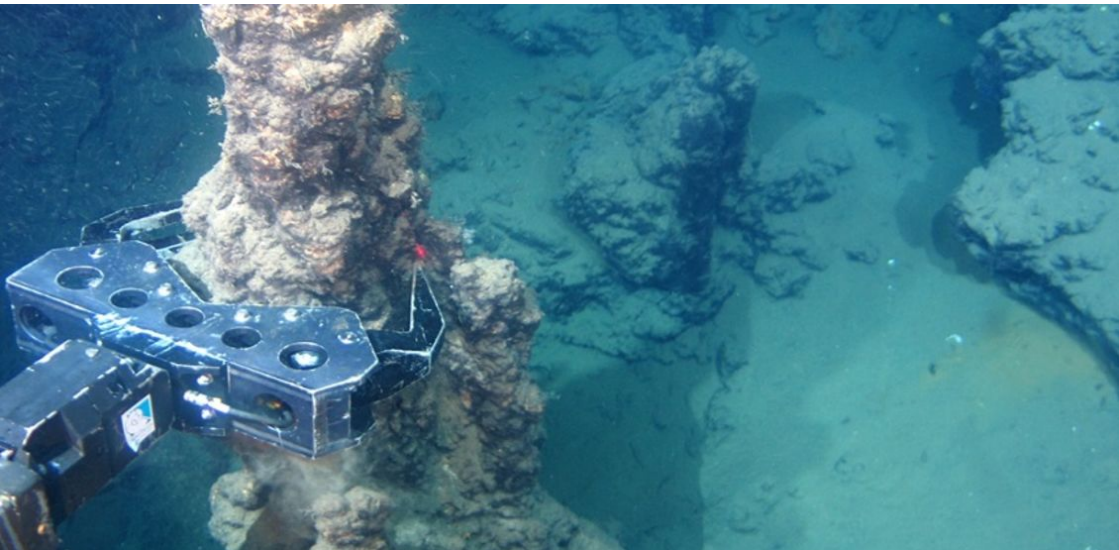




Get started in Responsible Research and Innovation

DEEP SEA MINING

An Opportunity To Do Things Right?



MARINA Project

7th May 2018 | Mobilisation and Mutual Learning Workshop | International



The European Centre
for Information on Marine
Science and Technology

DEEP SEA MINING

Many countries are waiting for the decision of the United Nations on the extension of their jurisdiction beyond their Exclusive Economic Zone. Small countries like Portugal could become the landlord of a seabed almost as large as the entire European Union dry land. With that comes an ocean of opportunities in terms of resources as well as marine research and innovation. However, this solution to the scarcity of raw materials on land can also impact a not so well-known environment and its unique biodiversity. Is the solution to our lack of materials at the bottom of the sea or in our homes? What can be done differently in terms of consumption behaviors, design and waste management? The debate is open in society. Only one thing is granted: this is a unique opportunity to do things right. Can DSM avoid the environmental mistakes of mining on land?

23 stakeholders from different groups expressed their opinion in this workshop:

Citizens



Industry



Policymakers



Researchers



NGOs



RESPONSIBLE RESEARCH AND INNOVATION

Responsible Research and Innovation (RRI) engages and brings together all stakeholders, creates dialogue and facilitates knowledge-sharing. It ensures the sustainable use of natural resources and makes sure that the needs of citizens and society are integrated into research and innovation. Participants put forth proposals of collective solutions based on the six RRI dimensions:



WORKSHOP OUTCOMES

The participants defined three main sets of actions. Each set calls for the involvement of all the stakeholder groups, highlighting the need for collaboration between those with contrasting agendas in order to co-create solutions.

Each action was linked to various RRI dimensions. **Governance** and **Ethics** were the most important dimensions in this workshop, reflecting the fact that most stakeholders want the DSM decision-making to follow a precautionary approach.

Learn and
inform

Train and
convince

Communicate
and manage

Stakeholder Groups



RRI Dimensions



Create an open access platform with DSM related data.

Work together (science, law, economics) to provide policy advice on DSM.

Increase knowledge of the impact of plumes produced by DSM exploitation.

Increase knowledge of deep sea mineral occurrences and their economic value.

Increase awareness of the use of raw materials and their importance in our society.

Bring in scientists from non-conventional areas to DSM research.

Oblige companies by contract to spend 10% of their investment to investigate engineering design that would mitigate DSM impacts during operations.

Question why we think we need DSM in the first place.

Make environmental impact assessments mandatory for DSM in the EU.

Restore ecosystems we disturb.

Fund small scale pilot cases to evaluate impacts.

The MARINA Project is funded by the EU Programme Horizon 2020. 14 partners across Europe are joining forces for a period of 36 months to bring together stakeholders around marine issues and societal challenges and propose RRI driven roadmaps of actions to respond to them.

45 workshops on marine issues in the European Union



-  Marine biotechnologies
-  Climate change
-  Deep-sea mining
-  Tourism and coastal cities
-  Renewable energy
-  Fishing and aquaculture
-  Sea transportation
-  Pollution caused by human, land and sea pressures

Do you want to learn more ? Register now on www.marinaproject.eu



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