Scramble for the Undersea:
Challenges ahead for deep-seabed mining and submarine cables

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1. INTRODUCTION

This Strategic Update looks at the undersea—both deep-seabed mining and submarine telecommunications cables—and key variables driving rising fierce competition in both strategic domains. It is not in vain that the undersea became a topic for discussion in this year's leading Shangri-La Dialogue held in Singapore. Neither is the fact that the second Trump administration has already issued executive orders to allow the United States to undertake deep-sea mining outside its jurisdiction.

Both domains face substantial challenges that cut across both spheres, as explored in this paper. First, there is obvious growing geopolitical competition on the common-pool nature of the deep-seabed resources and submarine cables with differing implications for each. Second, the exponential role of industry linked to all major actors involved is profound and growing. Finally, both domains are embedded in a legally ambiguous and weak institutional framework of their own which present solid glitches for the future.

In addition, the stakes are high, considering that undersea cables are now branded as 'critical infrastructure' while mineral resources from the seabed are deemed crucial for much-needed green technology. Proponents of deep-sea mining justify it due to the expected increased demand for critical minerals and metals to support low and zero carbon initiatives. Yet capacity-building, combined with the need to maintain and protect critical infrastructure will not happen from one day to the next. Less so in the case of developing and more vulnerable states.

This update further provides a snapshot of the implications of the above to the specific case of the Indian Ocean Region (IOR) with a set of recommendations at the end. Regional circumstances clearly show how the risk for smaller countries and coastal states to be taken advantage of by great and regional powers—or their private proxies—is higher than ever. The gradual increase in deep-seabed mining interests

by not only China but also India reflects great power politics at play among regional and global players. I specifically look at the case of the cobalt-rich Afanasy Nikitin Seamount that illustrates well the regional scramble for influence in this domain. This direct competition between India and China is further palpable in submarine telecommunications cables, considering that these are also at risk of hybrid threats and require growing protection and repair capabilities.

2. KEY CHALLENGES AHEAD ACROSS BOTH DOMAINS

This section unpacks the intricacies of the undersea that pertain to both deep-seabed mining resources and submarine telecommunication cables, addressing key challenges going forward that will likely shape future developments in both domains.

2.1 Growing geo-political competition on the common-pool nature of the undersea

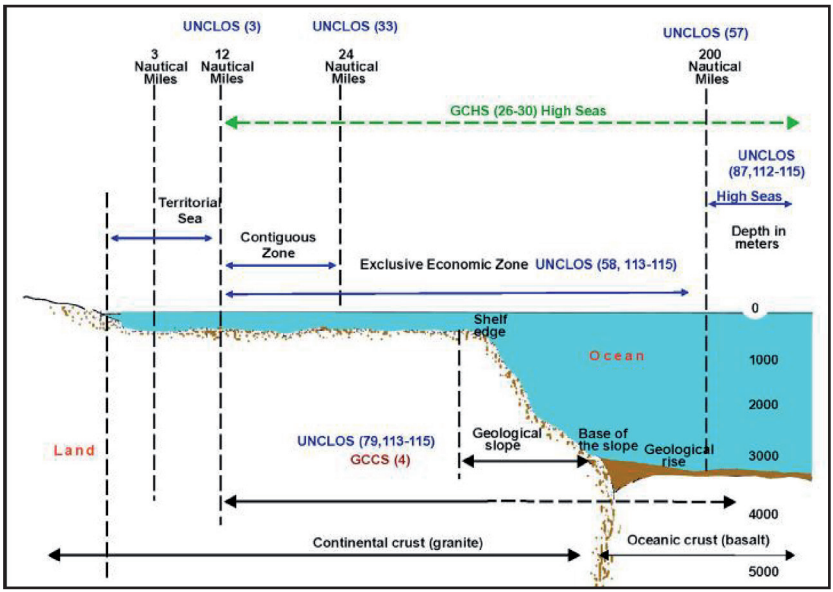
There is an ongoing scramble for the undersea taking place amidst today's leading powers, namely the traditional ones—particularly the US and Japan—and rising ones, most prominently China, Russia and South Korea. We see this playing out in terms of their access to and involvement in deep-sea mining activities, particularly outside their jurisdiction. This combined with Indo-Pacific countries' higher degree of submarine cable redundancy, full/partial ownership in some cases and engagement in protection activities, is noteworthy.

