Comments/ suggestions on the

Amendment of the Offshore Areas Mineral (Development and Regulation) Act, *2002*

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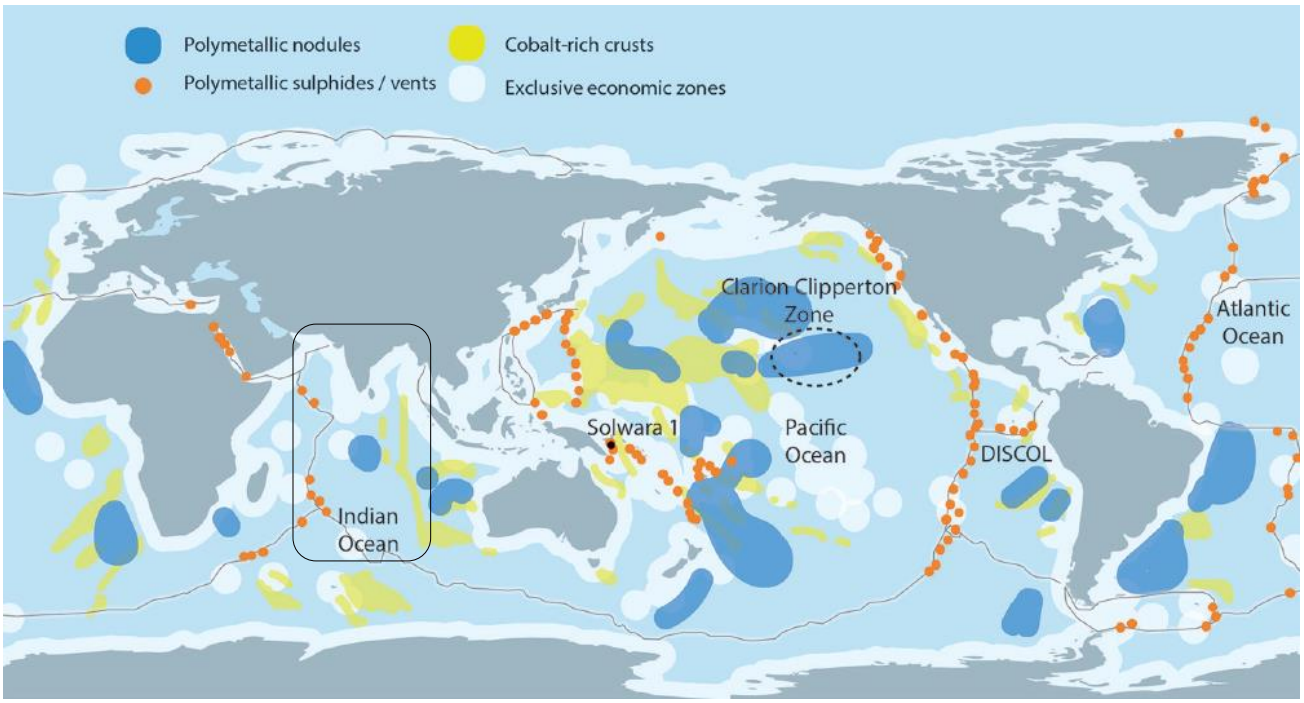
The following are my concerns about the proposed amendments in OAMDR, and I would be grateful if my comments are given due consideration. Thanks in advance.

