



Status of exploration activities in the Area



June 2024/2

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

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 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

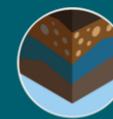
Polymetallic Sulphides



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.

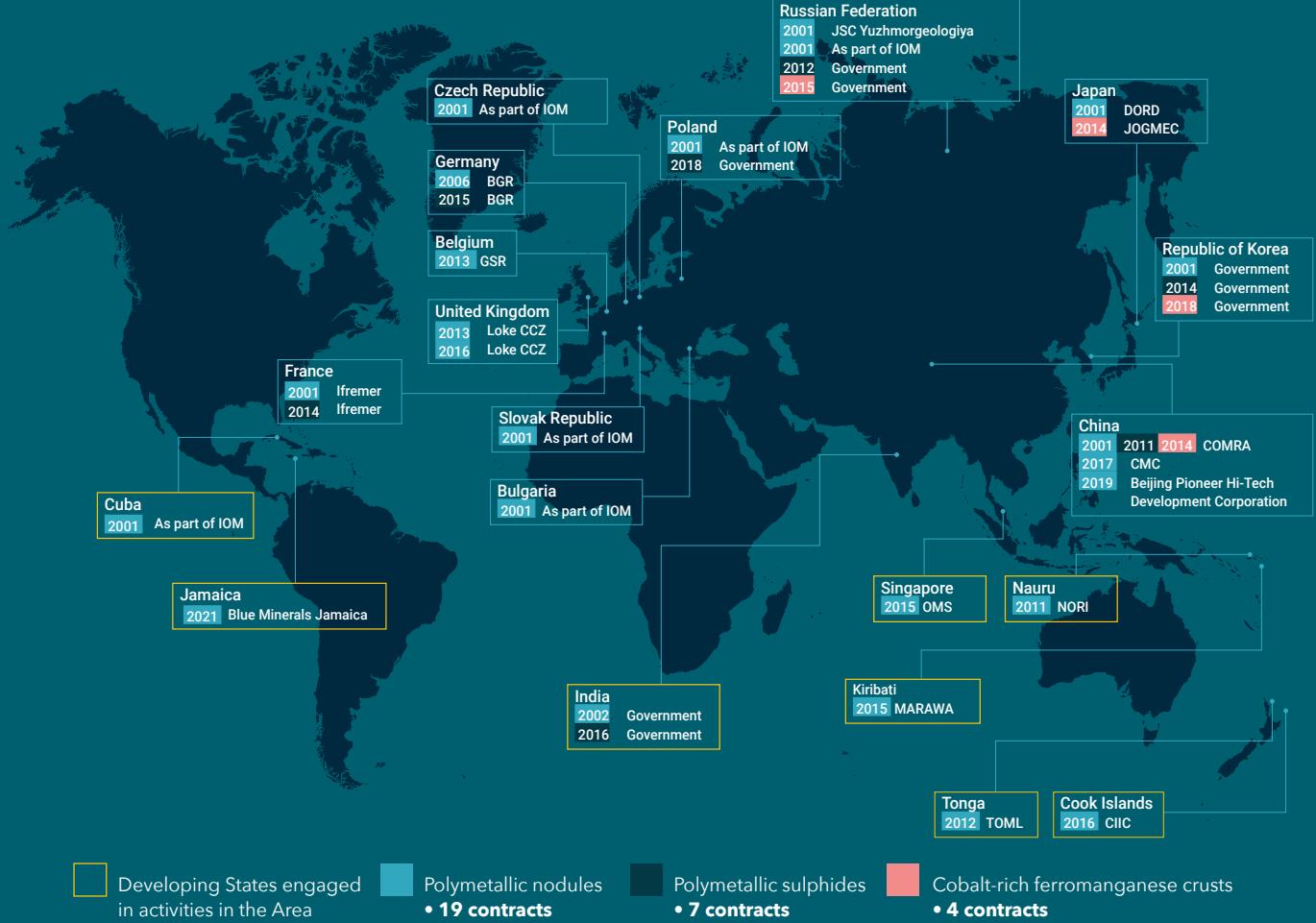


Figure 1: ISA exploration contractors and sponsoring States

Who is exploring where, for which resources?