In the case of deep-seabed mining, each coastal state has control over the deep-seabed within its Exclusive Economic Zone (EEZ) under its jurisdiction. Yet, two-thirds of the deep seabed lies beyond the national jurisdiction of any state (International Seabed Authority (ISA), 2025a); this is known as 'the Area'. The International Seabed Authority (ISA) is the leading institution behind organising and controlling all mineral-resources-related activities in 'the Area'. The ISA falls under the legal umbrella of the 1982 United Nations Convention of the Law of the Sea (UNCLOS) [Part XI and Annexes III and IV] and the

1994 Agreement relating to the Implementation of Part XI of UNCLOS (ISA, 2015). In accordance with UNCLOS, all States Parties to UNCLOS are *ipso facto* ISA members. UNCLOS includes 169 Member States and the European Union (EU), remarkably excluding the US, Turkey and Iran. Having said that, successive US administrations had adopted UNCLOS as customary law despite not having ratified it.

Submarine cables are protected under three international treaties: UNCLOS, the 1884 International Convention for the Protection of Subsea Cables, and the 1958 Geneva Conventions of the Continental Shelf and High Seas. Under UNCLOS, coastal states retain sovereignty over a maritime zone contiguous to their territory known as the 'territorial sea', which measures up to twelve nautical miles. Such sovereignty extends to the seabed and subsoil below the water-column. Thus, the surveying of routes, the laying of cables, their operation, landing on territory and maintenance can only take place within the territorial sea to the extent that the coastal state explicitly consents and is in accordance with the domestic regulations in force (Karavias, 2018, p. 864).

Figure 1. Legal boundaries of the ocean

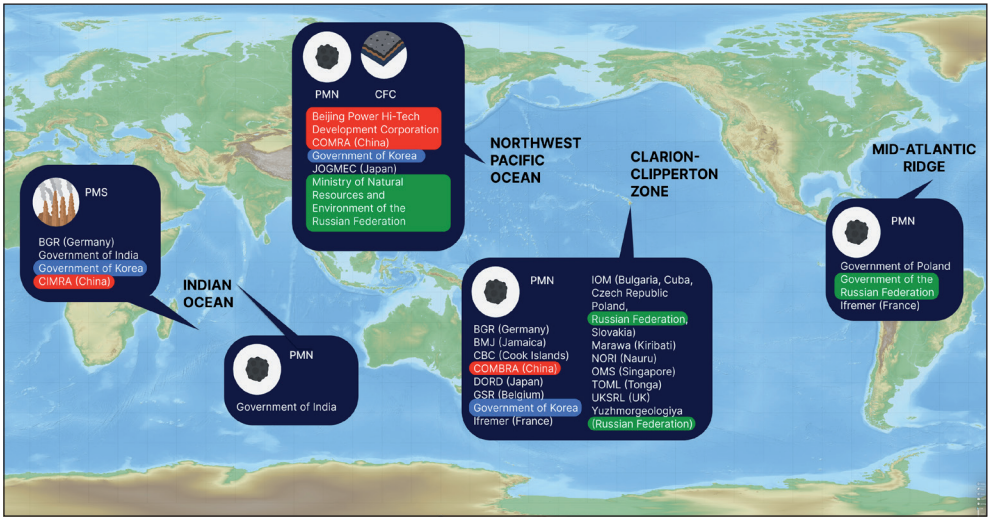


Source: ENISA, 2023

According to the existing legislation, states cannot lay a cable which terminates on the territory or enters the territorial sea of another state without the latter's consent. In contrast to deep-seabed mining, however, UNCLOS considers that the EEZ is free for the installation of subsea cables, even if some countries require authorisation. Finally, with respect to the high seas and the seabed plus subsoil beyond national jurisdiction, UNCLOS recognizes the freedom of all states to lay submarine cables subject to the rules on the continental shelf (The European Union Agency for Cybersecurity (ENISA), 2023).

