
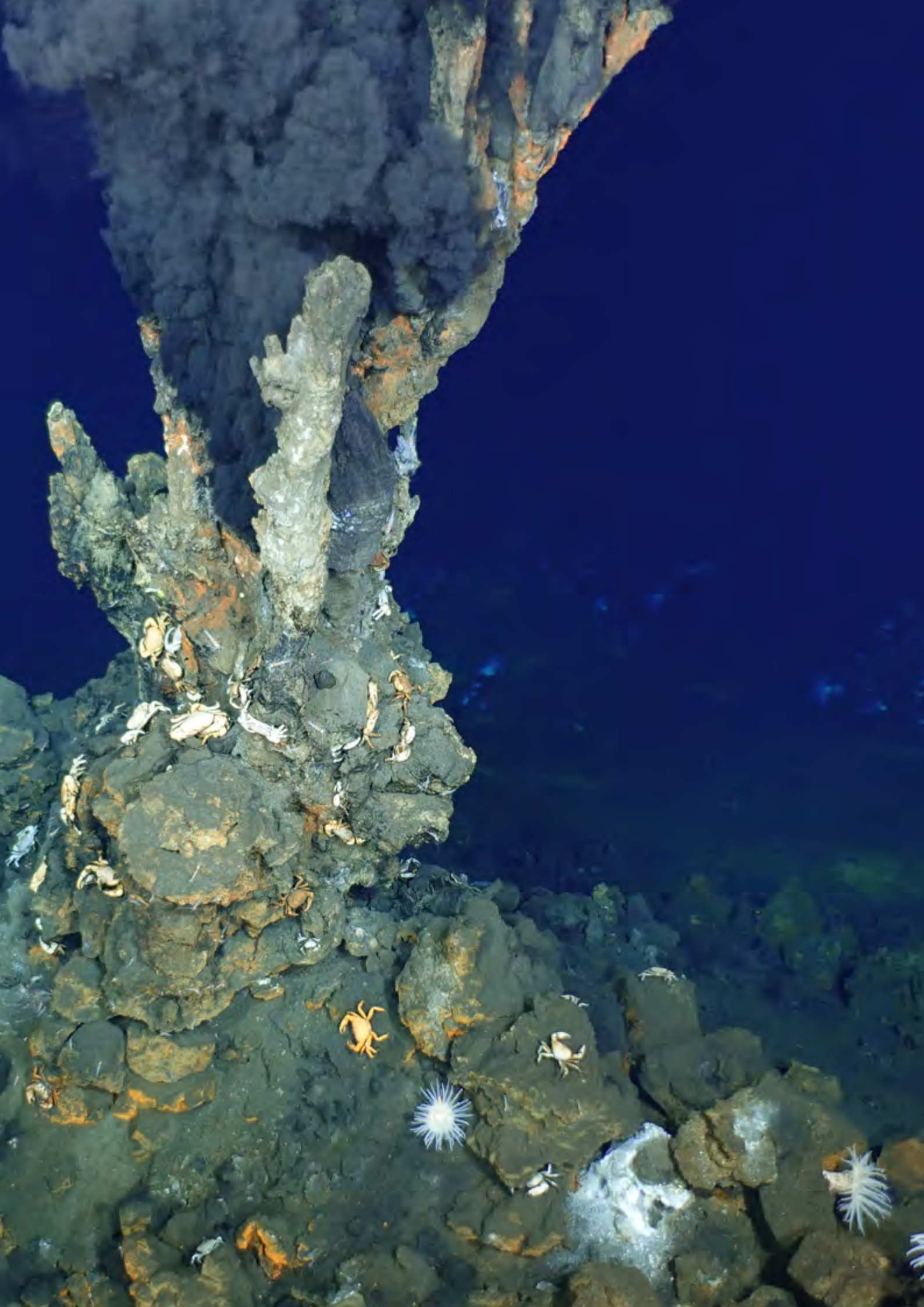


04

STATUS OF CONTRACTS FOR EXPLORATION IN THE AREA

Photo: BGR

A deep-sea hydrothermal vent field, likely a black smoker, showing a dark, rocky seafloor covered with numerous glowing white anemones. The background is a deep blue, suggesting the depth of the ocean.





The areas explored are in the CCZ, the Indian Ocean, the Mid-Atlantic Ridge and the Northwest Pacific Ocean.

