

Status of exploration activities in the Area



December 2024/3

International Seabed Authority

The International Seabed Authority (ISA) was established in 1994 with the specific and exclusive mandate to manage the Area and its resources for the shared benefit of humankind, which includes ensuring the effective protection of the marine environment in the Area, a specific and exclusive competence recognized and reinforced by the latest international agreement under the United Nations

Convention on the Law of the Sea (UNCLOS) adopted in June 2023 on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (2023 Agreement).

The contribution of ISA to the objectives of the 2023 Agreement is detailed in the report available [here](#).

Exploration in the Area

Mineral exploration in the Area may be carried out only by qualified entities under contract granted by ISA and in accordance with Part XI of UNCLOS, the 1994 Agreement on the implementation of Part XI of UNCLOS and the rules, regulations and procedures of ISA.

ISA defines exploration as

- the searching for minerals
- the analysis of the economic potential of mineral deposits construction and testing of recovery systems and equipment, processing facilities and transportation systems
- the carrying out of studies of the environmental, technical, economic, commercial and other appropriate factors that must be considered before a decision to proceed to commercial production.¹

How big are contract areas?

In accordance with the exploration regulations, over the contract term, the contractor is requested to relinquish portions of the areas allocated to it and revert them to the Area.

For polymetallic sulphides (PMS), the maximum exploration area must not exceed 10,000 km², consisting of up to 100 blocks of approximately 10 km by 10 km and no greater than 100 km² each.

For polymetallic nodules (PMN), the maximum exploration area allocated to each contractor may not exceed 150,000 km².

For cobalt-rich ferromanganese crusts (CFC), the maximum exploration area may not exceed 3,000 km², consisting of up to 150 blocks, which may be square or rectangular in shape and no greater than 20 km² in size.

Box 1

How is exploration regulated?

Exploration contractors must abide by the rules, regulations and procedures on exploration for mineral resources in the Area adopted by ISA:

Polymetallic Nodules



Regulations for the prospecting and exploration of polymetallic nodules in the Area

2000 and revised in 2013

Polymetallic Sulphides



Regulations for the prospecting and exploration of polymetallic sulphides in the Area

adopted in 2010

Cobalt-rich Ferromanganese Crusts



Regulations for the prospecting and exploration of cobalt-rich ferromanganese crusts in the Area

adopted in 2012

¹ ISA. 2016. Consolidated Regulations and Recommendations on Prospecting and Exploration. Available at: <https://www.isa.org.jm/publications/consolidated-regulations-and-recommendations-on-prospecting-and-exploration>.

Exploration in the Area

Contracts for exploration are in principle granted for a period of 15 years. The first contracts were issued by ISA in 2001. Extensions were granted by the ISA Council based on recommendations of the Legal and Technical Commission (LTC) to several contractors who wished to continue gathering more information and data on the respective

areas pending the adoption of regulations governing exploitation of seabed minerals in the Area. In July 2024, the ISA Council approved a plan of work for exploration for polymetallic sulphides in the Indian Ocean by the Earth System Science Organization-Ministry of Earth Sciences of the Government of India