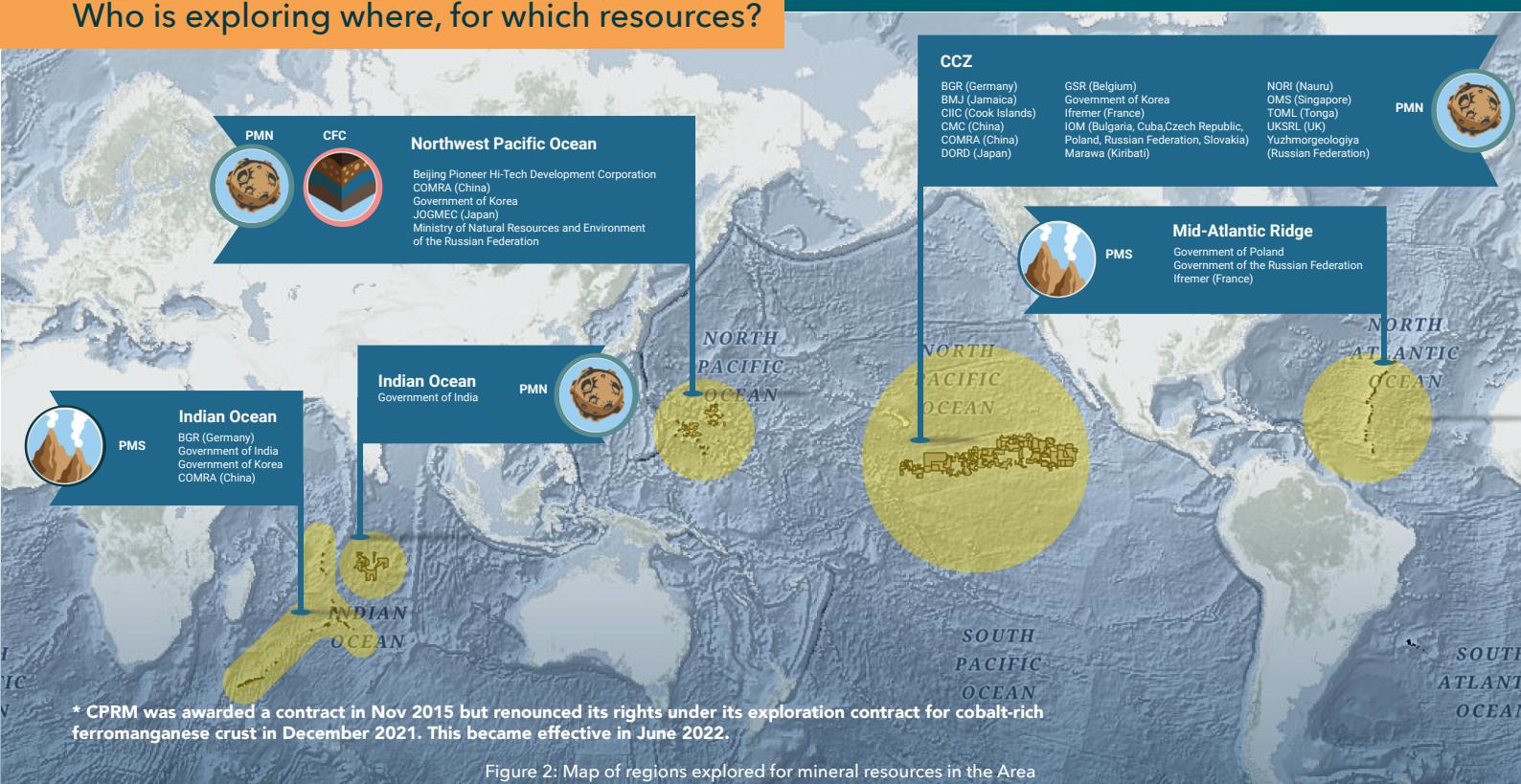


Figure 2: Map of regions explored for mineral resources in the Area

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.

