



INNOVATION FOR A SUSTAINABLE OCEAN ECONOMY:

Linking economic potential and marine ecosystem health through innovation

Naples, Italy

10-11 October 2017

Agenda

Hosted by the Stazione Zoologica Anton Dohrn (SZN), a major European research centre for marine biology located in Naples, Italy, this joint OECD workshop will examine how scientific advances and innovation are contributing to the development of major marine and maritime activities, while helping in protecting and restoring ecosystems.

In this context, four major issues for the future of the seas and ocean will be discussed: the greening of shipbuilding and marine infrastructures; the decommissioning of marine platforms; the pivotal role of science and technology in enhancing maritime spatial planning; and innovation as the key force driving the potential emergence of a marine ecosystem restoration industry.

The workshop will assemble some 50 international participants from leading research centres, the private sector, and intergovernmental organisations. The event will provide participants with an opportunity to exchange on national and international experiences, and will feed into current OECD research activities on the <u>ocean economy and innovation</u>.





AGENDA

WORKSHOP CHAIR: Prof Roberto Danovaro, President, Stazione Zoologica Anton Dohrn

FIRST DAY – 10 October 2017

14.00 Welcoming remarks

- Italian authorities:
 - Prof. Fulvio Esposito, Technical Secretariat for Research Policies MIUR
 - Cons. Enrico Padula, Ministry for Foreign Affairs and International Cooperation, DG for innovation and research
 - Marco Gaudini, Presidente Commissione Ambiente, Comune di Napoli
- Host institution: Roberto Danovaro, President, Stazione Zoologica Anton Dohrn

Background and objectives of the workshop

- Marco Borra, In Charge of International Cooperation and Strategic Partnership, Stazione Zoologica Anton Dohrn
- Claire Jolly, Head, Ocean Economy Group, Directorate for Science, Technology and Innovation, OECD

15.00 Keynote:

- Kevin Forshaw, Associate Director, Innovation and Enterprise, UK National Oceanography Centre: *Linking Ocean Sustainability and Innovation*
- 15.30 **Session 1. Innovation contributing to sustainable shipbuilding and marine infrastructures** Shipbuilding and marine infrastructures (aquaculture, oil and gas platforms), like other sectors, will increasingly be impacted by advances in digitalization, new eco-friendly materials and processes. This session will examine how innovation is rapidly changing practices and potentially leading to the greening of these important sectors.

Moderator: Claire Jolly, Head, Ocean Economy Group, Directorate for Science, Technology and Innovation, OECD

- Laurent Daniel, Head of Unit, Shipbuilding, OECD: *Green ships and green growth: Assessment of selected policies promoting the construction and operation of greener vessels*
- Massimo Debenedetti, Head of Innovation, Fincantieri: *Innovation contributing to sustainable shipbuilding in cargo and cruise vessels and offshore platforms*
- Bela Buck, Head of Working Group, Marine Aquaculture, Maritime Technologies and ICZM, Alfred-Wegener Institute: *New approaches to sustainable offshore food production and the multiple use of offshore infrastructures (recorded presentation)*

16.30 Networking break





17.00 Session 1. Innovation contributing to sustainable shipbuilding and marine infrastructures (session continues)

- Malcolm Beveridge, Branch Head, Aquaculture, Fisheries and Aquaculture Department, FAO: *Reducing pollution in marine infrastructures through cross-sectoral knowledge spillovers: the case of innovation in aquaculture*
- Lorenzo Matacena, CEO, Caronte & Tourist SpA, Italy: *Emission reduction: how the shipping industry is tackling the issue*

17.30 Session 2. Decommissioning of marine infrastructures and ecosystems preservation

A growing number of infrastructures at sea are due to be decommissioned over the next decade around the world (e.g. there are more than 7,000 oil and gas platforms worldwide). This creates both potential commercial prospects and major economic and environmental challenges and trade-offs. This session will take stock of the situation with a number of national and regional case studies, and identify a range of scientific advances and new enabling technologies and processes that provide useful tools for regulators, as well as public and private stakeholders.

Moderator: Marco Borra, In Charge of International Cooperation and Strategic Partnership, Stazione Zoologica Anton Dohrn

- Roberto Cimino, Vice President, Eni S.p.A: *Decommissioning infrastructures at sea:* reducing environmental impact, enhancing blue growth opportunities
- Mark Calverley, R&D Manager, Fugro GB Marine Limited: *Monitoring the impacts of decommissioning: what technologies can help?*
- 18.15 Wrap up of first day
- 18.30 Cocktail

SECOND DAY – 11 October 2017

09.00 Welcome by the host institution: Roberto Danovaro, President, Stazione Zoologica Anton Dohrn

09.15 Session 2. Decommissioning of marine infrastructures and ecosystems preservation (session continues)

- Monica Grasso, Chief Economist, NOAA: Artificial Reefs: U.S. and Global Activities
- Mike Elliot, Director, Institute of Estuarine & Coastal Studies, Hull University: *Challenges in harmonizing offshore oil, gas and wind-power decommissioning with maritime spatial planning and ecological protection*
- 10.30 **Networking pause**





11.00 Session 3. Innovation to support efficient maritime spatial planning

As human activities are ever-growing in the seas and oceans, maritime spatial planning (MSP) can contribute to a balanced management of protected ecosystems and economic activities. This session will review the state of MSP around the world and discuss innovations that are becoming available to support decision-makers in the public and private sectors.

Moderator: Barrie Stevens, Senior Adviser, IPSO, Directorate for Science, Technology and Innovation, OECD

- Charles Ehler, Senior Consultant, Marine Spatial Planning, Intergovernmental Oceanographic Commission, UNESCO: *Progress and continuing challenges in Marine Spatial Planning (2005-2030 and beyond)*
- Ferdinando Boero, Italian National Research Council (CNR): *What can marine sciences do for Maritime Spatial Planning*
- Pierre Bahurel, CEO, Mercator Ocean: Using new geospatial tools for ocean management
- Anthony Grehan, University Fellow, Dept of Earth & Ocean Studies, NUI Galway, Ireland, representing ATLAS: Innovation to support efficient maritime spatial planning where data is lacking

12.30 Lunch break

14.00 Session 4. What prospects for a marine ecosystem restoration industry driven by science and innovation?

Environmental regulations could increasingly be laying the foundations for the creation of a marine ecosystem restoration sector that could create new opportunities worldwide in terms of economic activities and employment, and unite ever more research institutes, NGOs, governments and diverse commercial sectors in a common cause. This session aims to identify the opportunities and steps needed to build up such an industry, and to consider the science and innovation breakthroughs required to enable its creation.

Moderator: Roberto Danovaro, President, Stazione Zoologica Anton Dohrn

- David Billet, Managing Director, Deep Seas Environmental Solutions, member ISA UK: *Marine* ecosystem restoration and the economy of the oceans
- Christina Abildgaard, Director, Dept for Marine Bioresources and Environmental Research, The Research Council of Norway: *Marine Ecosystem Restoration – Industrial development?*
- Torsten Thiele, Visiting Fellow, Institute of Global Affairs, London School of Economics: *What prospects for a marine ecosystem restoration industry driven by science and innovation?*
- Telmo Morato, Department of Oceanography and Fisheries, University of the Azores, Portugal: *Prospects for future deep-sea restoration activities*

16.00 Next steps and wrap up of the workshop

OECD Secretariat and the host institution