



Status of exploration activities in the Area



February 2024/1

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).

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?

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.

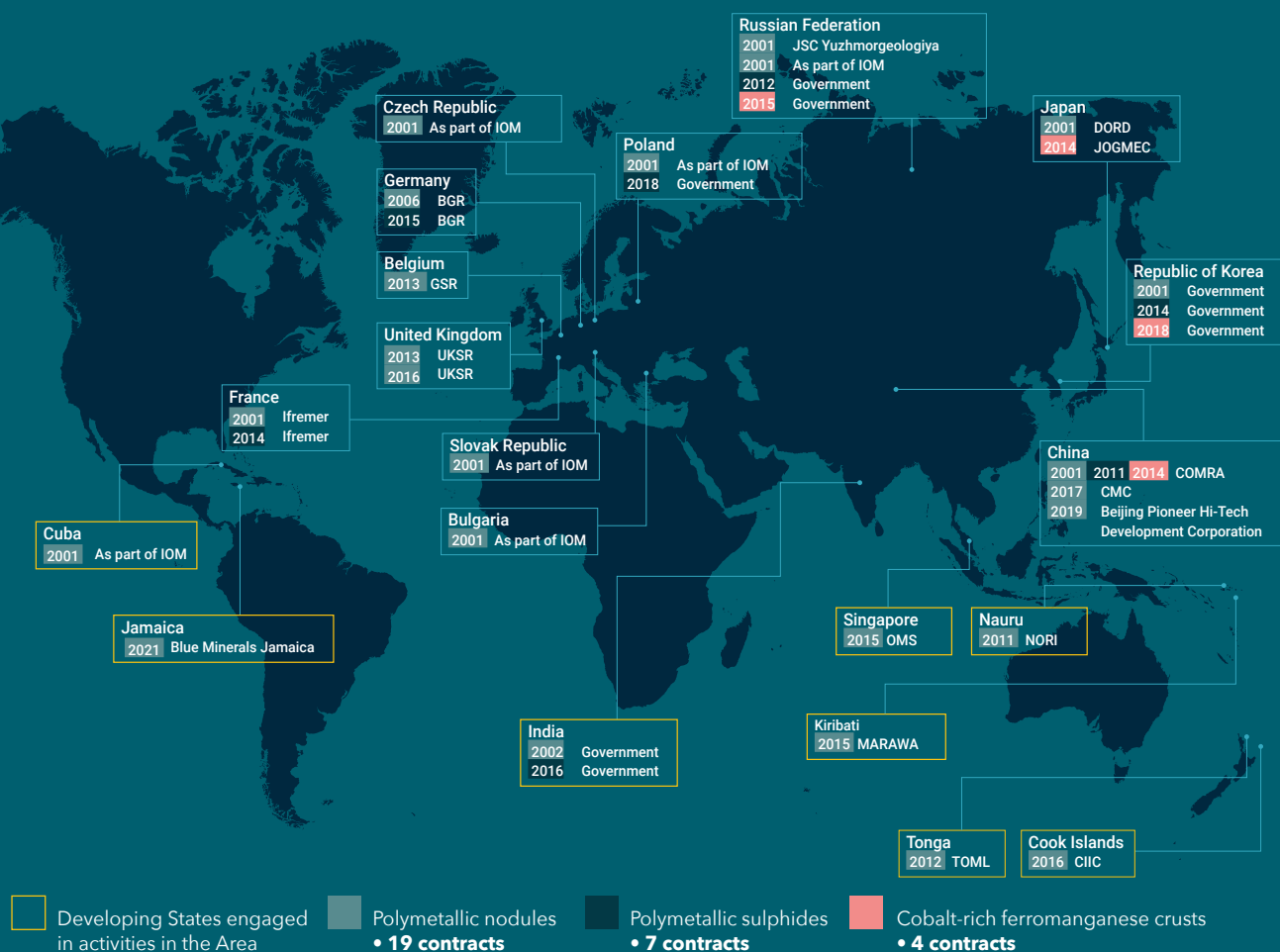


Figure 1: ISA exploration contractors and sponsoring States

Who is exploring where, for which resources?