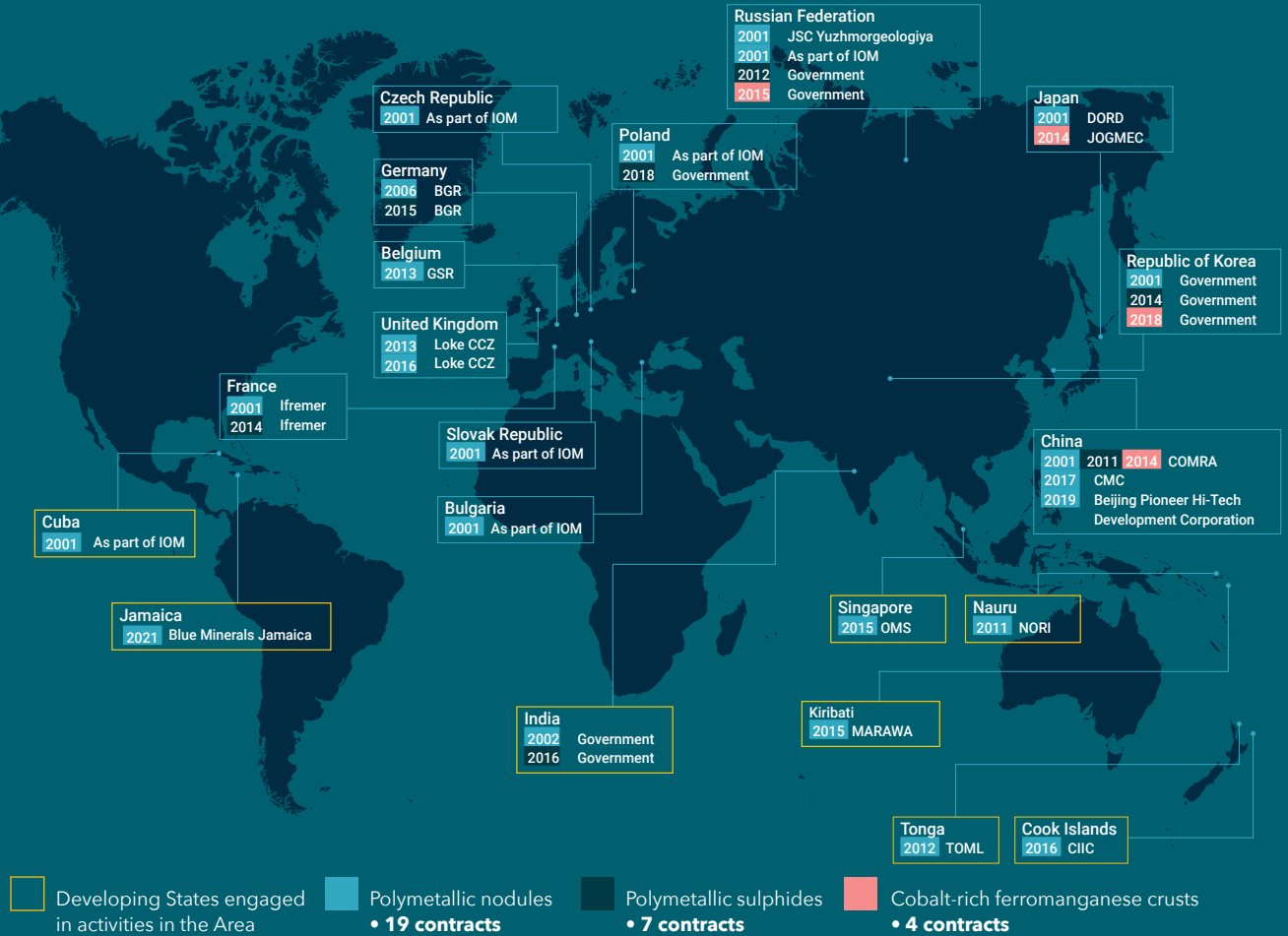


Figure 1: ISA exploration contractors and sponsoring States

Who is exploring where, for which resources?