Figure 11. Map of regions explored for mineral resources in the Area

CCZ

BGR (Germany)
BMJ (Jamaica)
CIIC (Cook Islands)
CMC (China)
COMRA (China)
DORD (Japan)

GSR (Belgium)
Government of Korea
Ifremer (France)
IOM (Bulgaria, Cuba, Czech Republic,
Poland, Russian Federation, Slovakia)
Marawa (Kiribati)

NORI (Nauru)
OMS (Singapore)
TOML (Tonga)
UKSRL (UK)
Yuzhmorgeologiya
(Russian Federation)

PMN



Mid-Atlantic Ridge

PMS

Government of Poland
Government of the Russian Federation
Ifremer (France)



SOUTH
PACIFIC
OCEAN

SOUTH
ATLANTIC
OCEAN

Polymetallic nodules (PMN)

19 contracts

Polymetallic sulphides (PMS)

7 contracts

Cobalt-rich ferromanganese
crusts (CFC)

4 contracts

Status of contracts for exploration in the Area

ISA has issued 30 contracts to 21 contractors for the exploration for three types of mineral resources in the Area: polymetallic nodules (PMN), polymetallic sulphides (PMS) and cobalt-rich ferromanganese crusts (CFC) (Figure 11). Contracts are granted for an initial period of 15 years (Figure 13). States sponsoring these contracts include nine developing States and six small island developing States (Cook

Islands, Jamaica, Kiribati, Nauru, Singapore and Tonga) (Figure 12). Exploration activities consist primarily of geological studies, mineral resources assessment and environmental surveys and sampling and have very limited or no environmental impact. Other activities include developing and testing mining technology and mineral processing techniques.