Indo-Pacific players are leading the way among ISA members, in particular China, Russia, and South Korea. They are the only states to hold or have held exploration contracts for all three types of minerals; China, however, tops the list (ISA, 2024b). Beijing has already invested billions in solid deep-seabed research institutions (Khanna, 2025) while Japan has identified a vast field of manganese nodules rich in cobalt and nickel around Minami-Torishima in its southern EEZ (The Nippon Foundation, 2024). Most recently, Trump's administration signed an executive order

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



Map adapted from International Seabed Authority (ISA, 2024b)

to allow for 'commercial recovery permits' to be issued by US government bodies to allow for deep-sea mining in international waters and outside US jurisdiction (The Economist, 2025b). This has sent shockwaves amidst ISA member countries, particularly since the US has not ratified UNCLOS.

Aside from growing competition between countries, there is heightened unpredictability for those that have taken the plunge. Norway became the first country in the world to move forward with commercial-scale deep-seabed mining back in January 2024. Yet, it had to pause its plans due to opposition from environmental groups, international institutions and a left-wing party that blocked the government's budget unless the licensing round was scrapped (Davies, 2024). In the meantime, more than two dozen countries—among them Canada, New Zealand, Britain, France, Spain and Germany—have favoured a moratorium on deep-sea mining. Costa Rica and certain Pacific Island states support an outright ban on mining. Many demand more certainty about the environmental impact prior to moving forward with commercial exploitation.

In the case of submarine telecommunication cables, the fact that they are recognised as 'critical infrastructure' by states' own domestic legislation, as well as international bodies, raises the stakes. The designation of undersea cables as 'critical' implies that their security and resilience are vital to economic and societal well-being, as well as economic and national security (Kavanagh, Franken and He, 2025). Protecting the integrity of these cables has become an imperative due to their vulnerability to physical and cyber threats, such as sabotage, espionage, and natural disruptions. In fact, when considering raising defence spending across European capitals, for example, part of this budget will be channelled towards securing so-called critical infrastructure.

Today, these cables currently carry about 99% of transoceanic digital communications, including trillions of daily international financial trans-actions (Gallagher, 2022). More importantly, due to the world's increased demand for connectivity, the global cable

system has grown more than 300% since 2010 (Tomaz and Voo, 2024). As of today, the longest existing telecommunications submarine cable is the 2AFRICA, which spans 45,000 km—encircling Africa and connecting 46 landing points across 33 countries from the UK to India, around Africa and the Middle East (TeleGeography, no date). Installing and operating these systems can take several years; their average life span is approximately 25 years (Bernardino, 2024).

There is a wide disparity in access and means to protect this kind of critical infrastructure among countries across the Indo-Pacific, for example. Singapore, Australia and Japan have so-called high redundancy; they have multiple cables laid along different routes so that, should one cable fail, data can be redirected to others, minimising outages (Tomaz and Voo, 2024). Yet smaller island nation-states and littoral states, particularly developing countries, depend on one or two cable connections. This means that any failure could severely damage their digital connectivity (Bueger, 2025).

Africa stands out as a particularly vulnerable location despite its role as a critical transit hub in the global cable network. West Africa remains highly exposed, as the 2024 landslide off Ivory Coast that severed four subsea cables starkly illustrated (Franken, 2025). It is a similar case along the East African coast, particularly in Eritrea, Mozambique, and Somalia. The internet outages caused by anchor damages from the Houthi-targeted freighter *Rubymar* highlight the risks of low redundancy (*Ibid.)*.

There is a quasi-oligopoly when it comes to the submarine cable construction and repair industry. SubCom (US), Alcatel Submarine Networks (ASN) (France) and NEC (Japan) lead the market, while China's HMN Tech (formerly Huawei Marine) is now the fourth-largest submarine cable builder in the world. Yet the 'China factor' is a source of concern for those seeking to reduce their strategic dependency from Beijing. Despite holding a global market share of less than 10%, China's strategic influence is growing (Koshino, 2024). This has resulted in efforts by Australia, Japan and the

US to intervene in consortia that include Chinese partners to strategically redirect cable landings and outbid Chinese companies (Tomaz and Voo, 2024). China, for its part, has delayed granting a license to Japanese manufacturer NEC to lay a cable bound to pass through the South China Sea and land in Hong Kong and mainland China (Agarwal, 2023).

In addition, the fact that the bulk of newly commissioned telecommunications cables are run by US-based hyper-scalers Google, Meta, Microsoft and Amazon is noteworthy (Mauldin, 2024). These are not only US-based Big Tech but also leading providers of internet-based content and platforms, as well as cloud services, which is problematic. The dependency from the US across the world in technology is also concerning, including for its European partners following the current Trump administration's erratic and unpredictable behaviour.

