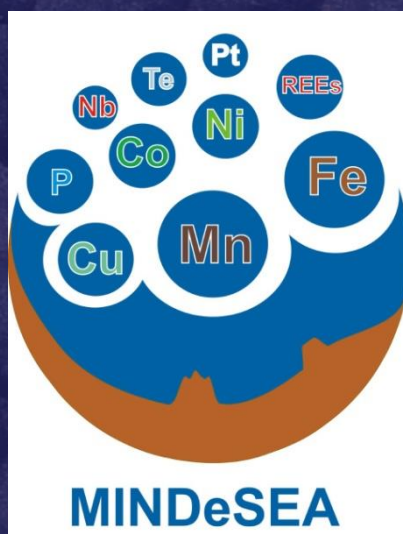


# MINDeSEA

## Seabed Mineral Deposits in European Seas: Metallogeny and Geological Potential for Strategic and Critical Raw Materials



### Deliverable 7.2: WP7 Database and maps on exploration in pan-European seas

WP7 leader: Geological Survey of Spain (IGME) - Spain		
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Deliverable number	Short Title
7.2	Database and maps on Database and maps on exploration in pan-European seas
<b>Long Title</b>	
Deliverable 7.2 – Database and maps on ferromanganese crusts and phosphorites	
<b>Short Description</b>	
This document presents a summary on the WP7 database and maps on exploration in pan-European seas	
<b>Keywords</b>	
Database, mineral occurrence map, seabed mapping, exploration, European seas	
Authors / Organisation(s)	Editor / Organisation
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MINDeSEA_D7-2_WP7- Database and maps on exploration in pan-European seas.doc	
Deliverable due date	Deliverable submitted date (WP leader)
30 October 2021 (M40)	
<b>Comments</b>	

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Version	Author(s)	Status	Date	Comments
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Dissemination level		
<b>PU</b>	Public	X
<b>CO</b>	Confidential, for project partners, GeoERA and the European Commission only	

## **D7.2. Database and maps on exploration in pan-European seas**

### **Summary:**

**GeoERA** is a Co-Fund ERA-NET action under Horizon 2020, towards "**Establishing the European Geological Surveys Research Area to deliver a Geological Service for Europe**". Its main objective is to contribute to the optimal use and management of the subsurface.

The project "**Seabed Mineral Deposits in European Seas: Metallogeny and Geological Potential for Strategic and Critical Raw Materials**" (**MINDeSEA**), materialized in the frame of the GeoERA Raw Materials Theme (Grant Agreement N° 731166, project GeoE.171.001), resulted from the collaboration between eight GeoERA Partners and four Non-funded Organizations at various points of common interest for exploration and investigation on seafloor mineral deposits.

This document reports a summary on the MINDeSEA database and maps of exploration in pan-European seas produced during the project life (July 2018 - October 2021).

