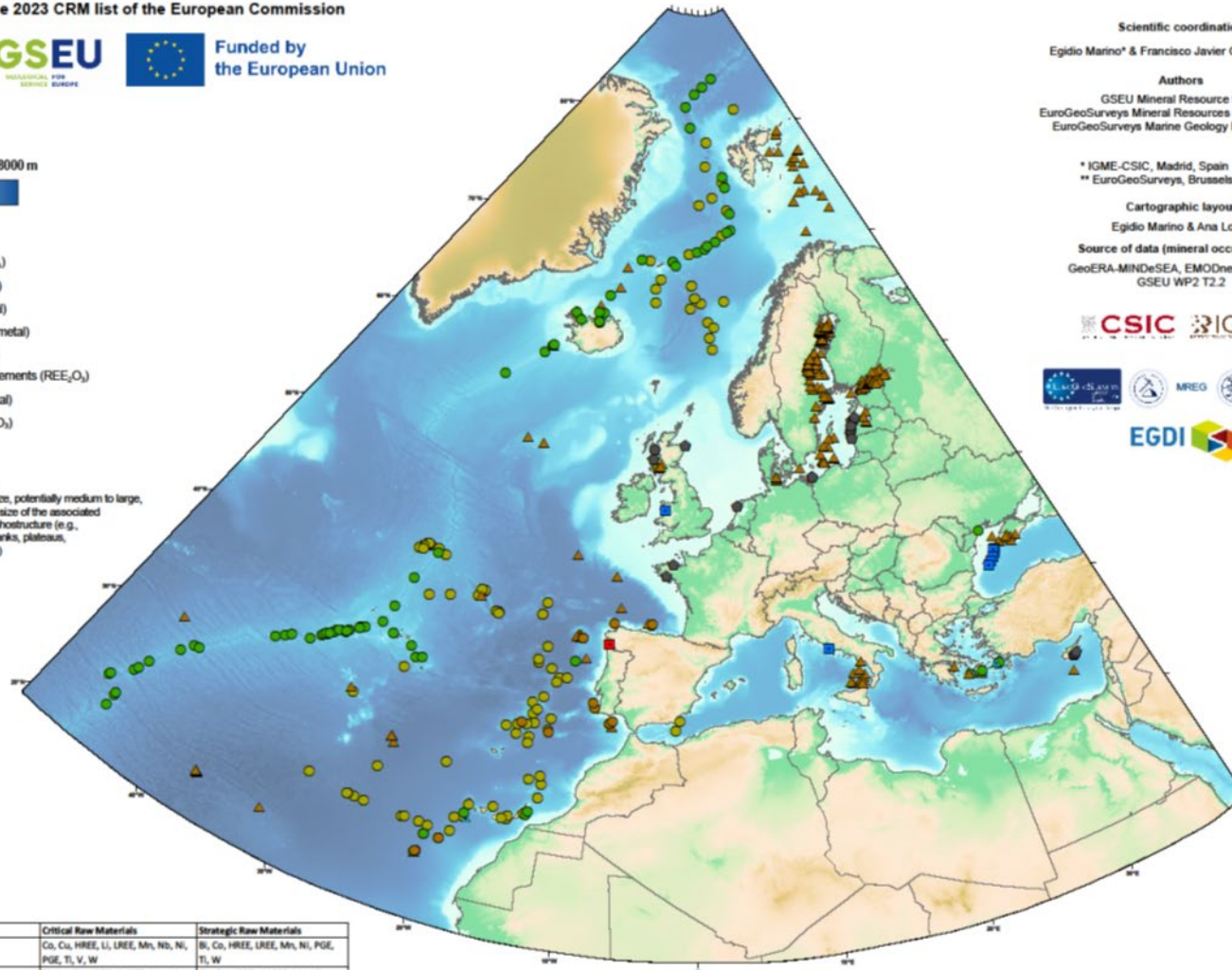
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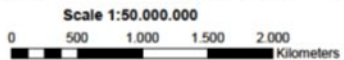
- Commodity**
- ▲ Barite (BaSO<sub>4</sub>)
  - Cobalt (metal)
  - Copper (metal)
  - ▲ Manganese (metal)
  - Phosphorous
  - Rare Earth Elements (REE<sub>2</sub>O<sub>3</sub>)
  - Titanium (metal)
  - Tungsten (WO<sub>3</sub>)

**Size**

□ Occurrence  
(The deposit size, potentially medium to large, depends on the size of the associated favorable morphostructure (e.g. seamounts, banks, plateaus, abyssal plains))



Marine mineral deposits	Critical Raw Materials	Strategic Raw Materials
Ferromanganese Crusts	Co, Cu, HREE, Li, LREE, Mn, Nb, Ni, PGE, Ti, V, W	Bi, Co, HREE, LREE, Mn, Ni, PGE, Ti, W
Polymetallic Nodules	Bi, Co, Cu, HREE, Li, LREE, Mn, Ni	Co, Cu, HREE, Li, LREE, Mn, Ni
Polymetallic Sulphides	As, Bi, Cu, Ga, Ge, Sb	Bi, Cu, Ga, Ge
Phosphorites	F, HREE, LREE, P	HREE, LREE
Placers	HREE, LREE, PGE, Ta, Ti, W	HREE, LREE, PGE, Ti, W



Polyconic Projection, Centra l Meridia n : 16° E, FE = 0, L a titude of origin : 0, DAT U M WGS84