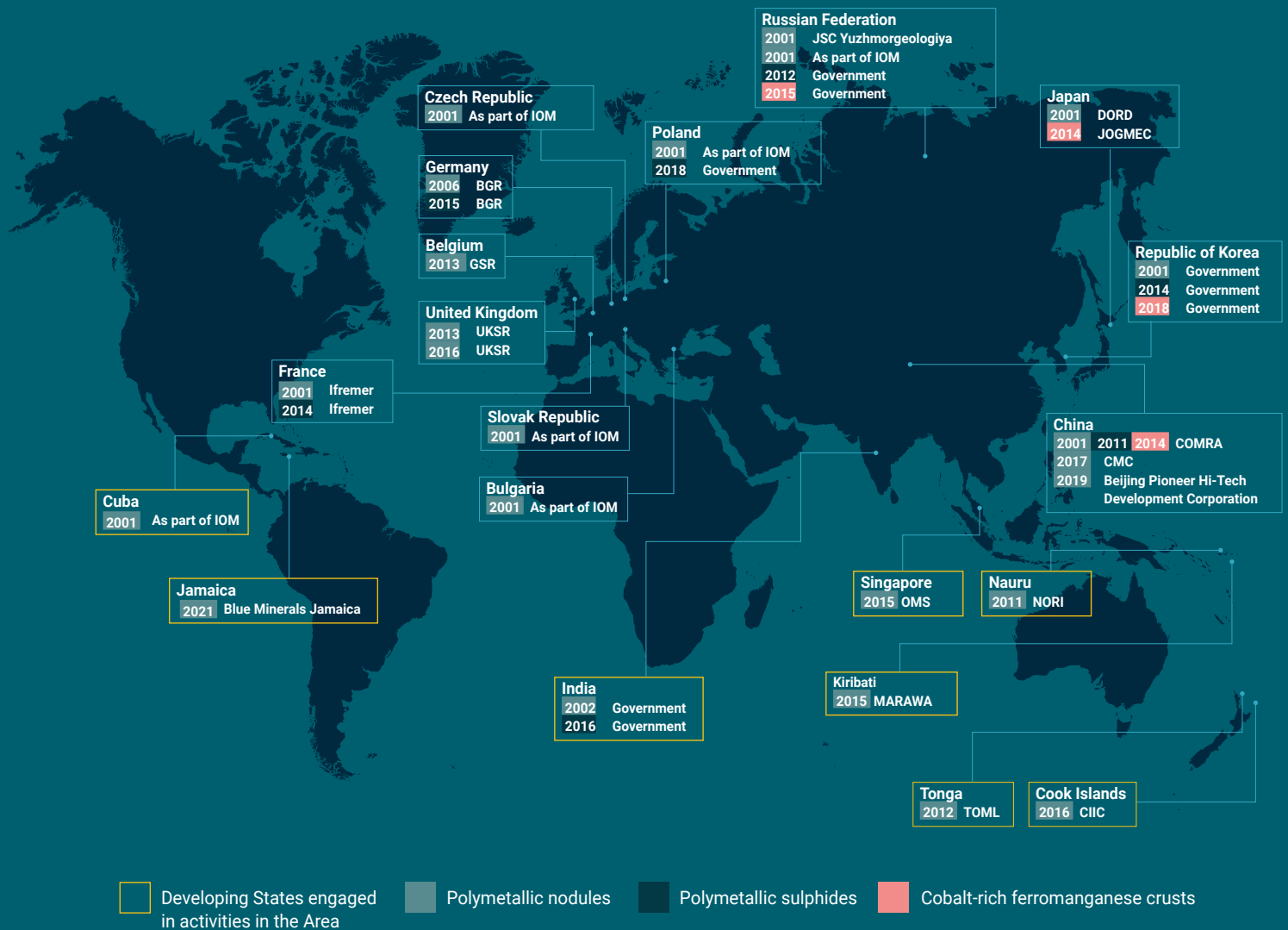


Figure 12. ISA exploration contractors and sponsoring States

20 countries
30 contracts
21 contractors

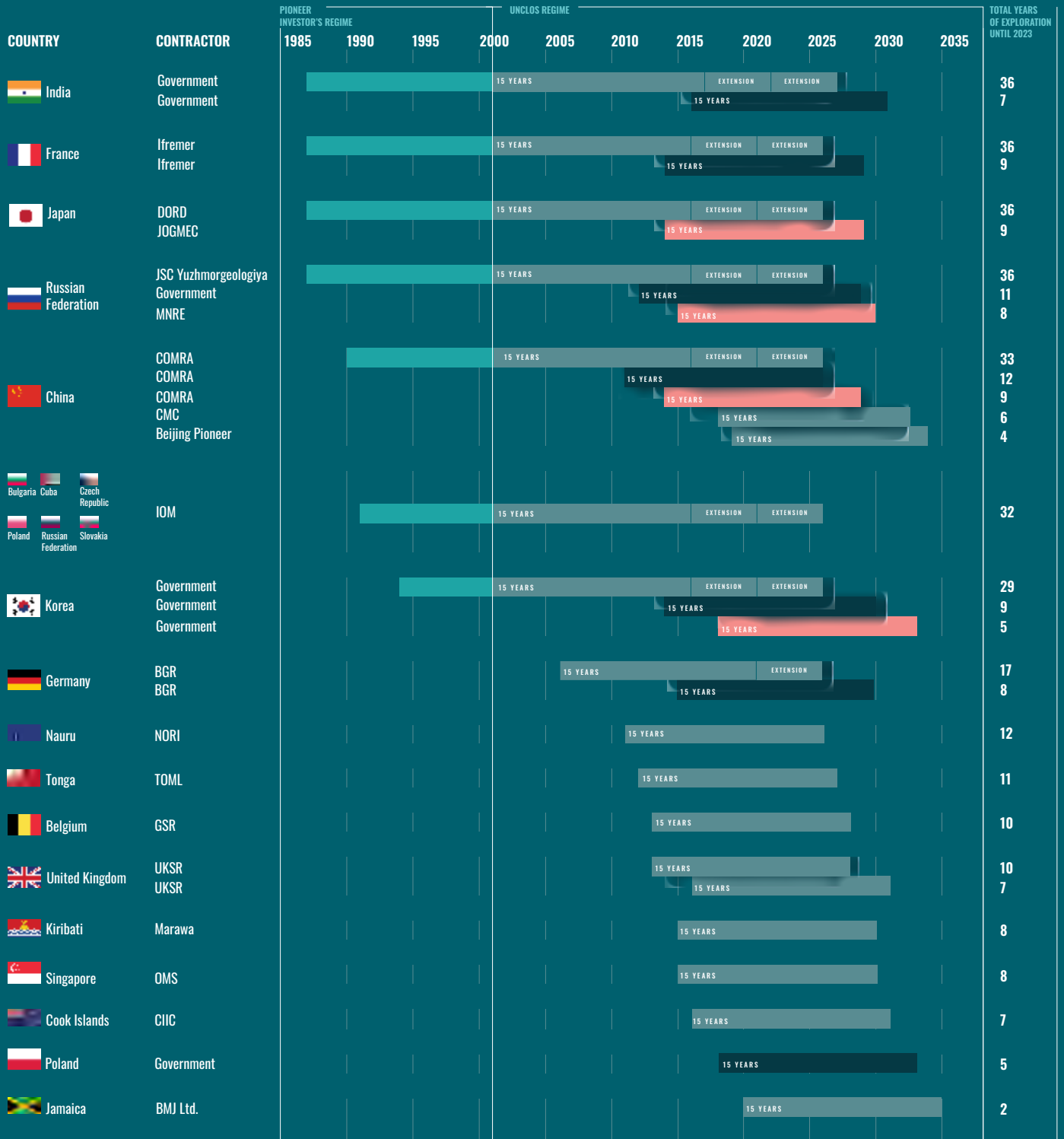


Figure 13. Exploration of the Area in figures



Photo: TMC

Compliance assurance and regulatory management

Under UNCLOS, Article 153(4), ISA is required to exercise such control over activities in the Area as is necessary for securing compliance with the relevant provisions of UNCLOS, Part XI, and the related annexes, the 1994 Agreement, the rules, regulations and procedures of ISA and approved plans of work for exploration.