2.2 Growing role of the private sector for all major actors involved

In both domains, the growing prevalence of industry is striking, more so in the case of submarine telecommunication cables, as already highlighted above. These are increasingly owned by private companies, though state-owned telecommunications and technology companies are still active. The submarine cable ecosystem consists not only of undersea cable owners and operators but also of integrated suppliers, suppliers without a fleet, owners of installation and repair vessels, and undersea cable maintenance companies (ENISA, 2023).

Since the early 2010s, technology companies have moved from being customers of wholesale capacity to owning transport network infrastructure. In addition, ownership has gradually shifted from companies that had mostly shared ownership to ones that can sometimes afford to go it alone; particularly so in the case of the hyper-scalers mentioned before (Mauldin, 2024).Thus, we are

witnessing the prevalence of US industry ownership combined with an increasing Chinese engagement, particularly so in cable protection.

There are growing voices that highlight the relevance of industry in the protection of submarine cables given that private and/or state-owned entities own and operate cables and have a vested interest in protecting them. Private companies also constitute the first port of call when there is a disruption in the services since they use their own measures to protect submarine cables, including burying them. The International Cable Protection Committee (ICPC) in fact combines both industry and government in its membership. It has further issued a set of recommendations and guidelines primarily directed at cable owners, operators, and suppliers for the protection of submarines cables (International Law Association, 2024).

We have a very different picture in the case of deep-seabed mining. Despite the obvious engagement of private consortiums in ongoing exploration activities, certain clauses exist requiring state sponsorship from a state party for contracts with the ISA to get signed. The aim behind this is to protect coastal states potentially affected by others' deep-sea mining activities and to avoid the risk of not-so-equitable sharing of mining royalties (ISA, 2025b). Of the existing 29 contracts, one is held by an international consortium of states (exploring for nodules), eight are held by states (exploring for a mixture of nodules, sulphides and cobalt crusts), and 15 are held by state enterprises, state institutions or state-controlled corporations (Dingwall, 2018).

The existing international regulation is legally binding for the corporations with whom the ISA has signed a contract, who *de facto* go into 'internationalised functional contracts' with the sponsoring states being responsible for due diligence (Dingwall, 2018). In fact, prior to the commencement of its programme of activities under the contract, each contractor is also required to submit to the Secretary-General a contingency plan to respond

effectively to incidents arising from its activities in the exploration area. In the broader scheme of things, however, there is still no global consensus among leading powers as to how to approach a new deep-sea mining regime in which not only states but also private companies, consortiums, and environmental civil society groups have a stake.

2.3 Legally ambiguous regimes that cannot guarantee environmental protection and equal access

One of the impending challenges ahead is the existing legal vacuum when it comes to guaranteeing both environmental protection and equal access to the future commercial exploitation of deep-seabed minerals, as well as higher submarine cables redundancy.

The regulatory quagmire

In terms of deep-sea mining, ISA officials claim that a regulatory framework which considers the interests of states, mining groups and environmentalists is a must (The Economist, 2025a). Not in vain, regulations are currently being drafted when it comes to commercial exploitation, which is welcome considering that prior to the existence of the ISA and UNCLOS, different countries had free rein in accessing the deep-ocean resources. While discrepancies exist on whether to go ahead with exploitation activities (ISA, 2015), exploration in deep-sea mining has already started on different types of resources, namely on polymetallic nodules (PMN—rich in nickel, copper, cobalt, manganese and other minerals), on polymetallic sulphides (PMS), and cobalt-rich ferromanganese crusts (CFC) (Dingwall, 2018, p. 894). As of the latest official information available from the ISA, it currently has 30 ongoing 15-year-long exploration contracts, with the first contracts being granted as far back as 2001 (ISA, 2024b).

Exploitation for commercial purposes in international waters could start from 2026 (International Union for Conservation of Nature (IUCN), 2022). Yet no ISA regulations exist yet with regards to exploitation for commercial use of deep seabed mining activities, though the ISA released *Draft Exploitation Regulations* in July 2018. Negotiations are ongoing but a consolidated text was released in February 2024 (ISA, 2024a). Pressure will rise to achieve a legal regime that caters to a commercially viable system which further includes robust environmental safeguards. Such a regime will need to govern the extraction of deep seabed minerals, including the extent of investment protection available to deep seabed miners (Dingwall, 2018). Thus, industry remains a key piece of the puzzle despite the required state-backing. They will be the sole actors able to achieve the technical know-how and provide the necessary capital to achieve a viable development of deep seabed mining in 'the Area' in the long-term (Dingwall, 2018).