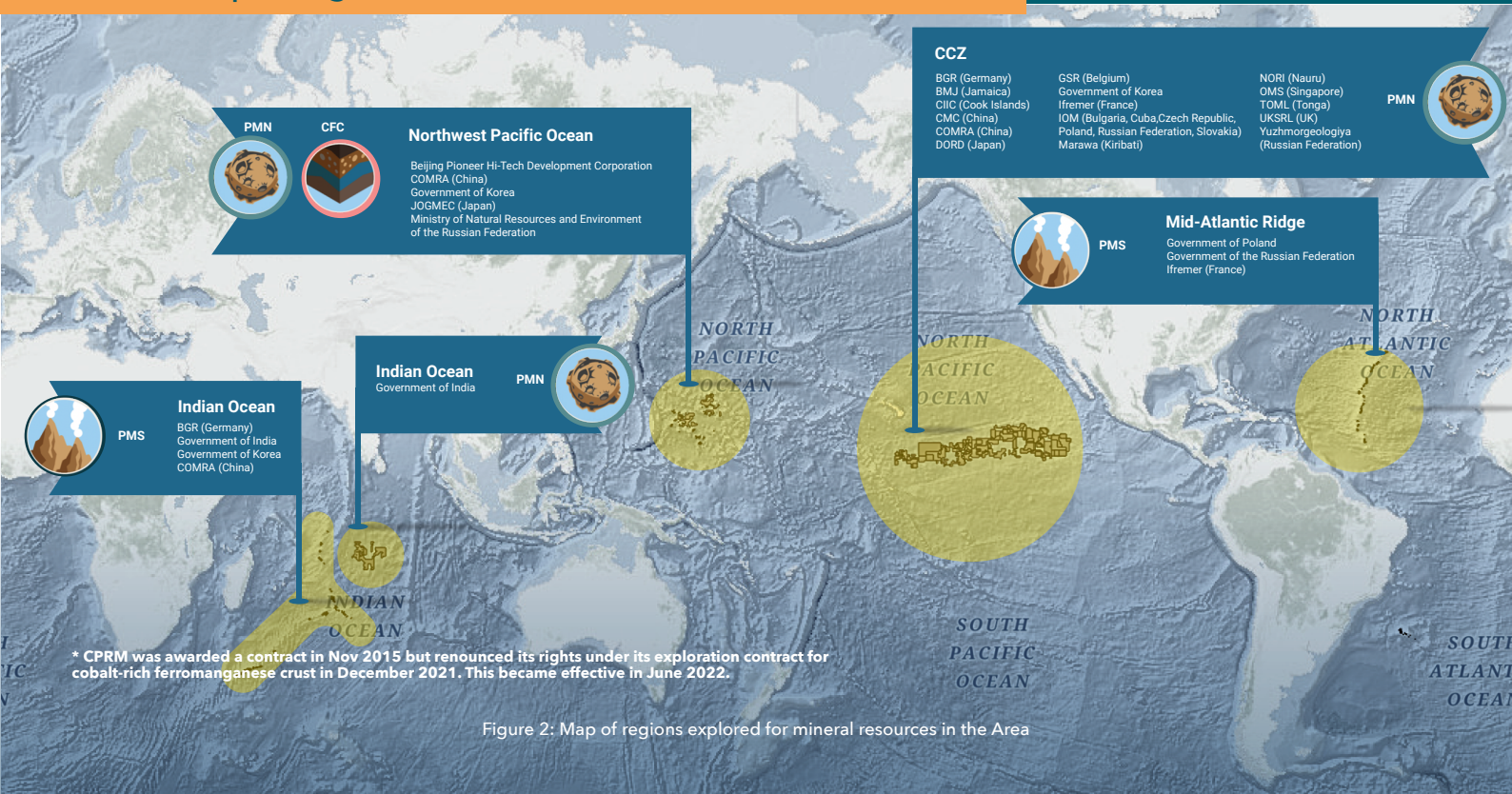


Figure 2: Map of regions explored for mineral resources in the Area

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.