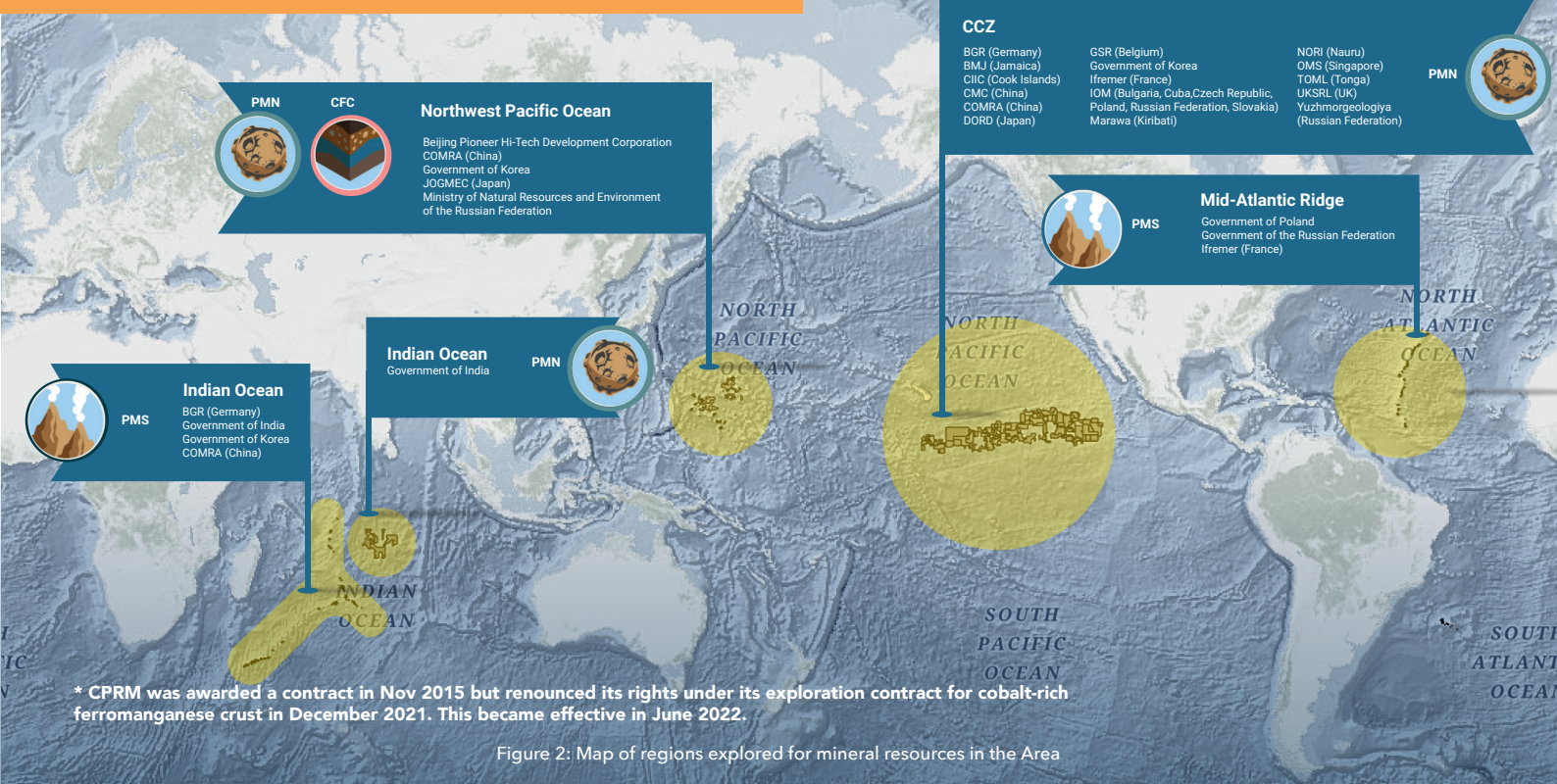


Figure 2: Map of regions explored for mineral resources in the Area

What are reserved areas?

To ensure equity for developing countries in access to seabed mineral resources, developed States applying for exploration contracts are required to divide the total area of application into two parts of equal estimated commercial value. They must provide ISA with survey data

and information to substantiate the estimated values. The ISA then allocates one area to the applicant and set aside the other area as “reserved area” to go into a “site bank” where the area will be available for application by developing countries or by the Enterprise.

