Submission to UN Ocean Conference 2022 for Interactive Dialogue: Managing, protecting, conserving and restoring marine and coastal ecosystems

Submitted by: Dr. Maria Baker, Co-Lead of the Deep-Ocean Stewardship Initiative, University of Southampton.

20th June 2022

The Deep-Ocean Stewardship Initiative (DOSI) is a growing network of more than 2500 deep-ocean stakeholders from different disciplines and from over 100 countries. DOSI welcomes this opportunity to provide a statement on this Interactive Dialogue. The concept paper covers important topics that are not confined to the shallows, but also relate to the deep ocean, which contains over 95% of the living space for life on Earth. Policy responses connected to this dialogue do not yet do enough to account for this vast, interconnected environment, which provides nutrient recycling, carbon storage, food, hydrocarbon and mineral resources and blue biotechnology through genetic biodiversity - all of which have growing economic significance.

Societal perception and scientific knowledge of the deep ocean are limited and, today, a change is required to manage, protect and conserve it. We call upon delegates here to aid this mission. This is a crucial time for deep-ocean biodiversity and environmental policy, with urgent international treaty negotiations and regulation development for areas beyond national jurisdiction and ongoing state decision-making about resource extraction within EEZs. Deep-ocean biodiversity faces clear and increasing threats from climate change, mining, fishing, cable-laying, contaminants and pollution from land and at sea, and potentially from open ocean-based climate interventions, all of which may lead to erosion of ecosystem functions. To help ensure deep-ocean life

can keep supporting a liveable planet, DOSI is forming new partnerships, including for capacity and technology transfer, and informing policy solutions so that they may be grounded in the latest scientific findings.

Inclusive networks play a crucial role in enabling collaboration between actors, knowledge exchange, and advancing best-practices; they are particularly critical in arenas like the deep ocean, where expertise and resources are limited. The stocktaking role of collation, translation and sharing of scientific data is one of the main functions of DOSI, and we continue to successfully build open and communicative relations with policy makers and other stakeholders to facilitate knowledge transfer in order to contribute to SDG14.

Through existing and new partnerships across sectors and topics, including actions of the UN Decade for Ocean Science and Sustainable Development such as Challenger 150 and the Deep-Ocean Observing Strategy, the deep-ocean science community, including DOSI, is focused on development of collaborative and standardised scientific research priorities that will inform deep-ocean management planning for conservation and sustainability in response to SDG14. Good progress is being made in areas of scientific endeavours and in knowledge transfer. More work is needed to enhance deep-ocean literacy and to engage blue businesses in stewardship of the deep ocean.

Regarding our voluntary commitments made in 2017 (*Science for Deep Ocean Sustainability*), DOSI continues to tackle the most pressing challenges facing the deep ocean, actively driving the ocean policy agenda by ensuring that the latest deep-ocean scientific knowledge is understood and considered during international debates and processes. Given that sampling the deep ocean is challenging and costly, measures to facilitate open access to samples and data are critical and numerous collaborative initiatives are already in place to enable their availability.

Despite the highly connected nature of the entire ocean (e.g. vertical carbon flux and sequestration, migration and horizontal migratory corridors and ocean circulation), integrated management of the deep ocean is so far lacking. There is clear evidence that the deep ocean is directly connected to the coastline and neglecting this realm is perilous. DOSI addresses challenges of cross-sectoral management and works to ensure collaborative approaches to deep-ocean policy, including consideration of a nexus with climate change. DOSI also contributes critical deep-ocean science to global assessments by the IPCC, IPBES and the World Ocean Assessment.

The work and associated challenges ahead can seem overwhelming, not least in the deep ocean where transformative change is needed in the way we manage its bounty. But by crafting solutions that acknowledge the ties between the deep and shallow ocean as well as human lives, we can make real progress toward sustainable development. DOSI calls upon delegates to work with us to ensure that the latest deep-ocean scientific knowledge is considered during international and national ocean policy processes, and at all levels of management, because we cannot solve the ocean's most urgent challenges without accounting for its largest part.

Yours sincerely,

Dr. Maria Baker

Deep-Ocean Stewardship Initiative

University of Southampton

European Way

Southampton

SO14 3ZH

UK

Email: mcb3@soton.ac.uk