REPORT

Meeting: **JPI Oceans Strategic Navigation Forum**
Parties: **stakeholders**
Date: **11 June 2024**
Location: **Comic Arts Museum, Rue des Sables 20, 1000 Brussels**
Moderator: **Katrina Sichel, Wit and Word Communications**
Rapporteur: **Kateryna Urbanovych**, **NSAC Secretariat**

1. Welcome and introduction

The JPI Oceans Strategic Navigation Forum, an event endorsed by the Belgian presidency of the Council of the European Union, convened to pioneer discussions on future marine and maritime research and innovation beyond 2025.

Benjamin Kurten, Vice Chair of JPI Oceans, highlighted the origins of the Joint Programming Initiative, aimed at improving coordination across EU Member States. Established in 2011, JPI Oceans leverages marine policies to enhance biodiversity and food security, implementing strategies through joint initiatives and knowledge exchange hubs.

The current portfolio includes topics such as aquatic pollutants, blue bioeconomy, and deep-sea mining, and many more. Moving forward, JPI Oceans' strategy will address climate change impacts, integrating sustainable fisheries management with economic opportunities and biodiversity protection.

2. Vision of JPI Oceans Member Countries

Representatives from eight JPI Oceans Member Countries shared their national visions, emphasizing the importance of actionable plans.

- **Belgium** (Koen Lefever, Belgian Science Policy Office): Despite its small size, Belgium's busy seas make JPI Oceans crucial for future research and partnerships. Cooperation with JPI Climate on ocean rise issues underscores JPI Oceans' relevance.
- **Germany** (Zage Kaculevski, Federal Ministry of Education and Research): Germany's future focus includes sustainability, innovation, and research, emphasizing a mission-oriented approach and targeted funding for societal issues.

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- **Ireland** (Niall McDonough, Marine Institute): Ireland is preparing for its next national marine research strategy, Ocean Knowledge 2023. Key challenges include achieving energy transition, meeting biodiversity targets, addressing climate change impacts, managing marine space, producing sustainable seafood, ensuring safe seas, and transitioning to a climate-neutral blue economy.
- **Malta** (Maria Azzopardi, Council for Science and Technology): Malta focuses on a sustainable blue economy, balancing growth with reducing coastal impacts. Tourism, a key economic pillar, must be protected from climate change effects. JPI Oceans can help develop strategies for marine biodiversity, ocean literacy, and citizen engagement to drive policy change.
- **Netherlands** (Carine van der Boog, Ministry of Infrastructure and Water Management): The Dutch Ministry aims to protect and preserve a healthy environment, although the North Sea has been classified as unhealthy by the OSPAR 2023 QSR. Collaboration with ministries, industries, and NGOs is crucial for implementing the North Sea Agreement. Emphasis is placed on sustainable ecosystem management and addressing climate change impacts.
- **Norway** (Stine Hammer, Ministry of Trade, Industry and Fisheries): Norway stresses the need for investment in ocean research, essential for climate, industry, and global sustainability. The remain committed to ocean research and infrastructure.
- **Portugal** (Sofia Cordeiro, Atlantic International Research Centre): Emphasized the importance of adapting strategies for climate change and sustaining the blue economy. Citizen involvement is crucial for understanding the ocean's link to health, preservation, and economic development. Strengthening connections between national research organizations and promoting science-based policies are vital.
- **Italy** (Marco Borra, Blue Italian Growth Technology Cluster): JPI Oceans is viewed as a valuable investment opportunity and an incubator for new ideas, involving multiple countries and basins. Italy envisions JPI Oceans as an advisor to policymakers and a generator of new calls and opportunities, addressing gaps and needs effectively.

In summary, the speakers highlighted JPI Oceans' role in supporting national marine research, fostering international collaboration, and addressing future challenges through sustainable innovation and strategic initiatives.

3. JPI Oceans Joint Action Highlights

Bart van den Hurk, Co-Chair of IPCC WG2, introduced the European Knowledge Hub on Sea Level Rise and highlighted the recently published First Assessment Report. This report uses an integrated and interdisciplinary approach to provide state-of-the-art information, consolidate knowledge, and identify gaps. It evaluates current policy landscapes and adaptation planning across Europe, offering insights into the drivers, impacts, and policy options for sea level rise in major European basins. The goal is to equip decision-makers with

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the necessary knowledge to make informed decisions about protective and adaptive measures.

Donata Canu from the National Institute of Oceanography and Applied Geophysics launched the handbook on **cumulative effects assessment** (CEA) of human activities on the marine environment. The handbook addresses various human pressures, aiming to understand the tipping points of ecosystems. The CEA evaluates combined effects of human activities and natural processes, essential for effective management and sustainability. The handbook highlights the need for a holistic, ecosystem-based management approach and calls for harmonizing terminology to make assessments comparable across different environments.