Safety guard clauses are integrated in ISA contracts with the aim of guaranteeing developing countries' access to deep-seabed mining. Thus, developed states applying for exploration contracts are required to divide the total area of application into two parts of equal-estimated commercial value based on survey data and information that they must share with the ISA. The latter then allocates one area to the applicant and sets aside the other area as a 'reserved area'. This will then be available for application by developing countries or by the Enterprise, a sort of equity fund (ISA, 2024a). In addition, the ISA integrates a clause by which each contractor is required to propose a programme for the training of nationals of developing states together with a commitment to prevent, control and reduce pollution and other hazards to the marine environment while ensuring that they are financially and technically capable of undertaking such activities (ISA, 2024a).

Several states designated as '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. The criteria to categorise 'developing states' should be more explicitly articulated by the ISA to avoid

incongruent circumstances as those of Annex A vs. Annex B countries within the Kyoto Protocol under the UN Framework Convention on Climate Change (UNFCCC). For example: why are China and Singapore considered developing states versus Russia? Going forward, this unclear designation can easily lead to exploitation by both developed and stronger so-called 'developing' states against weaker developing ones.

The environmental battleground

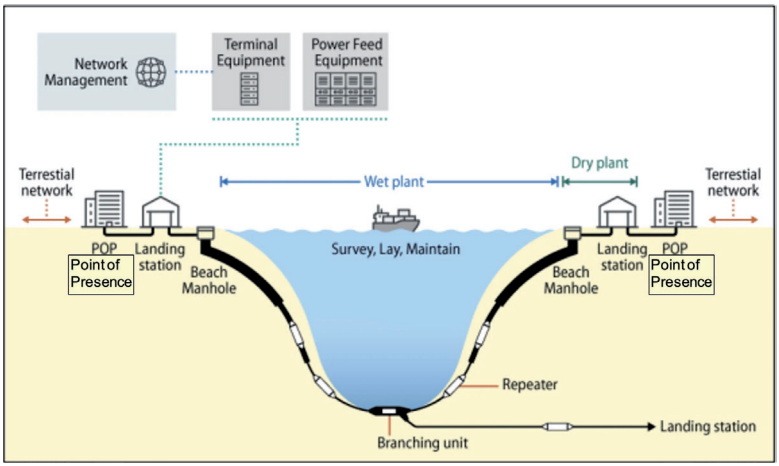
Actual deep-sea mining activities are relatively recent and the debate as to whether this could severely harm marine biodiversity and ecosystems is ongoing. Yet, the respect for environmental standards currently faces not only legal ambiguity but further provides space for counter-narratives. There are those who argue that deep-sea mining is essential to meet the demands for critical materials while others contest that there is potential for policy to prioritize a circular economy, support innovation, and thus reduce dependency on virgin materials extraction from nature (European Academies' Science Advisory Council (EASAC), 2023). Others argue that the grade of some minerals, such as copper, cobalt, nickel, and gold in the deep sea may be substantially higher than terrestrial sources of the same mineral (Roche, 2015).

Globally, environmentalists continue to hinder the issuing of new exploration and exploitation contracts unless and until rigorous and transparent impact assessments have been conducted and the effective protection of the marine environment can be ensured (IUCN, 2022; 2020). On the side, there is also growing momentum around the ratification of the Agreement on Biodiversity Beyond National Jurisdiction, known as the High Seas Treaty, adopted in 2023 with the aim to establish marine protected areas in international waters; currently, an additional 11 new countries would need to ratify to reach the necessary 60 signatures (Euronews, 2025). In any case, key players such as Australia, the US and China have signed but not ratified it, while Japan and Russia, for example, have done neither.