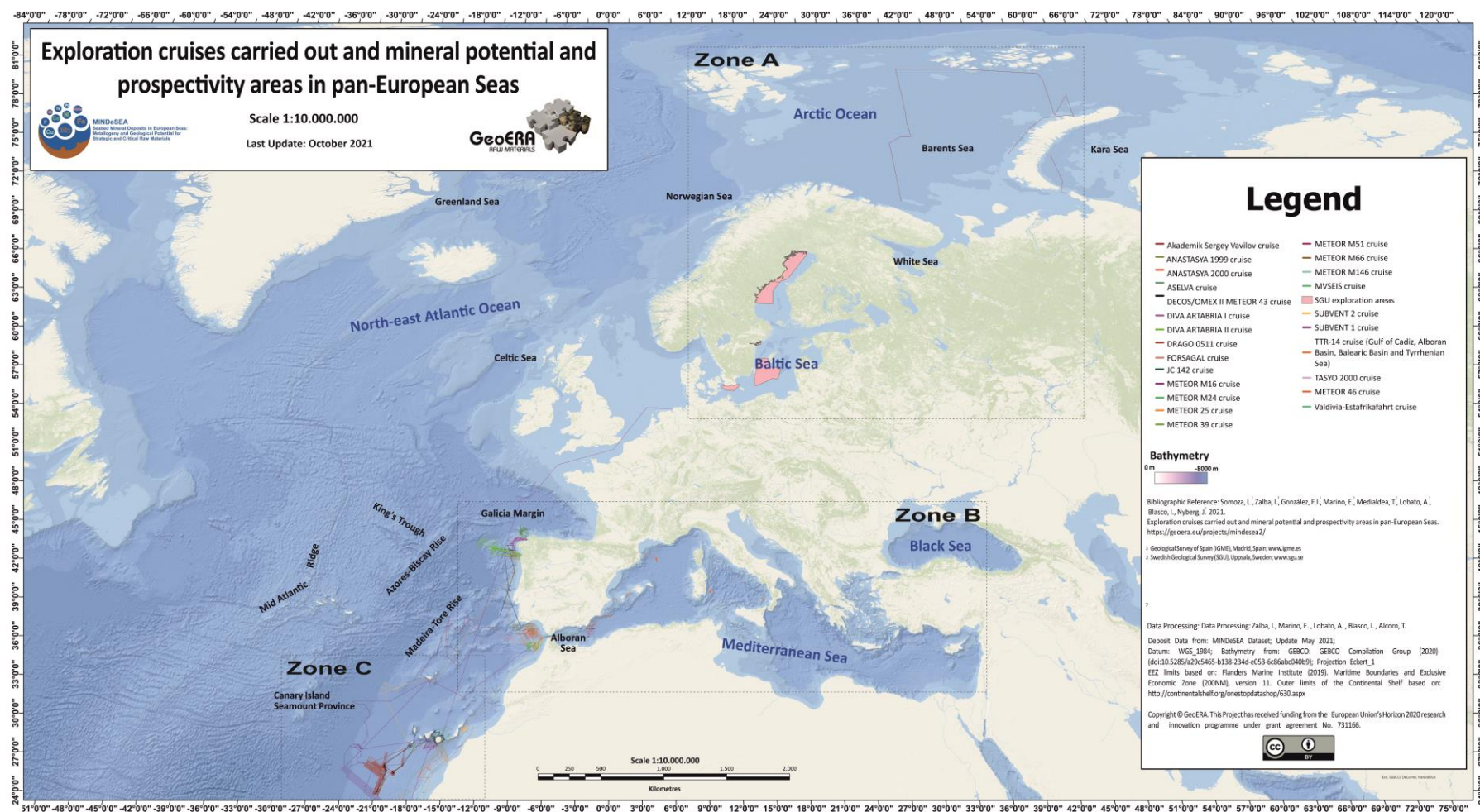
The database compiles all existing and accessible data on minerals research/exploration in European waters, generating a harmonised dataset from known and sampled sites and mineral occurrences in terms to create a new dataset on the distribution of the explored areas for submarine mineral resources in Europe; (ii) to propose recommendations for new unexplored areas; and (iii) to recommend pilot areas with high potential of discovering new submarine mineral resource mineral accumulations. Free and open access to data and maps, under CCBY license, are available in the [GeoERA](#) and [EGDI](#) portals and visors.

The database on exploration contains 32 cruise surveys, in 5 marine regions (Baltic Sea, Barents Sea, Bay of Biscay and the Iberian Coasts, Macaronesia, Mediterranean Sea) and 6 EU countries (Spain, Portugal, Italy, Sweden, Norway) and contiguous International Waters. Detailed information on the seafloor exploration technics and explored areas is available on Deliverable 7.3 and its specific maps (Fig. 1, zones A, B, C).

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**Figure 1:** MINDeSEA compilation map for exploration in pan-European seas. Last update: October 2021.



*This project has been supported by the European Union's Horizon 2020 research and innovation programme, GeoERA (Grant Agreement N° 731166, project GeoE.171.001).*



## Exploration cruises carried out in pan-European Seas



MINDeSEA  
Seabed Mineral Deposits in European Seas:  
Metallogeny and Geological Potential for  
Strategic and Critical Raw Materials