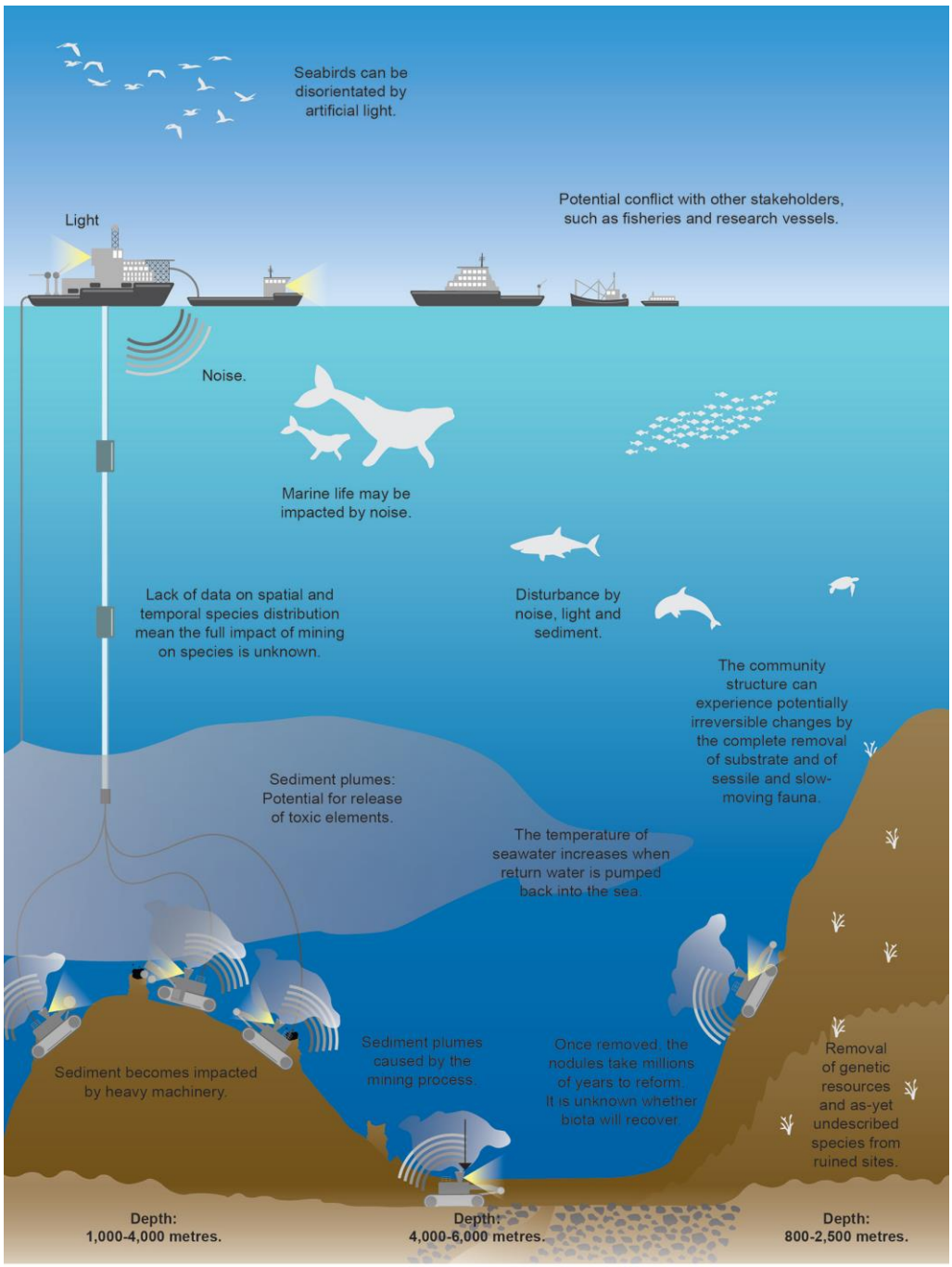
1. This amendment does away with many checks and balances that existed in the act, particularly technical oversight by the Geological Survey of India (GSI) and the Indian Bureau of Mines (IBM), thereby liberalising (and possibly opening to corruption) mining of offshore areas minerals.
2. It is very unfortunate that this amendment has come at a time when all the countries of the UN have passed a historic Ocean Treaty – The high seas treaty pledging to place 30% of the seas into protected areas by 2030 aiming to safeguard and recuperate the marine nature.
3. The OAMDR Act has a very confusing definition of "offshore areas" which includes the territorial seas and the adjoining EEZ up to 200 nm from the baseline, which may create a conflict with the Constitution of India as the territorial seas are administered