In terms of submarine cables, the legal waters are rather murky too. The ICPC provides a set of Government Best Practices recommendations that relate to several aspects of submarine cables, including route and landing redundancy, spatial separation, cable damage, and the installation and repair/streamlining. Certain states—such as India, Ireland, Vietnam, the US or Comoros—are currently updating their regulatory frameworks in many of these areas (Kavanagh, Franken and He, 2025). However, this requires a deeper understanding of dependencies, as well as individual countries' capacity to develop their own regulation. The International Telecommunication Union (ITU) has taken up a new initiative for cable policy under the ITU-ICPC Advisory Body on Submarine Cable Resilience, co-chaired by Portugal and Nigeria. This constitutes a valuable platform for technical cooperation, standardisation and agenda-setting to ensure resilience capacities. Yet its impact is limited by consensus rules (Franken, 2025).

Today, legal concerns have gone beyond the laying of submarine cables to include their protection and maintenance from natural and intentional damage. Submarine cable communication systems include the physical, logical and information layers. The physical layer includes terrestrial networks, landing stations, points of

Figure 3. Submarine cable communication systems



Source: Agarwal, 2023

presence—as part of the dry plant—and the actual cable that may contain one or several branching units (wet plant). The logical layer of the cable system is responsible for the management of data transmission by ensuring the routing of data to its destination while the information layer pertains to the actual data being transmitted (Agarwal, 2023). This shows how submarine cables spill over several spheres beyond the physical and are also at risk of hybrid threats.

Not in vain, the proliferation of incidents at sea affecting undersea infrastructure is pushing states to integrate subsea cable security into their national preparedness and crisis response plans. This includes establishing coordination arrangements and reviewing mechanisms for engaging with industry, including to monitor and deter malicious activity. New mechanisms to enhance situational awareness of threats to and vulnerabilities of the systems at sea, on land and in cyberspace must be put in place, yet the capacity to do so is limited to a selected few—considering that a growing number of countries are battling to achieve higher redundancy to begin with (Kavanagh, Franken and He, 2025).

3. SPECIFICS OF THE INDIAN OCEAN REGION (IOR): REGIONAL POWERS' SCRAMBLE

Deep-sea mining in the IOR: the case of the Afanasy Nikitin Seamount

The discovery of a cobalt-rich underwater mountain in the Indian Ocean—the Afanasy Nikitin Seamount—where maritime boundaries are not clearly demarcated has thrown India and China into another scramble for access to resources—different to access to ports or Sea Lanes of Communication (SLOCs) (Wijesooriya, 2024). More importantly, Sri Lanka claims that it is part of its EEZ against India's claims which adds another layer of complexity and provides space for regional powers' interference.

Cobalt is considered one of the key minerals in the production of EV batteries, smartphones and other critical technologies. India is dependent on the Democratic Republic of Congo (DRC) for its imports of this critical mineral. China, on the other hand, controls 70% of the cobalt global supply chain, having important investments in the DRC (Kuttappan, 2024). The African country is home to over 50% of the world's cobalt reserves, followed from afar by Australia (World Population Review, 2025). Allowing New Delhi to gain additional access to this resource would be strategically inconvenient for Beijing.

There is an added twist to the plot. Upon the discovery of this new source of minerals, India filed an application for approval to explore the cobalt-rich Afanasy Nikitin Seamount in January 2024. Yet the ISA's response was not as expected for New Delhi. Instead, the international body responded that the entire area covered by the Seamount was claimed by 'another country' since it was lying within the boundaries of this other country's continental shelf. While not explicitly mentioned, it is most probable that 'another country' is Sri Lanka (Kuttappan, 2024).

Any country's continental shelf usually extends up to 200 nautical miles (370km) from its shore marking what is known as its EEZ. Yet a country can apply for an extension of the limits of its continental shelf, which Colombo did officially to the UN Commission on the Limits of the Continental Shelf (CLCS) in 2009. The CLCS is yet to decide on Sri Lanka's claim. Interestingly, New Delhi did not show any opposition to this at the time but changed its position in 2022, requesting the CLCS not to 'consider and qualify' (Kuttappan, 2024). For now, an impasse prevails.

The struggle for maritime security and EEZ protection of small island-nation states: scope for submarine cables protection?

The prevalent focus in maritime security today in the IOR is on piracy, human trafficking and illicit fishing activities, as well as on the return of extra-regional powers' presence across the region (Sánchez-Cacicedo, 2024). The need to protect critical maritime infrastructure is still underappreciated but is quickly becoming a key dimension (Bueger, 2025). With ten submarine cables inter-connecting the Indian Ocean islands and linking them to the world, coordinated protection has become an imperative (UNODC, 2021).