The Secretariat's Compliance Assurance and Regulatory Management Unit (CARMU) was established in 2022 as the successor to the Contract Management Unit to act as the central administrative point of contact between contractors, sponsoring States and the other organs of ISA. It promotes communication, coordination and collaboration among them. The primary functions of CARMU, under High-level action 9.3.2, are to develop clear, open and cost-effective working practices and procedures to ensure that the chain of responsibility and accountability is properly managed in the development, implementation and enforcement of technical, environmental, operational, scientific and safety regulations and standards for the Area.

In 2022, the Secretariat conducted a risk-based review of CARMU's work processes to optimize workflow, roles and responsibilities within the Secretariat and relevant stakeholders, and reinforce the Secretary-General's ability to monitor contractor compliance.

CARMU is also responsible for the step-by-step development of the seabed mining register to provide for the safe custody and preservation of all documents, data and information submitted in connection with applications for approval of plans of work and contracts for exploration.

A critical outcome of this exercise will be the generation of improved visual tools on contracts undertaken in the Area that promote and increase transparency.

Monitoring of exploration activities

Annual reports

Under the exploration regulations, contractors are required to submit annual reports to the Secretary-General in which they report on the progress of exploration activities carried out against the approved plan of work for exploration.

The annual reports also provide ISA with critical data and information, including environmental baseline data, which may be used to evaluate, analyze and assess the potential environmental impacts of future exploitation activities and inform the development of rules, regulations and procedures pertaining to activities in the Area. All non-confidential information that contractors provide, including all environmental data, is available to the public in the DeepData database.

The LTC reviews and evaluates the annual reports and the exploration work carried out by contractors each year. To support the LTC, the scientific and technical staff of the Secretariat conducts a preliminary evaluation of the annual reports, highlighting areas to which the LTC should give additional attention. This includes a review of the integrity and quality of data submitted by contractors. The results of the LTC's evaluation are sent to each contractor through the Secretary-General.

Periodic reviews

The exploration regulations also require each contractor and the Secretary-General to jointly undertake a periodic review of the implementation of the plan of work for exploration at intervals of five years. The periodic review process includes the submission of a comprehensive five-year report by the contractor, evaluation of the report by the Secretariat and review by the LTC of the outcomes of the programme of activities. Among other things, the review process produces an agreement between the Secretary-General and the contractor on a programme of activities to be implemented over the next five-year period of the contract, consistent with the overall plan of work for exploration.

Four periodic reviews were completed in 2022 in respect of the contracts for exploration with the Government

of India (PMN), Nauru Ocean Resources Inc. (NORI) (PMN), Cook Islands Investment Corporation (PMN) and Tonga Offshore Mining Ltd. (PMN).

On 31 August 2022, the Ministry of Natural Resources and Environment of the Russian Federation submitted its periodic review report in respect of its contract for exploration for PMS. The report is undergoing evaluation. The periodic review process is anticipated to be completed by July 2023.

On 18 November 2022, UK Seabed Resources Ltd. submitted a draft of its second periodic review report in respect of its first contract for exploration for PMN (2013). The report is under evaluation, with an anticipated completion date of July 2023.

Supervisory inspections

During the reporting period, CARMU conducted two supervisory inspections of contractors' exploration activities in the Area for the first time.

The first inspection targeted the test campaign carried out by NORI for the development of its PMN collector system components in its contract area in the CCZ. The test campaign took place between 10 September and 15 November 2022. CARMU undertook inspection activities at various times between 23 June 2022 and 20 January 2023. The inspection activities included meetings with the contractor and three separate visits onboard the two vessels involved in the campaign. Two observations in the form of suggestions for improvement were identified in the inspection report, which is available on the ISA website.⁵⁴

As a result of the inspection, CARMU also investigated an event on board NORI's campaign vessel, the *Hidden*

Gem, on 12 October 2022, involving a temporary overflow of water during the production ramp-up sequence of the collector test. The investigation did not identify any non-compliances on the part of the contractor. Based on internal and external assessments supported by external scientific expert reviews, it concluded that the overflow did not cause serious harm to the marine environment. The investigation report is available on the ISA website.⁵⁵