Version 3 - January 2024

Scientific coordination  
Egidio Marino\* & Francisco Javier González Sanz\*

Authors  
GSEU Mineral Resource team,  
EuroGeoSurveys Mineral Resources Expert Group\*\* &  
EuroGeoSurveys Marine Geology Expert Group\*\*

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\*\* EuroGeoSurveys, Brussels, Belgium

Cartographic layout  
Egidio Marino & Ana Lobato

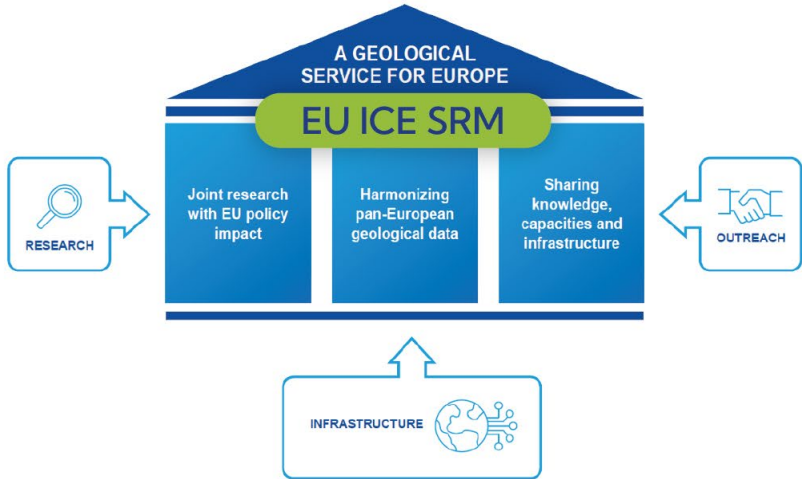
Source of data (mineral occurrences)  
GeoERA-MINDeSEA, EMODnet Geology &  
GSEU WP2 T2.2



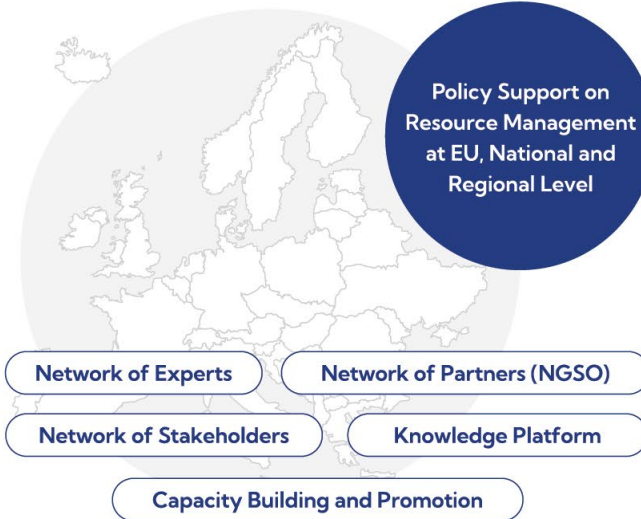
**WARNING:**  
The bathymetric data used for this Mineral Occurrences map of Europe was obtained by the GEBCO Compilation Group (2023) GEBCO 2023 Grid doi: 10.5285/998b053b-0cbe-6c23-e053-6c8eab01af7b) Given the polymetallic nature of marine minerals deposits only is represented in the map the main commodity, having the potential to contain various Strategic and Critical Raw Materials.



# EU International Centre of Excellence on Sustainable Resource Management

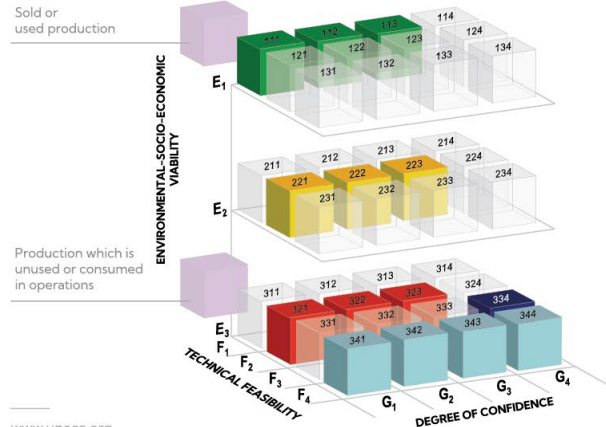


Capacity Building and Knowledge Centre in support of UNFC and UNRMS



## UNECE ICE-SRM

Promotion, Capacity Building on UNFC



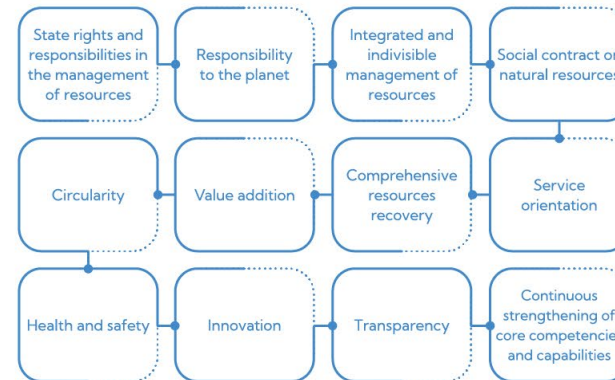
www.unece.org

Support UNRMS, in line with the UN 2030 Agenda for Sustainable Development



www.sdg.un.org

### UNRMS Fundamental Principles



www.unece.org





# GSEU

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## Thank you for your attention!

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