World map showing the location of the three main marine mineral deposits: polymetallic nodules (blue); polymetallic or seafloor massive sulfides SMS (orange); and cobalt-rich ferromanganese crusts (yellow). Redrawn from various sources by Miller et al 2018.

by the maritime states. There is no amendment to this clause to bring clarity, and besides, the scope of the act has not been extended to the ABNJ to exercise control over Indian activity in ABNJ. It is fairly well established that the deepsea minerals available in the vicinity of India are outside its EEZ (see map).

4. Hence, there is some doubt whether deepsea minerals are the objective of this amendment. The target may be sea sand or placer deposits.
5. An international study by a news agency (https://time.com/6224508/deep-sea-mining-threat-ban/) says …. Deep-sea mining would wreak enormous damage. Massive machines digging, dredging, and vacuuming up the ocean floor would create huge sediment plumes deep in the ocean that will drift on currents, smothering marine life, including species not yet discovered. Surface-level processing ships would dump tailings—the waste materials left after the target mineral is extracted



from ore—back into the ocean, killing plant and animal life as it drifts through the water column, releasing acidic and toxic sediment hazardous to fish and those who consume it. This process would disrupt the ocean's vast natural carbon capture and sequestration system, and release greenhouse gas from the seabed floor, accelerating climate change. See a graphic on the potential impacts of deepsea mining (Miller et al., 2018).

6. It is also well known that India does not have the technical capability to mine minerals from the deepsea. Therefore, it would have to depend on the expertise of a few international or multinational companies. But the current amendments leave this requirement unsaid. This means that multinational corporates would be gaining a backdoor entry into this sector through Indian-owned licenses.
7. The licensing system is amended to a composite license encompassing exploration and production, whereas throughout the world, mostly explorative licenses are granted (see below).

Exploration contract holder	Sponsor	Location	Resource	Contract start date	Contract end date
China Minmetals Corporation	Government of China	CCZ	Polymetallic nodules	May 12, 2017	May 11, 2032
Cook Islands Investment Corporation	Government of Cook Islands	CCZ	Polymetallic nodules	July 15, 2016	July 14, 2031
UK Seabed Resources Ltd.	Government of United Kingdom of Great Britain and Northern Ireland	CCZ II	Polymetallic nodules	March 29, 2016	March 28, 2021
		CCZ I	Polymetallic nodules	February 8, 2013	February 7, 2028
Ocean Mineral Singapore Pte Ltd.	Singapore company majority owned by Keppel Corporation. Minority shareholders: Seabed Resources Ltd. (Lockheed Martin UK Holdings Ltd.); and Singapore-based Lion City Capital Partners Pte. Ltd.	CCZ	Polymetallic nodules	January 22, 2015	January 21, 2030
G-Tec Sea Minerals Resources NV	Government of Belgium	CCZ	Polymetallic nodules	January 14, 2013	January 13, 2028
Marawa Research and Exploration Ltd.	State enterprise of the Republic of Kiribati	CCZ	Polymetallic nodules	January 19, 2015	January 18, 2030
Tonga Offshore Mining Limited	Government of Tonga. Subsidiary of Nautilus Minerals Inc.	CCZ	Polymetallic nodules	January 11, 2012	January 10, 2027
Nauru Ocean Resources Inc.	Government of Nauru	CCZ	Polymetallic nodules	July 22, 2011	July 21, 2026
Federal Institute for Geosciences and Natural Resources of Germany	Government of Germany	CCZ	Polymetallic nodules	July 19, 2006	July 18, 2021
Government of India	n/a	Indian Ocean	Polymetallic nodules	March 25, 2002	March 24, 2017
Institut français de recherche pour l'exploitation de la mer (IFREMER)	Government of France	CCZ	Polymetallic nodules	June 20, 2001	June 19, 2016
China Ocean Mineral Resources Research and Development Association	Government of China	CCZ	Polymetallic nodules	May 22, 2001	May 21, 2016
Government of the Republic of Korea	n/a	CCZ	Polymetallic nodules	April 27, 2001	April 26, 2016
Yuzhmorgeologiya	Russian Federation	CCZ	Polymetallic nodules	March 29, 2001	March 28, 2016
Interoceanmetal Joint Organization	Governments of Bulgaria, Cuba, Czech Republic, Poland, Russian Federation and Slovakia	CCZ	Polymetallic nodules	March 29, 2001	March 28, 2016
Government of India		Central Indian Ocean	SMS	September 26, 2016	September 5, 2031
Institut français de recherche pour l'exploitation de la mer	Government of France	Mid-Atlantic Ridge	SMS	November 18, 2014	November 17, 2029
Government of the Republic of Korea		Central Indian Ridge	SMS	June 24, 2014	June 24, 2029
Government of the Russian Federation		Mid-Atlantic Ridge	SMS	October 29, 2012	October 28, 2027