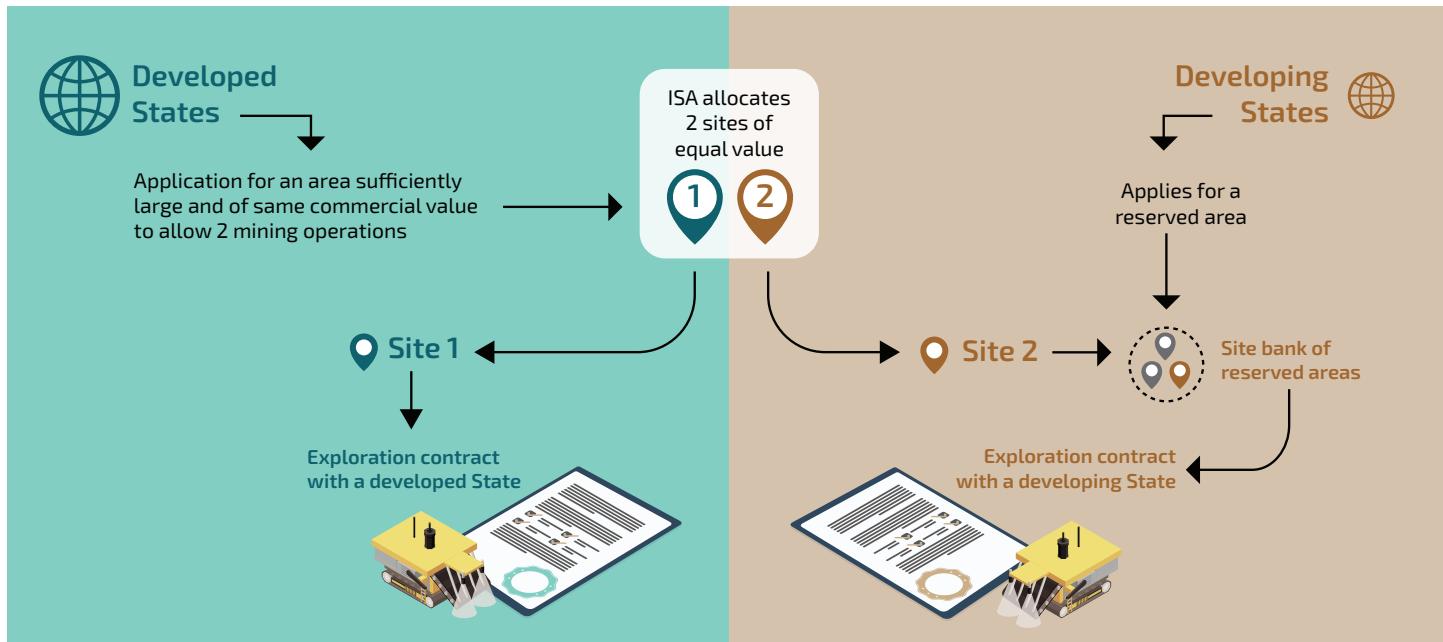


Figure 3: Allocation of Reserved Areas for Developing States in the Area for Exploration of Polymetallic Nodules (PMN)

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.

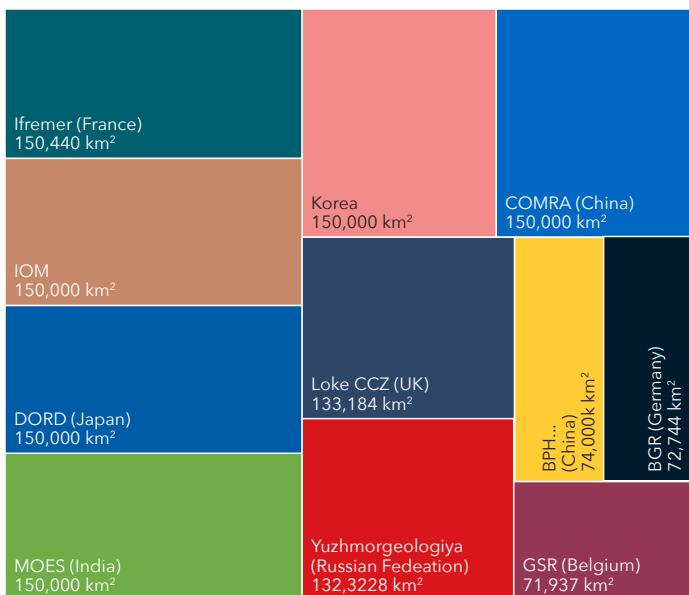


Figure 4: Reserved areas contributed by contractors for PMN

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.



