Deep Ocean Stewardship Initiative (DOSI) progress in relation to deep-sea mining

Maria Baker¹, Verena Tunnicliffe², Lisa Levin³, Kristina Gjerde⁴

¹University of Southampton ²University of Victoria, Canada ³Scripps Institution of Oceanography, USA ⁴International Union for the Conservation of Nature (IUCN), USA; kgjerde@eip.com.pl

Deep-sea mining is rapidly approaching the test-mining phase to prepare for commercial mining in multiple oceans, both in areas within and beyond national jurisdiction. The first test-mining operations are likely to focus on seafloor massive sulfides found at active and inactive hydrothermal vents within national jurisdictions - possibly in the coming months. Beyond national jurisdictions, the International Seabed Authority (ISA) is developing the regulations to oversee exploitation of polymetallic nodules, massive sulfides and cobalt crusts. The DOSI minerals working group has, over the last 3 years, made formal submissions on the regulatory framework, on the draft exploitation regulations, on the article 154 review of ISA and on the initial environmental regulations. In advance of both test and commercial mining, we urgently need to identify and develop comprehensive, ecosystem-based management practices for deep-ocean environments subject to mineral extraction. Transparent criteria for deep-sea institutional and corporate social responsibility also need to be established. Proactive development of management practices, frameworks and policy prior to the onset of mining will facilitate some degree of protection and preservation of the marine environment, whilst enabling the use of seabed mineral resources. The DOSI minerals working group constitutes a broad spectrum of scientific, industry, legal and policy expertise. We provide expert opinion, both in collated and individual response forms, on deep-sea mining related concerns to ISA and national bodies. Our publications and workshops on key concepts raise awareness and provide scientific updates on ecosystems targeted for mining. See www.dosi-project.org minerals working group and join us to further this work.