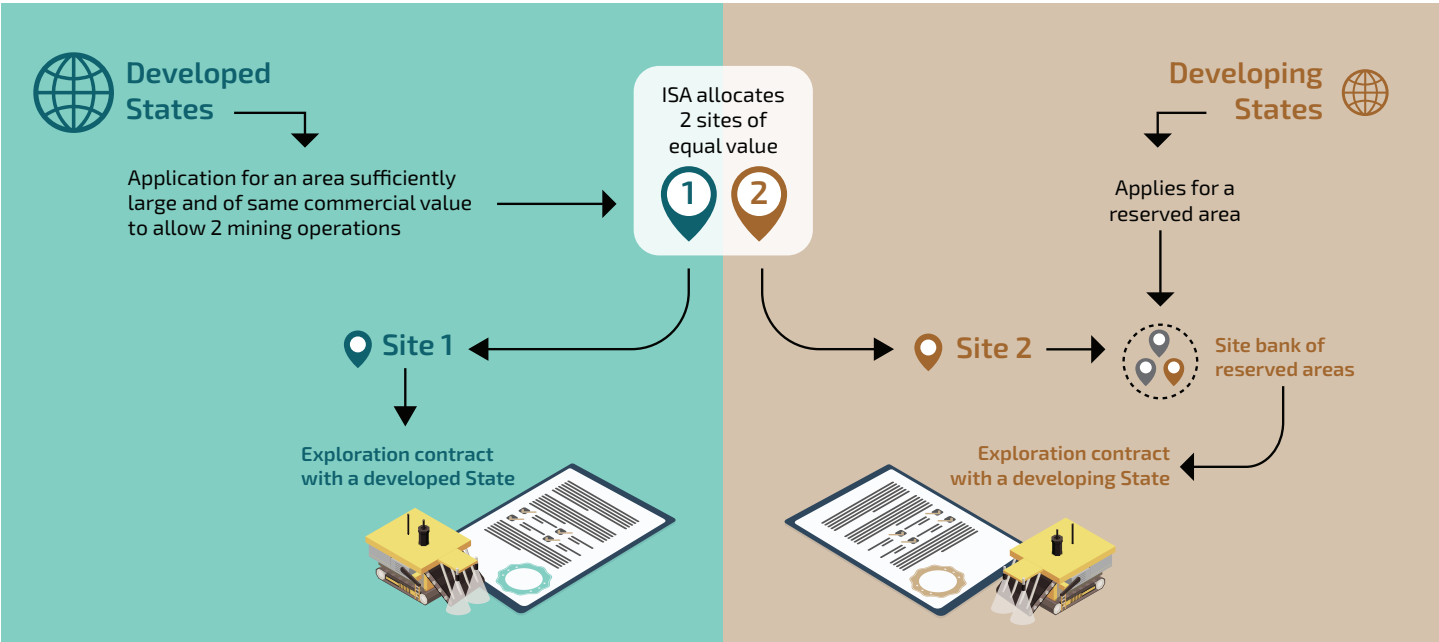


Figure 3: Allocation of Reserved Areas for Developing States in the Area for Exploration of Polymetallic Nodules (PMN)

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.

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.

