



Submission by the Secretary-General of the International Seabed Authority in the context of the hearing carried out by the X Commission of the Italian Chamber of Deputies on the the draft law on “Disposizioni urgenti sulle materie prime critiche di interesse strategico”

Kingston, 9 July 2024

Honorable Deputies,

I wish to thank the Members of the X Commission of the Italian Chamber of Deputies for inviting the International Seabed Authority to provide a written statement in the context of the hearings for the draft law on “Disposizioni urgenti sulle materie prime critiche di interesse strategico”.

I am pleased to learn that – following last year meeting with Hon. Alberto Gusmeroli at Montecitorio – the Italian Parliament is now discussing the development and approval of an act on critical raw material of strategic interest.

Mandate of the Authority

As you are aware, the Authority is one of the three international organizations created under the United Nations Convention on the Law of the Sea with the specific mandate to organize and control all mineral-related activities taking place in the seabed and ocean floor beyond the limits of national jurisdiction (the Area). At the core of this responsibility is the duty to ensure the protection of the marine environment and facilitate the advancement of marine scientific research. Since its establishment in 1994, the Authority has awarded 31 contracts to 22 contractors,¹ from different countries, including 12 developing States, for the exploration of the mineral resources of the Area. Such mineral resources include:

- polymetallic nodules, covering vast areas of the ocean floor. They are more abundant in areas off the west coast of Mexico in the Pacific (known as the Clarion-Clipperton Zone), the Central Indian Ocean Basin, and the Peru basin. They are composed mainly of manganese, nickel, copper, cobalt and rare earth elements, and are therefore attracting interest to meet the growing demand for these metals.
- polymetallic sulphides, metalliferous muds contained large amounts of copper, zinc, lead, iron, silver and gold.
- cobalt-rich ferromanganese crusts, growing on hard-rock substrates of volcanic origin by the precipitation of metals dissolved in seawater in areas of seamounts, ridges, plateaus, that are attracting investment in exploration for higher cobalt percentage, platinum and rare earth elements besides nickel and manganese.

As of today, China holds most of the exploration contracts (5), followed by Russia (4), Korea (3), Japan (2), and some European countries, including the United Kingdom (2), France (2), Germany (2), Belgium (1) and Poland (1). India is also expected to become a key player in the exploration and

¹ https://www.isa.org.jm/wp-content/uploads/2024/03/ISA_Status_of_exploration_activities_Feb_2024.pdf

future exploitation of such resources, with two new requests for application for a plan of work submitted in 2024 to the Authority and currently under consideration by its organs. Exploration projects are all at different stages of development. The more advanced contractors have already completed resource assessments and have carried out several tests of mining components to test the developed technical equipment and technologies. All contractors are required to collect baseline environmental information that are necessary to determine that any exploitation activity to be carried out in the future provides robust guarantees of the protection of the marine environment.²

Commercial interest and emerging global industry sector

Mineral consumption has increased exponentially in the last years, especially in manufacturing countries like Italy, and this trend is expected to continue in the future. The transition to low-carbon societies and economies is driving much of the increased need for critical minerals.

Demand for critical minerals experienced again strong growth in 2023, with lithium demand rising by 30%, and demand for nickel, cobalt, graphite and rare earth elements from 8% to 15%.³

Clean energy applications have become the main driver of demand growth for a range of critical minerals. According to the most recent surveys, mineral demand for clean energy technologies is expected to double between today and 2030 in a scenario that reflects today's policy settings.

The recently published 2024 Global Critical Minerals Outlook underscores that in the current geopolitical scenario lithium and copper are seriously exposed to supply and volume risk. Some minerals are significantly below the minimum non-single-origin threshold of 35% identified in the EU Critical Raw Materials Act.⁴

Such trends require increasing and diversifying the sources of critical raw materials, in a way that does not impact local communities and the environment. Deep-sea minerals are typically of higher quality, in ore grade and concentration, than their terrestrial counterparts, making them more valuable in the transition to low-carbon economies. Where land-based ores are of lower quality, a wider exploitation area is required, and this can in turn extend the range of any negative impacts. The social and environmental costs of poorly regulated production would be so significant that some contribution made instead by highly-regulated deep-sea mining, based on a consistent global standard, could play an important role in reducing net negative impacts.⁵

It is in this context that the Council of the Authority, the executive body entrusted – inter alia – with the approval of plans of work and the adoption of the rules, regulations and procedures for activities in the Area, is currently negotiating, with a view to adopt, the draft regulations on the exploitation of mineral resources of the Area. Such endeavour, which started in 2017,⁶ is expected to conclude by 2025.⁷

The goal is a regime that is crafted in a way that fully takes into account the protection of the marine environment, particularly through the proper application of the precautionary approach, and yet is consistent with the social, economic, and environmental aspirations of the sustainable development of the resources of the Area. Never before has such a comprehensive regulatory regime been negotiated before any commercial activity begins and never before has an extractive industry been subject to so much scrutiny or has such a precautionary approach to development been taken.

² <https://www.isa.org.jm/protection-of-the-marine-environment/environmental-impact-assessments/>

³ 2024 Global Critical Minerals Outlook

⁴ <https://www.iea.org/reports/global-critical-minerals-outlook-2024>

⁵ <https://www.isa.org.jm/isa-and-the-2030-agenda/>

⁶ https://www.isa.org.jm/wp-content/uploads/2023/09/ISBA-28-C-INF_2.pdf

⁷ <https://www.isa.org.jm/wp-content/uploads/2023/07/2314552E.pdf>

Contribution of Italy to the work of the Authority

Italy has long played a key role in the development of such regime, as one of the most long-standing members of the Council, elected to the executive body since 1996.

From 1999, Italy is elected in Group A of the Council, which includes four of the States that during the last five years for which statistics are available, have either consumed more than 2 per cent in value terms of total world consumption or have had net imports of more than 2 per cent in value terms of total world imports of the commodities produced from the categories of minerals to be derived from the Area. In particular, Italy is currently amongst the major consumers of copper and a major net importer of cobalt, copper and nickel.⁸

Italy is participating in the negotiations of the draft regulations with a commitment to finalise them in accordance with the roadmap set out by the Council.

As one of the countries that sponsored a pioneer investor in the exploration of the Area already back in the 80s, the Italian industry has also shown interest in engaging in such activities. This has been reiterated in a recent symposium jointly organized by the Authority and the Italian Ministry of Enterprises and Made in Italy on the topic of “Blue economy and the role of critical raw materials in the development of sustainable ocean economies: challenges, opportunities and innovations”.⁹ Participating industries, that are also currently partnering at different levels with foreign industrial actors directly engaged in exploration activities, have highlighted the need for a clear regulatory framework both at international and national level.

While at a national level, this would entail the adoption of a national legislation for the sponsorship of activities in the Area, the draft law under consideration is certainly a necessary step in the direction of securing the availability of critical mineral resources.

In this respect, I welcome the creation of a Technical Committee for the critical and strategic raw materials within the Ministry of Enterprises and Made in Italy with the objective of carrying out an economic, technical and strategic monitoring of the supply of critical raw materials.

I believe that such efforts will also contribute to the work of the Italian delegation to the Authority and would bring added value to the discussions at the Council of the Authority.

Thank you.

⁸ https://www.isa.org.jm/wp-content/uploads/2024/04/ISBA_29_A_CRP-2.pdf

⁹ <https://www.isa.org.jm/news/italy-and-isa-conclude-symposium-on-the-blue-economy-and-critical-raw-materials-highlighting-the-role-of-technology-and-deep-sea-research-and-innovation-as-key-pillars-of-stewardship-of-the-area-and-i/>