The second inspection carried out in 2022 followed the completion of the first scientific research cruise by the Government of Poland under its contract for exploration for PMS on the Mid-Atlantic Ridge. The cruise took place between 13 August and 19 September 2022. It identified one observation in the form of a suggestion for improvement. The inspection report was shared with the contractor and is available on the ISA website.⁵⁶

Extension of exploration contracts

Acting on the recommendation of the LTC, during its 26th and 27th sessions, the Council approved eight applications for a five-year extension of contracts for exploration for PMN (**Figure 13**). Agreements were subsequently signed during the reporting period with seven contractors: Interoceanmetal Joint Organization (IOM), Deep Ocean Resources Development Co. Ltd. (DORD), the Federal Institute

for Geosciences and Natural Resources of the Federal Republic of Germany (BGR), the Government of India, the Government of the Republic of Korea, China Ocean Mineral Resources Research and Development Association (COMRA) and Institut français de recherche pour l'exploitation de la mer (Ifremer). The Secretariat is working closely with JSC Yuzhmoregeologiya to finalize and sign the extension agreement.

54 ISA. 2023. CARMU Inspection Report 01/2023. Contractor: Nauru Ocean Resources Inc. Doc. No: INSP/2023/NRU/001. Available at: https://www.isa.org.jm/wp-content/uploads/2023/02/ISA_inspection_report_NORI_mining_collector_system_test.pdf.

55 ISA. 2023. CARMU Investigation Report 01/2023. Contractor: Nauru Ocean Resources Inc. Doc. No: INV/2023/NRU/001/Supp.1. Available at: <https://www.isa.org.jm/wp-content/uploads/2023/05/NORI-Investigation-report-27.04.23.pdf>.

56 ISA. 2023. CARMU Inspection Report 02/2023 Contractor: Government of Poland Doc.No.: INSP/2023/POL/002, Available at: <https://www.isa.org.jm/wp-content/uploads/2023/03/ISA-Inspection-Report-Government-of-Poland-Mar2023.pdf>.

Relinquishment

In the case of contracts for exploration for PMS and CFC, contractors have an obligation to relinquish part of the original exploration area at periodic intervals. Relinquished areas revert to the Area.

These obligations are stated in Regulation 27 of the Regulations on prospecting and exploration for PMS in the Area (ISBA/16/A/12/Rev.1, Annex) and Regulation 27 of the Regulations on prospecting and exploration for CFC in the Area (ISBA/18/A/11, Annex). To date, the following relinquishments have been made (**Table 5**):

Table 5. Relinquished parts of contract areas for PMS and CFC that have returned to the Area

	Contractor	1st relinquishment of 50% of original area (due by year 8)	2nd relinquishment of 75% of original area (due by year 10)
PMS	COMRA	Completed	Completed
	Russian Federation	Completed	Completed
	Republic of Korea	Completed	Deferred to 31 Dec 2026
	Ifremer	Deferred to 18 Nov 2023	Deferred to 18 Nov 2025
	BGR	Deferred to 6 May 2024	Deferred to 6 May 2026
	Govt of India	26 Sep 2024	26 Sep 2026
	Govt of Poland	12 Feb 2026	12 Feb 2028
CFC	JOGMEC	Completed	27 Jan 2024
	COMRA	Completed	28 Apr 2024
	Russian Federation	10 Mar 2023	9 Mar 2025
	Republic of Korea	27 Mar 2026	26 Mar 2028

Informal consultation between contractors and the Secretary-General

Since 2017, the Secretary-General has held annual consultative meetings with contractors to discuss issues of common interest and share best practices in deep-sea exploration. Considering the commitment to transparency in the execution of activities in the deep-sea sector, these meetings also provide an opportunity to discuss the role of ISA in a global context and engage the support and cooperation of contractors in the programmatic work of ISA.

The 2022 annual consultation took place in Delft, the Netherlands, from 5 to 7 December 2022, with the logistical support of Allseas and the Technical University of Delft. It was attended by 64 representatives of exploration contractors.

Participants discussed the progress made by the Council in advancing the draft regulations on the exploitation of mineral resources in the Area, the implementation of ISA's data management strategy and the use of required templates to submit data to DeepData.

The meeting also addressed the most recent initiatives implemented under the ISA MSR Action Plan, the possible creation of buffer zones around sulphide occurrences as part of REMPs and ways to enhance the process for environmental impact assessments further. The next annual consultation is expected to take place in October 2023 and will be hosted by KIOST (Republic of Korea).