Scale 1:10.000.000

Last Update: October 2021

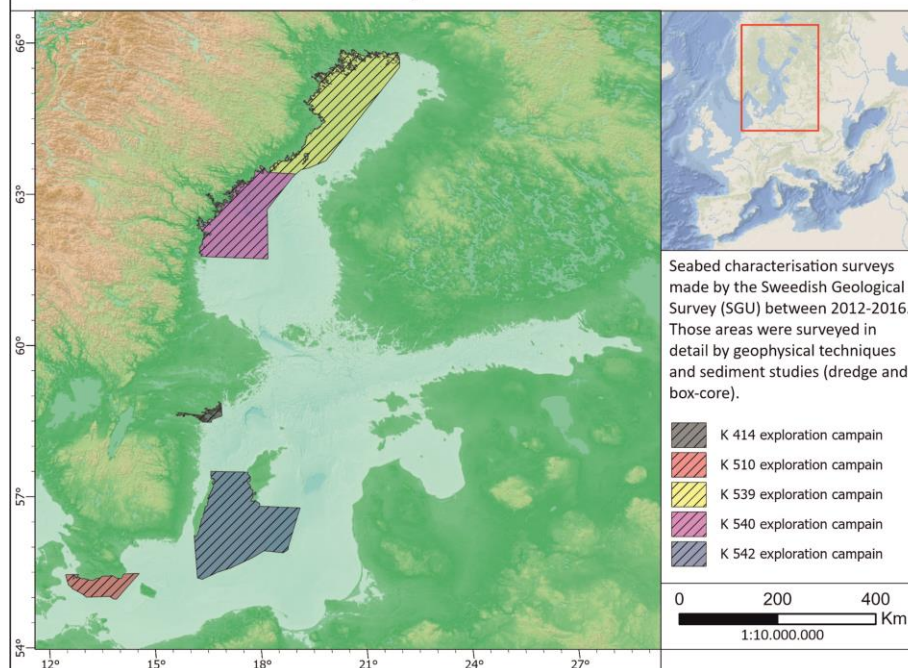


## Zone A

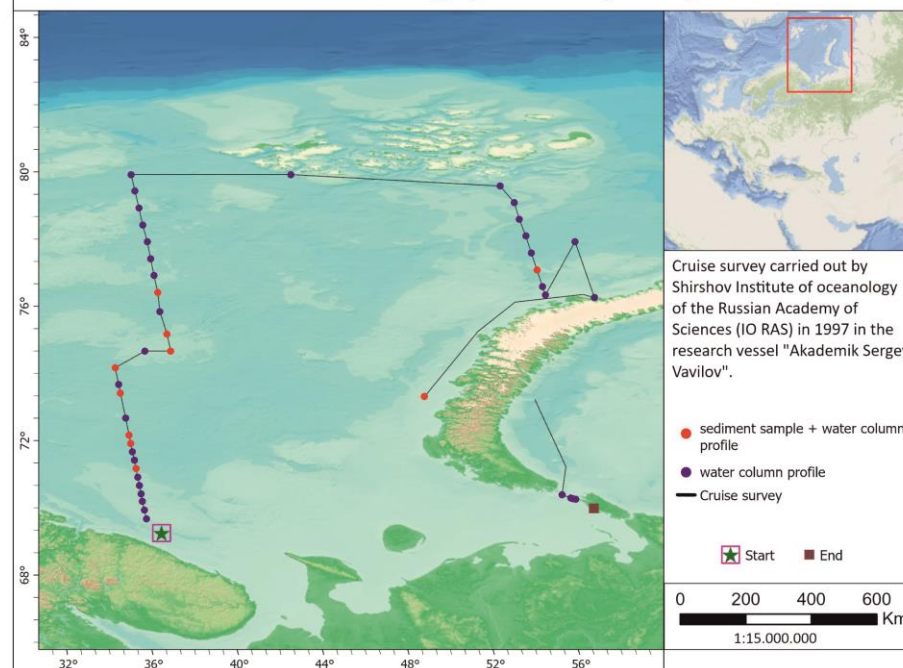
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Exploration cruises carried out and mineral potential and prospectivity areas in pan-European Seas.  
<https://geoera.eu/projects/mindesea2/>

Data Processing: Zalba, I., Marino, E., Lobato, A., Blasco, I., Alcorn, T.