Thorsten Kiefer, Executive Director of JPI Oceans, introduced the **Munition in the Sea** portal at European Maritime Day 2024. The project, initiated in 2015, aims to raise awareness, secure funding, and build a network of experts. Approximately 1.6 million tons of dumped munitions pose risks due to corrosion and leakage of toxic substances. Evaluation is done by divers and autonomous underwater vehicles.

Used Remediation Methods:

- Leave in place (pre-2015 policy)
- Blast (disperses toxins, harmful)
- Recover (improved technologies available)

In 2020, a knowledge hub was created, focusing on management, mapping, evaluation, environment, toxicity, and remediation. The initiative was referenced by the EU Commission and the European Economic and Social Committee in 2022. DG MARE funded projects for detecting munitions in seawater. Future efforts will increase collaboration with military and security forces, addressing data-sharing challenges.

4. The European and Global context: marine and maritime priorities

A panel consisting of **Kestutis Sadauskas** (DG MARE), **Alison Clausen** (UN Decade of Ocean Science for Sustainable Development), **Staci Rijal** (NOAA Research), and **Niall McDonough** (JPI Oceans) discussed critical marine and maritime issues for the next 4-5 years. The UN Decade of Ocean Science for Sustainable Development, launched in January 2021, was emphasized as a key initiative for applying science to societal needs.

Highlighted Challenges and Priorities:

- **Oceans as a New Frontier**: Increased focus due to environmental degradation, with key areas including food security, renewable energy, and MSP.
- **Ocean-Climate Relations**: Emphasizing the impact of human activities on oceans and supporting coastal communities.
- **Transition in Ocean Space Usage**: Managing the unprecedented shift in ocean space use for renewable energy and sustainable food production.

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Connections Between Land and Ocean:

- Marine pollution largely originates from land-based sources, necessitating a holistic approach to address top challenges.

Systemic and Holistic Solutions Needed:

- Ensuring policies are fit for purpose and integrated.
- Launching initiatives like the Digital Twin of the Ocean and the Sustainable Blue Economic Partnership.
- Emphasizing the role of social sciences in understanding and supporting local and coastal communities.
- Co-designing research and ensuring coherent resource use.

Investments and Infrastructure:

- Continued investment in observation and data infrastructure is crucial, viewed as having high returns.
- Showcasing case studies that highlight the benefits and returns of ocean science investments to engage the public.

5. Expert Communities insights and foresight

Sheila Heymans from the European Marine Board discussed research and innovation priorities beyond 2025, focusing on the upcoming "**Navigating the Future VI**" report (2022-2024). This report aims to highlight important and emerging topics in marine science to guide future research funding and policy developments. It consists of four main chapters:

- **Ocean and People**: Examines the dynamic relationship, emphasizing the blue economy and governance of maritime activities. Recommendations include understanding narratives, socio-economics, and developing sustainable ocean governance.
- **Ocean and Climate**: Explores the ocean's impact on global climate. Recommendations focus on understanding small-scale processes affecting large-scale phenomena, supporting ocean-based climate solutions, and developing scientific indicators for social adaptation.
- **Ocean and Fresh Water**: Links oceanic and terrestrial processes, highlighting cumulative impacts and stressors. Recommendations include understanding the impacts of matter release, contaminants, pathogens, and developing adaptive policies for emerging substances.
- **Ocean and Biodiversity**: Addresses the impacts of biological invaders and species distribution. Recommendations include studying marine species' adaptability to climate change, human impacts on biodiversity, and potential governance issues from climate-driven species movements.

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A position paper will be launched on 23 October 2024.

James Jolliffe from the Organisation for Economic Co-operation and Development (OECD) provided insights into the future ocean economy. Within the OECD, the Ocean Economy Group has been doing work to support policymakers by improving measurements of ocean economic activities, understanding the role of science and innovation in sustainable ocean economies, and enhancing capacity for forward-looking analysis.

Key points include:

- The ocean economy's significant impact, especially in developing countries where it can constitute up to 20% of the economy, compared to 1-2% in richer OECD countries.
- Ongoing analysis of how the ocean economy may evolve under different scenarios, with ocean science, technology, and innovation being crucial.
- Anticipated changes in the energy sector by 2050, with a decrease in gas usage and an increase in wind energy, despite continued fossil fuel use.

The OECD's project on the future ocean economy is set to conclude in 2025.

6. Closing session

The event highlighted JPI Oceans outstanding achievements of the past 12 years. Still, steps should be taken to:

- Fill knowledge and research gaps
- involve the private sector
- Enhance communication with policymakers and citizens
- Emphasize synergies and skill development, particularly in science diplomacy
- Improve data collection and utilization, as well as enhancing oceanographic fleets
- Optimize the use of marine space while ensuring safety and security
- Strengthen European intergovernmental structures

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