



The G7 Future of the Seas and Oceans Initiative Working Group Meeting, 2021



Virtual Sessions

SUMMARY REPORT

The G7 Future of the Seas and Oceans Initiative (FSOI) Working Group met virtually under the UK Presidency on 28 - 30 June 2021. The meeting focused on reviewing the ocean actions and outcomes from the UK G7 Presidency Summit held from 11-13 June, reviewing G7 member activities and plans, and agreeing on activities for joint action by the G7 FSOI.

Outcomes of the UK G7 Presidency Summit

Chair Tarquin Dorrington (Department of Environment Food and Rural Affairs, Defra, UK) provided a presentation on the [G7 Ocean Decade Navigation Plan](#) adopted by the [G7 Climate and Environment Ministers](#), and endorsed in the [Leaders' Nature Compact](#) explaining its development and its relationship to the G7 FSOI work plan. The UK Presidency Ocean Action comprised 3 parts:

- [The Climate and Environment Ministerial Communiqué](#) text including recognition of the G7 commitment to support [The Global Ocean Alliance 30by30 Initiative](#) and the conclusion of the negotiation of a new and ambitious international legally binding instrument under the UN Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine *Biological diversity of areas Beyond National Jurisdiction* (BBNJ), support for the UN Ocean Decade, Marine Litter and the Global Ghost Gear Initiative (GGGI), and the Ocean Risk and Resilience Action Alliance (ORRAA).
- [The G7 Ocean Decade Navigation Plan](#), including a statement of leadership in support of the UN Ocean Decade, and identifying 3 spotlight activities to be taken forward in the G7 FSOI work plan: Global Ocean Indicators Framework, the Digital Twin Ocean Capability and Net Zero Oceanographic Capability.
- The G7 FSOI summary work plan.

Andrew Stewart (Department of Fisheries and Oceans, Canada) provided an overview of the Canadian proposal to convene a workshop in Sept/Oct 2021 with G7 scientific and policy experts to discuss scaling up knowledge and monitoring of the North Atlantic biological carbon pump and key Arctic gateways to further targeted and effective ocean action enshrined in the [G7 Leaders' Nature Compact](#).

Activities for Joint Action by the G7 FSOI

The G7 FSOI activities focus primarily on resource mobilization, commitments to implementing the ocean observing system, monitoring those commitments and

aligning them across the G7, linking science to policy, and translating 'knowledge to action'. The G7 FSOI will also work to craft the science-to-policy narrative with a G7 label that can be used by nations to mobilize resources. The G7 FSOI will consider developing policy briefs as part of the G7 Ocean Decade Navigation Plan to explicitly describe the actions (e.g., observations, resources, coordination) needed to implement priority Ocean Decade Programmes.

The Working Group approved the following activities:

Resource Strategy Groups that bring together the G7 FSOI government agency and ministry representatives and the observing network mission teams or GOOS governance groups to identify joint priorities for coordinated investment and implementation.

BGC-Argo Array – Continued support for the implementation of a Global Biogeochemical Argo Array by 2030 is a G7 FSOI priority; maintaining a watch on implementing commitments, evolving the system for global coverage and the full suite of sensors, and strengthening the global partnerships required to complete and sustain the array.

Governance, Funding and Coordination Structures – Strengthening the sustained ocean observing system is central to the goals of the FSOI. The G7 FSOI will bring together experts, funders and policy makers to address the complex issues of observing system governance, funding and coordination required for sustained ocean observations in a way that is tractable with a smaller group of nations while consulting and engaging the broader ocean observing community in consultation with GOOS, drawing on international best practices through e.g. the Group of Senior Officials for Global Research Infrastructure (GSO GRI) and the GOOS Governance Task Team.

Net Zero Ocean Capabilities – Recognizing the need to incrementally move towards net zero carbon emissions, the G7 FSOI will bring together representatives and experts to focus on ways to optimize the observing system to deliver maximum benefit (information value) for investment, and horizon scanning for science needs and technological developments such as autonomous capabilities, ship and fuel technologies and data infrastructures.

Digital Twin Ocean – The G7 FSOI will bring together representatives and experts to evaluate the status of and needs for underpinning infrastructure and tools to support the realisation of Digital Twin Ocean capabilities in collaboration with and in support of the UN Ocean Decade Digital Twins of the Ocean (DITTO) programme.

Scientific and technical support to GOOS Expert Panels or groups, through the G7 FSOI Coordination Centre, to accelerate the development of observing network plans for G7 priorities and to facilitate the transition of these strategic plans into pilot networks or international mission teams.

Global Ocean Indicators Framework – Support the GOOS Expert Panels (lead: GOOS Physics and Climate Panel) to develop a global ocean monitoring

indicator framework to serve as a standardized means of monitoring global ocean changes and trends, identifying knowledge gaps and observations needs, and facilitating communication on the state of the ocean. This activity will liaise with existing G7 member activities and other relevant international / intergovernmental groups.

A Surface Ocean CO₂ Monitoring Network - Support the GOOS Biogeochemistry Panel and other international and G7 Member ocean carbon programmes, to catalyse and facilitate the development of an internationally-agreed strategy for monitoring surface ocean CO₂ globally, building on existing observing programmes, data management structures, and coordination bodies to create a global surface monitoring CO₂ network capable of responding to the needs of global and regional policy drivers including the UNFCCC Global Stocktake.

Augmented Observing and Forecasting Capacity for Marine Life - Support the GOOS Biology and Ecosystem Panel to work with the international community and the UN Ocean Decade programmes to establish the requirements for an observing and forecasting system for marine life to meet global and regional policy drivers, and to develop a strategic plan for coordinated G7 action and investment.

Observing System Evaluation Framework - Support the GOOS Expert Panels and the GOOS Observing System Co-Design Decade Programme to provide regular information required by funding agencies to identify implementation and investment priorities based on 1) review and synthesis of existing knowledge, capabilities, and frameworks such as recent observing system reviews and guidance from operational systems, and 2) through the GOOS Observing System Co-Design Programme that aims to develop a system to identify the best observing system design for multi-purpose, fit-for-purpose observations and to turn strategy development and planning into a more automated process that evolves as the system evolves.

Details about the G7 FSOI activities, news and events can be found on the web site at: www.g7fsoi.org