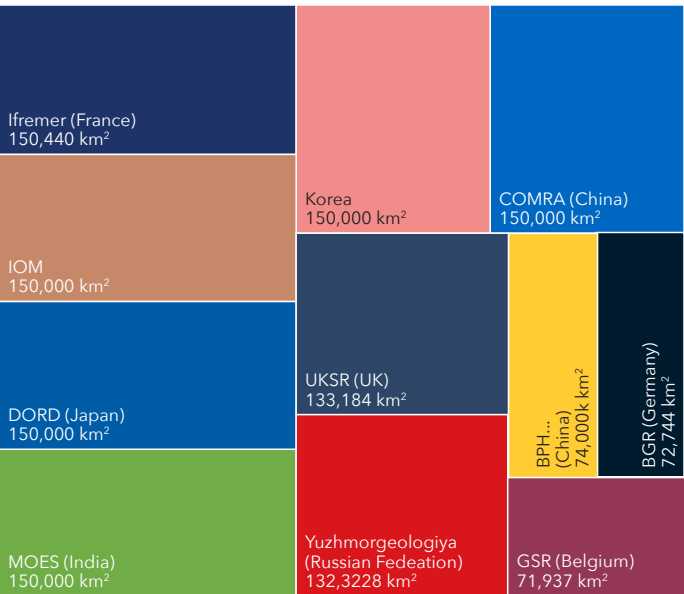


Figure 4: Reserved areas contributed by contractors for PMN

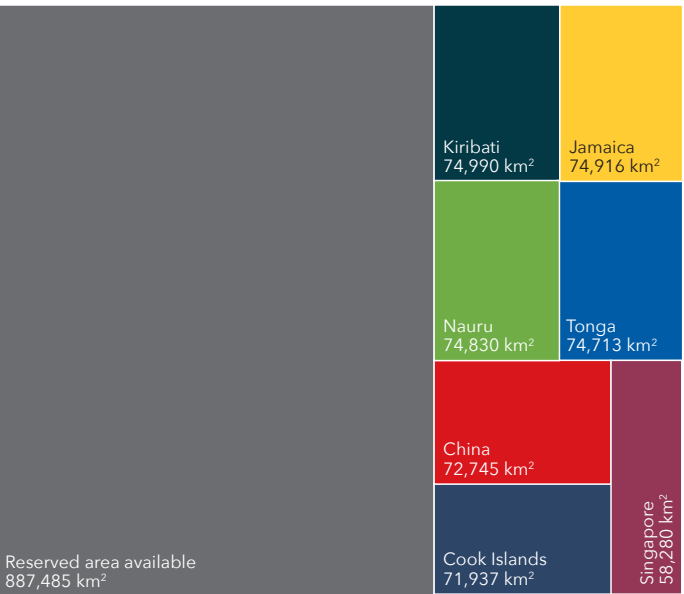
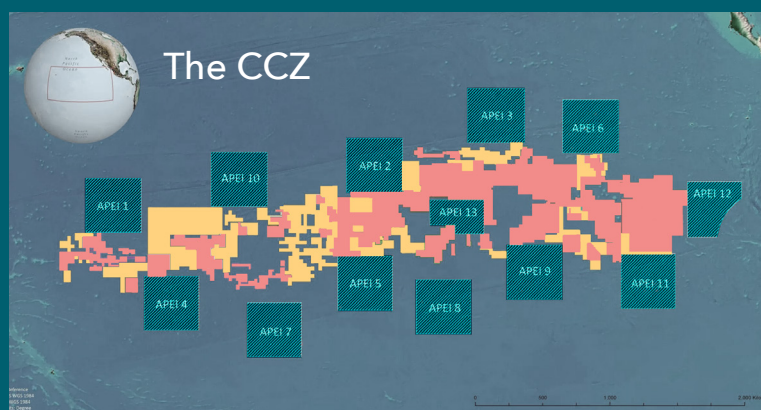


Figure 5: Reserved areas allocated to developing States and areas still available

FOCUS | The Clarion-Clipperton Zone (CCZ)

Nineteen (19) of the thirty (30) contracts awarded by ISA concern the exploration for PMN in the CCZ. Altogether, these contract areas for exploration cover approximately 1.2 million km² of the CCZ.

As will be the case for all regions of the Area that are targeted for possible future exploitation, ISA has developed an environmental management plan for the CCZ. The plan was approved in 2012 and initially created a network of 9 areas of particular environmental interest (APEIs) entirely protected from mining. The APEIs were placed across the CCZ to represent the region's full range of biodiversity and habitats. In December 2021, 4 additional APEIs were designated to enhance the effectiveness of the network of APEIs, bringing the total number of APEIs in the CCZ to 13 with a total area of 1.97 million km².



Exploration in the Area in figures

The Area covers around **54%** of the world's seabed



Areas being explored

1.47 million km²



The percentage was derived based on the area of the ocean's surface

0.584%
PMN

0.021%
PMS

0.004%
CFC



30
active exploration
contracts in the Area



233
exploration cruises
between 2001 and 2022



1.8B USD
spent in exploration
activities between
2001 and 2022

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&prd=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?prd=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