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

Box 2

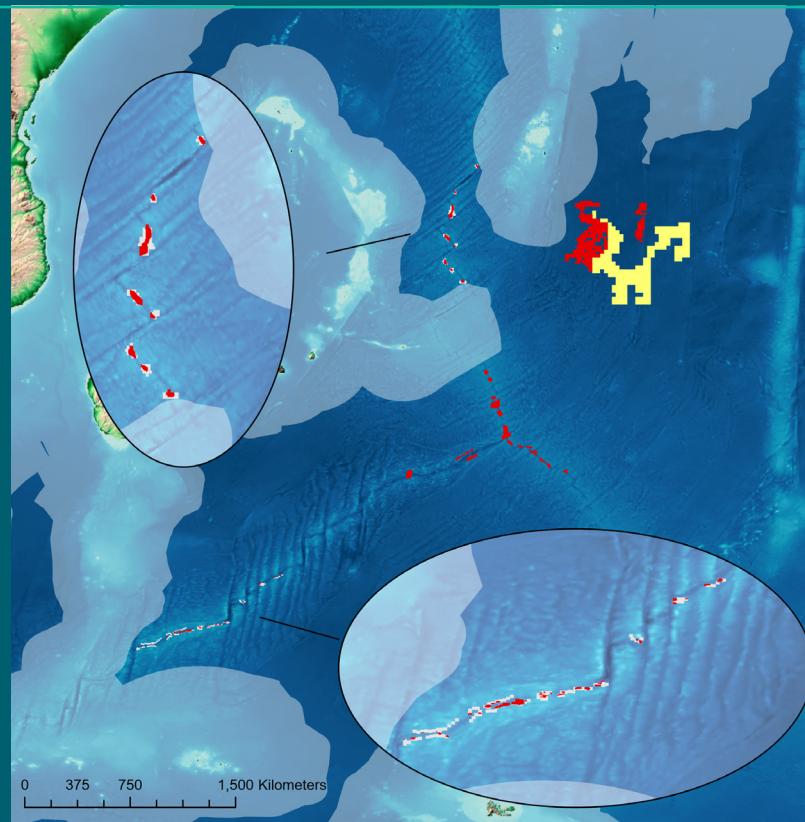
FOCUS | The Indian Ocean

Five (5) of the thirty (30) contracts awarded by ISA concern the exploration for PMN (Government of India) and PMS (BGR, Government of India, Government of Korea, COMRA) in the Indian Ocean. Altogether, these contracts areas for exploration cover approximately 0.1M sq.km (7.1% 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 Indian Ocean has been identified as a priority area for the development of REMP by the ISA Council.

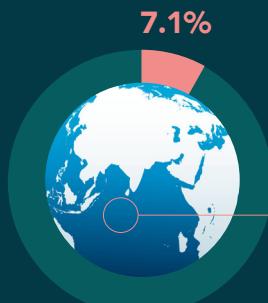
In collaboration with the Government of India, a workshop was convened to initiate the development of a REMP for the Indian Ocean in May 2023. The main outcomes of this workshop included the review of scientific data and information to support the identification of the potential geographical scope for the REMP and area-based management tools, as well as the validation of a qualitative model for cumulative impact assessment.



Box 3

Exploration in the Indian Ocean in figures

The percentages were derived based on exploration areas for minerals in the Indian Ocean to the entire ocean.



Exploration contracts in the Indian Ocean amount to 7.1% of all 30 contract areas

→ 0.032%
PMN
→ 0.019%
PMS



4 active PMS contracts in the Indian ocean



1 active PMN contract in the Indian Ocean



51 exploration cruises between 2001 and 2023



69M USD spent in exploration activities between 2001 and 2023

References

- ISA. 2011. The Law of the Sea: Compendium of Basic Documents. Kingston: International Seabed Authority, Caribbean Law Publishing, pp. 48- 92 and Annex III, pp.142-159.
- ISA. 2012. Decision of the Council relating to an environmental management plan for the Clarion-Clipperton Zone (ISBA/18/C/22). Available at: https://www.isa.org.jm/wp-content/uploads/2022/06/isba-18c-22_0.pdf.
- 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>.
- ISA. 2021. Decision of the Council of the International Seabed Authority relating to the review of the environmental management plan for the Clarion-Clipperton Zone (ISBA/26/C/58). Available at: https://www.isa.org.jm/wp-content/uploads/2022/06/ISBA_26_C_58_E.pdf.

Suggested readings

- Ascencio-Herrera, Alfonso, Myron H. Nordquist, Satya N. Nandan. 2022. The United Nations Convention on the Law of the Sea, Part XI Regime and the International Seabed Authority: A Twenty-Five Year Journey. Leiden: Brill Nijhoff.
- ISA. 2017. Technical Study 19: Polymetallic Nodules Resource Classification. Available at: <https://www.isa.org.jm/wp-content/uploads/2022/06/ts19final-web.pdf>.
- ISA. 2023. Secretary-General Annual Report 2023: Just and equitable management of the common heritage of humankind. Available at: https://www.isa.org.jm/wp-content/uploads/2023/07/ISA_Secretary_General_Annual_Report_2023.pdf.
- Levy, Jean-Pierre. 2014. International Seabed Authority. International Seabed Authority.
- Lodge, M.W. "International Seabed Area" in Max Planck Encyclopedia of Public International Law. 2021. Available at: <https://opil.ouplaw.com/display/10.1093/law:epil/9780199231690/law-9780199231690-e1179?rskey=MAX5iS&result=1&prid=MPIL>.
- Lodge, M.W. "International Seabed Authority" in Max Planck Encyclopedia of Public International Law. 2020. Available at: <https://opil.ouplaw.com/display/10.1093/law:epil/9780199231690/law-9780199231690-e1180?prid=MPIL>.
- Lodge, M.W. "The Deep Seabed" in Rothwell, Donald, Alex G Oude, Karen N Scott, Tim Stephens, and Oxford University Press. 2015. The Oxford Handbook of the Law of the Sea. Oxford; New York: Oxford University Press, 226-253.
- Satya N Nandan, Michael W Lodge, Shabtai Rosenne, The development of the regime for deep seabed mining, The Hague, 2002.