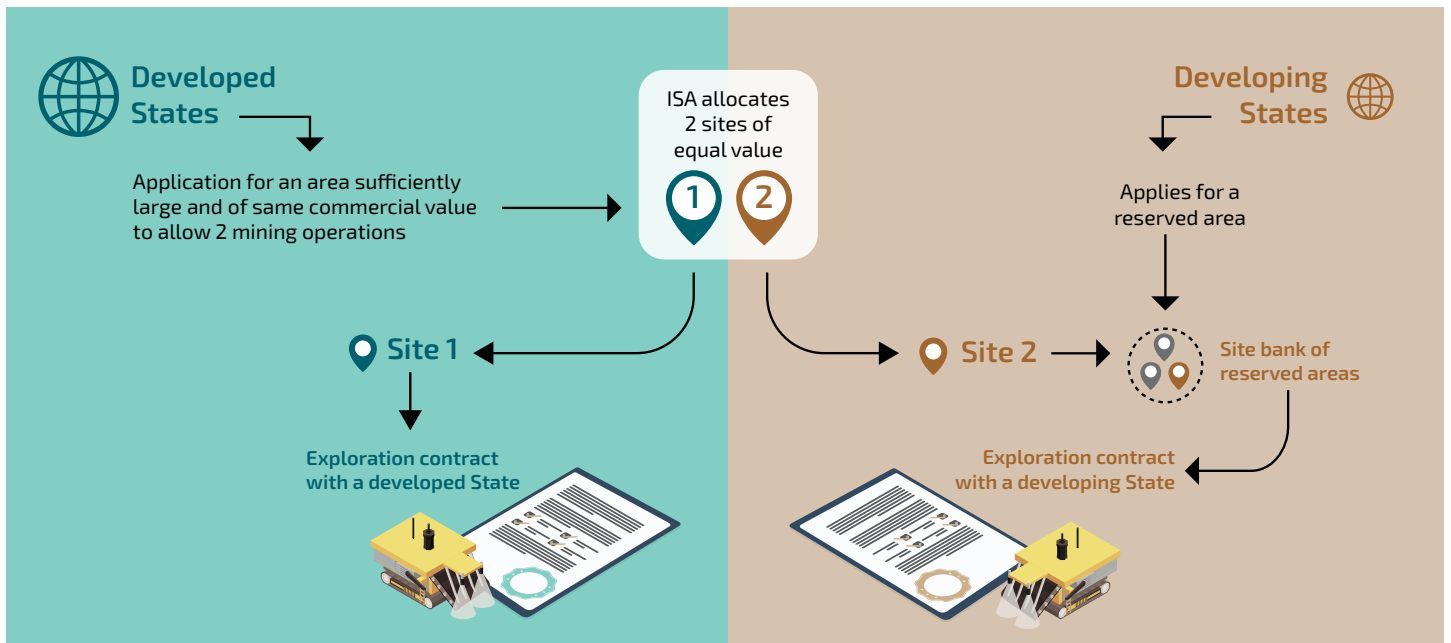


Figure 3: Allocation of Reserved Areas for Developing States in the Area for Exploration of Polymetallic Nodules (PMN)

How much area is reserved for developing States?

As of September 2023, 1.39 million km² of reserved area had been allocated to contractors sponsored by developing States, and 887,485 km² remained available in the site bank for exploration for PMN.

Several developing countries have already taken advantage of reserved areas to sponsor exploration activities for PMN, including China, the Cook Islands, Jamaica, Nauru, Kiribati, Singapore and Tonga.

So far, all the applicants for exploration for PMS have chosen to offer a future equity interest to the Enterprise in lieu of a reserved area and there are consequently no reserved areas.

In the case of CFC, only one out of five contractors - the Russian Federation - took the option to contribute a reserved area and contributed 3,000 km². The remaining contractors offered a future equity interest to the Enterprise. An update on the current status of reserved areas is available [here](#)