The reality of IOR countries is that guaranteeing the protection of their own EEZs is a titanic task. Smaller island nation-states sometimes have disproportionate EEZ-to-land-area ratios, which makes protecting them even more challenging. This is the case of the Maldives or Seychelles, for example: the Maldives' EEZ equates to the size of Venezuela (Baruah, Labh and Greely, 2023).

Table 1. Countries with the largest Exclusive Economic Zones in the Indian Ocean

Country	EEZ (in square kilometers)
Australia	6,369,268
India	1,629,607
Indonesia	1,410,200
Seychelles	1,331,964
Mauritius	1,272,765
Madagascar	1,200,330
Maldives	916,011
Somalia	831,059
South Africa	691,344
Mozambique	571,452
Sri Lanka	530,945

Source: Baruah, Labh and Greely, 2023

Notwithstanding, the Indian Ocean Commission (IOC) has gone ahead and developed a submarine cable protection strategy (UNODC, 2021). In the case of littoral Southern and East African states, however, security of energy infrastructure has received more attention than that of data cables as the extraction of energy resources has moved farther offshore. The reality is one where underwater infrastructure in the region must also contend with threats emanating from instability on land and weak rule of law over maritime territories, including within their own EEZs (Vreÿ, Blaine and De Wet, 2024).

India, as the regional power in the IOR, is probably the exception to the rule enhanced by its emphasis on achieving digital sovereignty, which has made increasing the number and protection of submarine cables a national imperative. Confronted with China's increased maritime presence in the IOR, India is very conscious of the risk of cyber- and hybrid attacks to the Network Management Systems (NMS) of submarine cables (Agarwal, 2023). The Information Fusion Centre-Indian Ocean Region (IFC-IOR) 2023 Annual Report highlights hybrid and cybersecurity maritime security threats as increasingly prevalent in the IOR (Information Fusion Centre-Indian Ocean Region (IFC-IOR), 2023).

New Delhi is aware of the vulnerabilities of these systems and the high probability of being successfully disrupted, partly due to the ownership by private industry focused on cost-effectiveness as its primary objective (Agarwal, 2023). As its submarine cable infrastructure expands, India will also have to address the challenges of repair capacity, diversification of its landing stations and endurance of domestic cable connectivity (Bashfield, 2024).

4. FUTURE PROSPECTS

The undersea constitutes a next frontier, not only in terms of deep-seabed mining but also linked to access and the protection of submarine telecommunications cables. As discussed in this paper, access to both is still widely unequal, dominated by leading powers and putting smaller island-states and littoral countries' EEZs at risk.

Thus, it is an imperative to work on a consolidated and officially recognised regulatory framework that grants the necessary protection to all players involved—be they public or private, developed or developing countries, owners or users. In the case of deep-seabed mining, we face the risk of uncontrolled resource extraction without sufficient security, environmental and economic guarantees serving the needs of a powerful few—be they state- or corporate entities.

Secondly, adopting regional policies, particularly in the case of submarine telecommunications cables could be very helpful. As addressed in this paper, the challenges of increasing access and securing protection of this critical infrastructure are vast and varied across the globe. In the case of the IOR, we see how littoral African states in Southern and East Africa may not prioritise the protection of data cables over energy ones, for example. In contrast, countries like India or Singapore make of ensuring their digital sovereignty an inherent part of their future economic prosperity. Yet the dependency on data cables is currently inescapable. Thus, organisations like the Indian Ocean Rim Association (IORA)—*Information Fusion Centre-Indian Ocean*—or the IOC—its *Regional Information Fusion Centre* in Madagascar or the *Regional Centre for Operational Coordination* in Seychelles—can take on a leading role in developing regionally-adapted technical know-how and in disseminating best practices.

Finally, there is an obvious need for increased investment for developing economies not to lag too much behind across both new frontiers. The idea of consortium-building in deep-seabed mining and submarine cables must be addressed strategically with engagement from industry across Asian, European and Gulf partners to reduce the over-dependency on the US or China. There is already a portion of the Area 'reserved' for developing countries that will likely lack the capacity and financial means to develop it. Much like in the case of climate change, sovereign wealth funds could be created to invest in joint projects that combine different economies; regional development banks could support these initiatives together with connectivity initiatives such as the EU Global Gateway. ■

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