### SGU Exploration areas



### Akademik Sergey Vavilov (1997)







## Exploration cruises carried out in pan-European Seas



Scale 1:10.000.000

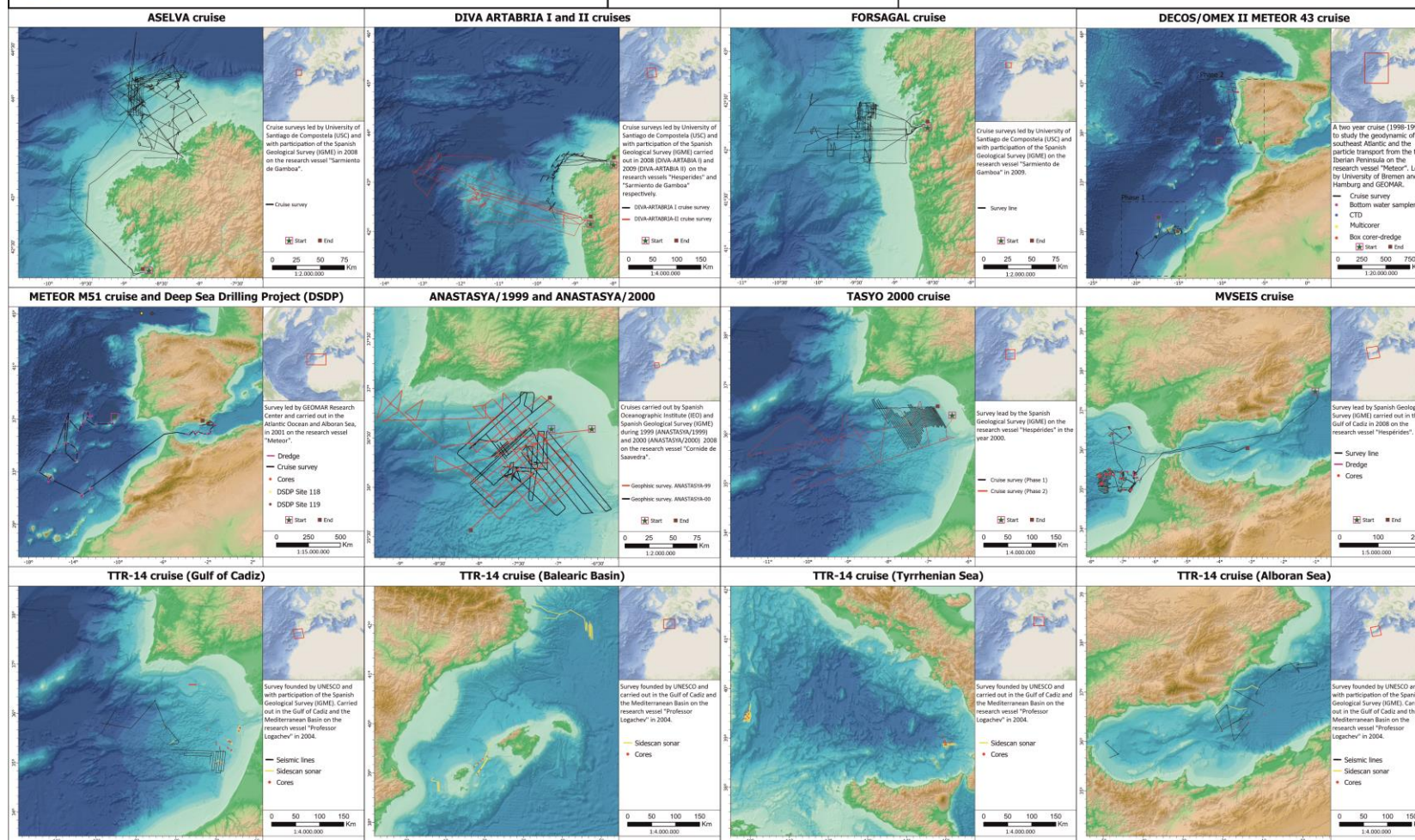
Last Update: October 2021



## Zone B

Bibliographic Reference: Somoza, L., Zalba, I., González, F.J., Marino, E., Medialdea, T., Lobato, A., Blasco, I., Nyberg, J. 2021.  
Exploration cruises carried out and mineral potential and prospectivity areas in pan-European Seas.  
<https://geoera.eu/projects/mindesea2/>

Data Processing: Zalba, I., Marino, E., Lobato, A., Blasco, I., Alcorn, T.







## Exploration cruises carried out in pan-European Seas



Scale 1:10.000.000

Last Update: October 2021



# Zone C

Bibliographic Reference: Somoza, L., Zalba, I., González, F.J., Marino, E., Medialdea, T., Lobato, A., Blasco, I., Nyberg, J. 2021.  
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Data Processing: Zalba, I., Marino, E., Lobato, A., Blasco, I., Alcorn, T.

