Environmental Effects of Deep Sea Mining

Terms of reference for WODA working group

1. Introduction

There is growing interest in the mineral deposits of the deep sea [1]. This is largely due to depleting terrestrial deposits for metals such as copper, nickel, aluminium, manganese, zinc, lithium and cobalt, coupled with rising demand for these metals to produce high-tech applications such as smartphones and green technologies such as wind turbines, solar panels and electric storage batteries.

Shallow sea mining already occurs in a number of locations around the world. These operations are targeting different resources, e.g. gold, diamonds (Namibia), iron ore (New Zealand) or sand and aggregates (Denmark, Netherlands and the UK). However, recent advancements in subsea technology have enabled greater access to seabed resources, and consequently Deep Sea Mining (DSM) is becoming increasingly feasible. Deep Sea Mining therefore relates to operations that occur below the continental shelf margins, approximately 200 metres water depth or more, and does not relate to the extraction of bulk sand and gravel. The lower limit of DSM is constrained only by the depth tolerances of subsea technology.

The marine dredging community are a natural choice of partner for the extraction of deep sea minerals, given the community's experience with extracting bulk materials from the seabed. However DSM presents new challenges, in terms of the deposit types and extraction technology, the environments within which it occurs, and how its impacts can be managed. Coupled to this, the scientific evidence and associated permitting regime is evolving rapidly around the world, especially in international waters beyond national jurisdictions.

Following a discussion with the CEDA Board, it has been agreed to convene an Environmental Effects of Deep Sea Mining Working Group to promote the use of robust scientific evidence on environmental effects from the dredging community, within policy and regulation of Deep Sea Mining.

2. Aims of the Environmental Effects of DSM working group

The aim of the Working Group is to promote the use of robust scientific evidence on environmental effects within policy and regulation of the Deep Sea Mining community. It is a technical forum for dredging community specialists with an interest in environmental effects, and is not seeking to advocate the development of the sector or particular organisational interests, or address other aspects of deep sea mining.

The Working Group shall present the joint views of the CEDA, EADA, and WEDA members, through WODA.

3. Terms of reference for Environmental Effects of DSM working group

The working group on the Environmental Effects of DSM will have the following terms of reference:

1. To ensure policy formulation by bodies such as the International Seabed Authority (ISA), OSPAR etc. is informed by a realistic understanding of the nature of the environmental effects of deep sea mining activities, and what is practically achievable.

[1] https://www.iucn.org/resources/issues-briefs/deep-sea-mining

2. To coordinate and respond to requests for dredging community technical input to consultation on technical guidance documents on environmental effects of DSM, issued by the ISA, OSPAR etc.
3. To act as a channel for scientific evidence on environmental effects collected by the dredging community back into relevant national and international scientific fora on deep sea mining.
4. All formal technical responses of the Working Group on environmental effects will be submitted to the ISA via WODA. Inputs to OSPAR will be by CEDA.
5. A report will be made of the 'state of the art' relating to environmental effects that have been discussed and agreed by the WG.
6. The working group is expected to have a duration of 3-years, to be reviewed.

4. Membership of DSM working group on environmental effects

CEDA, EADA and WEDA shall propose approximately 4 members each of the WODA Working Group. Members shall agree to provide independent evidence-led input, bearing in mind that the aims of the Group does not include advocacy of DSM.

The chair and secretary of the working group shall be elected by the whole Working Group. Other operating procedures shall be consistent with those adopted by other dredging association Working Groups.

The working group can include members with another formal national role on DSM, however the focus of this group is confined to providing technical input on environmental effects from the dredging community.

All working group members undertake to provide their inputs free of charge, and will endeavour to all requests for input within the shortest possible timeframe.

END.

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