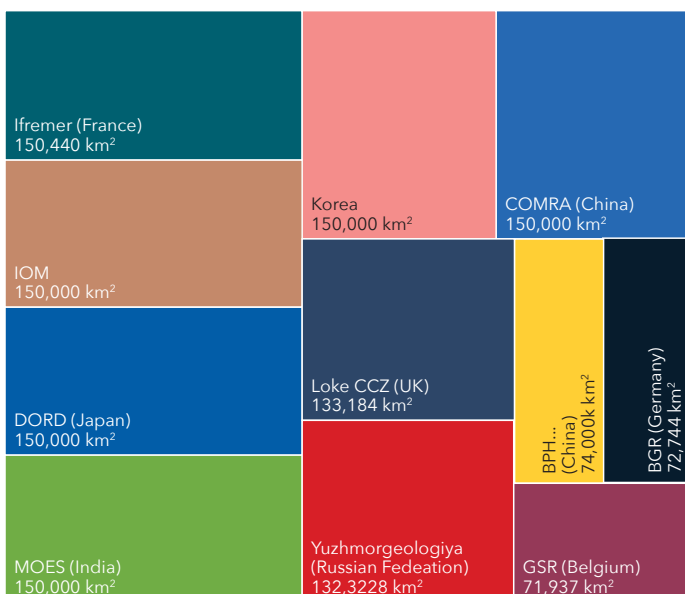


Figure 4: Reserved areas contributed by contractors for PMN

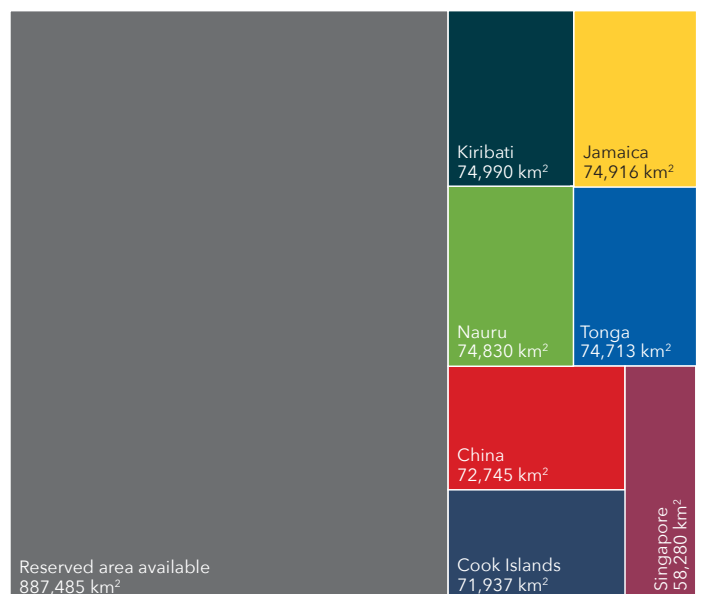


Figure 5: Reserved areas allocated to developing States and areas still available

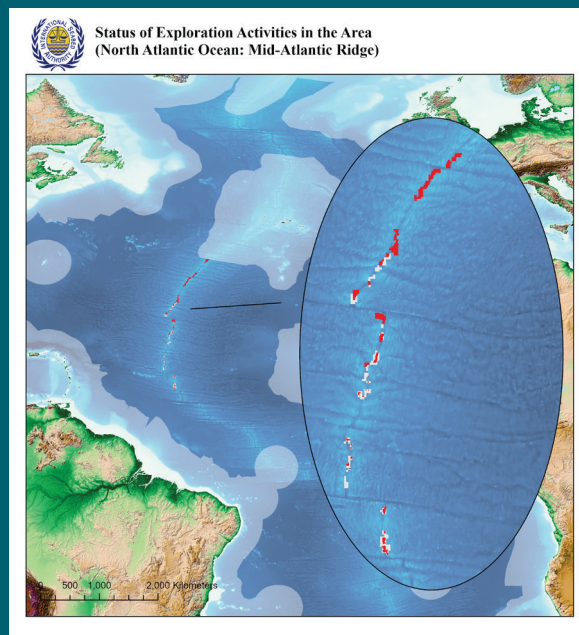
FOCUS | The Northern Mid-Atlantic Ridge

Five (5) of the thirty (30) contracts awarded by ISA concern the exploration for PMS (Government of the Republic of Poland, Government of the Russian Federation, IFREMER) in the Mid-Atlantic Ridge. Altogether, these contract areas for exploration cover approximately 0.0175 M sq.km (1.2% of all 30 contract areas).

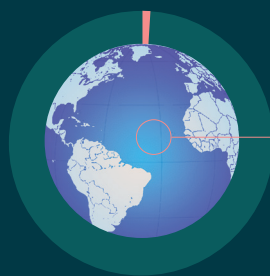
Regional environmental management plans (REMPs) are an essential element of the strategy of ISA to ensure the protection of the marine environment, as reflected in its Strategic Plan and associated High-Level Action Plan.

The Mid-Atlantic Ridge has been identified as a priority area for the development of REMPs by the ISA Council.

In collaboration with the Governments of Poland, Portugal, the EU, and the Russian Federation since 2018, three workshops have been held to initiate the development of a REMP for the Mid-Atlantic Ridge. The main outcomes of these workshops include the development of a framework for the REMP, a comprehensive review and synthesis of scientific data, and information on environmental and resource distributions. The outcomes of these workshops support the identification of the potential geographical scope and areas that may be vulnerable to exploitation using area-based management tools and qualitative models for cumulative impact assessment, including potential management approaches and measures.



Exploration in the Mid-Atlantic Ridge



0.0089%
of the Area

Exploration contracts in the Mid-Atlantic Ridge amount to 1.2% of all 30 contract areas



3
active PMS contracts in the Mid Atlantic Ridge



21
exploration cruises between 2014 and 2023



79M USD
spent in exploration activities between 2014 and 2023

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Suggested readings

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