An incomplete extract of mineral exploration contracts in the Area approved by the ISA (International Seabed Mining Authority) as of June 2017 including the start and end dates for these contracts (Miller et al., 2018)

8. Although the OAMDR Act amendment has the objective of increasing transparency, the clauses added do not identify the areas which are available for bidding. The conflict of interest with other users of the same area, particularly fisheries, is glaring. This can potentially affect the livelihoods of nearly a million Indian fishers.

9. The amendment reducing the size of the blocks from 45 minutes to one minute opens the sector to more licenses, and therefore, more conflicts among users.
10. It is funny that for a lease holding requiring a capital expenditure of millions of dollars, any violations of the conditions can be settled with the government for a penalty of a measly 5 lakhs.
11. The above contradictions make one suspect that all these amendments have been drafted with ulterior motives favouring corporate multinational investment groups who practice exploit-and-run policy. These amendments are certainly not in the best interests of our country and its people.

The Request

- It is requested that these amendments to the OAMDR are frozen immediately.
- The Government should redraft the OAMDR based on the current understanding of the global situation using scientific experts in the sector.
- Seldom do we have an opportunity to stop an environmental crisis before it begins. This is one of those opportunities. The mining industry is on the brink of excavating the deep ocean, creating a new environmental disaster with irreversible consequences for our ocean and climate.
- Currently, there is no commercial deepsea mining activity taking place in the world. Several countries have granted exploration or research licenses, but no commercial operations have been established yet.
- There is no provision for assessing the harmful effects of deepsea mining in the proposed amendments. Please see below Australia's emphasis on protecting and conserving their marine environment (see box below).

In Australia, deep-sea mining is regulated under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Under this act, any proposed deep-sea mining activities in Australia's exclusive economic zone (EEZ) or on the continental shelf require approval from the Australian government.

The EPBC Act requires that any proposed deep-sea mining activity be subject to a rigorous environmental impact assessment process to determine the potential environmental risks and impacts associated with the activity. This process involves assessing the potential impacts on marine biodiversity, water quality, and other environmental factors.

Additionally, the Australian government has implemented a moratorium on seabed mining in the Great Barrier Reef Marine Park and the Coral Sea Commonwealth Marine Reserve, which are both environmentally sensitive areas.

The Australian government has also established the Joint Authority for the Regulation of Offshore Petroleum and Greenhouse Gas Storage (JAROG) to oversee the regulation of offshore petroleum activities, including deep-sea mining, in Australia's EEZ and on the continental shelf. JAROG is responsible for granting exploration and production permits and ensuring that companies comply with environmental regulations and safety standards.

Overall, the rules governing deep-sea mining in Australia prioritize environmental protection and ensure that any proposed activities are subject to strict environmental and safety standards.