

Towards a European Ocean Observing System (EOOS): *Current status and next steps*

Kate Larkin

Deputy Executive Secretary, EMB



www.marineboard.eu

A dedication to Kostas Nittis



EMB Chair, May 2011 – May 2014

“We have to support science excellence in Europe and communicate our passion for marine research” Kostas Nittis, June 2013



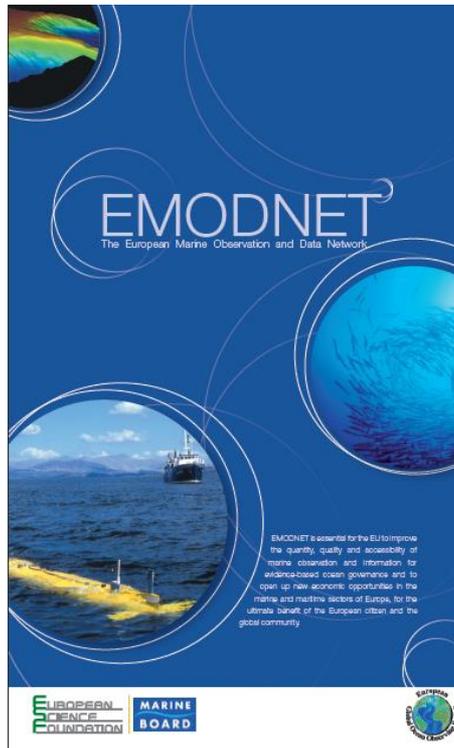
EMD2013, Valletta, Malta



NFIV launch, June 2013, Brussels

Towards a European Ocean Observing System

EMB – EuroGOOS Joint Vision Document on EMODNET (2008)



EMB Forums
2008 and 2010



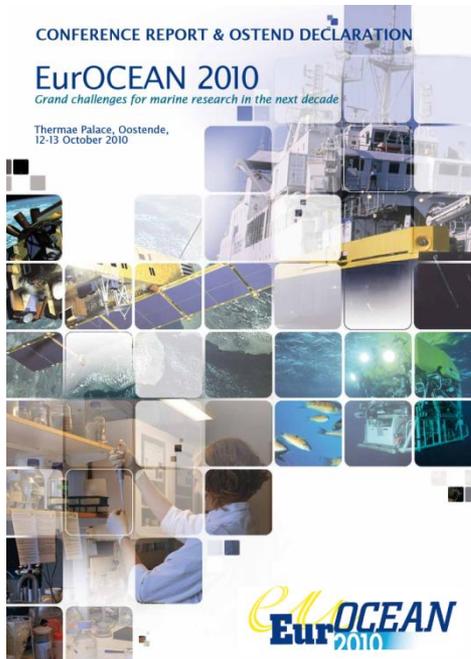
A call “to develop a comprehensive European strategy..”

Towards a European Ocean Observing System



EuroOCEAN 2010 “Ostend declaration”

“The Seas and Oceans are one of the Grand Challenges for the 21st Century.”



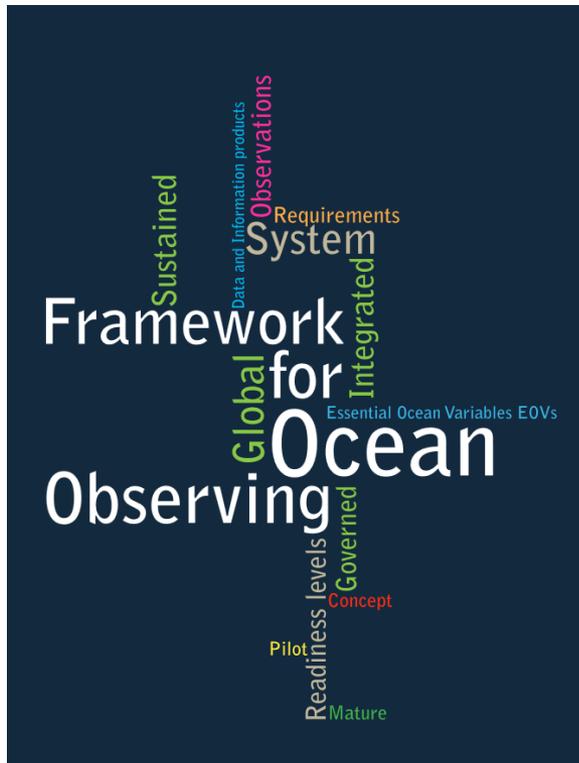
Addressing the Seas and Oceans Grand Challenge

The EuroOCEAN 2010 Conference identified priority marine and maritime research challenges and opportunities in areas such as food, global environmental change, energy, marine biotechnology, maritime transport and marine spatial planning, including seabed mapping. The Conference delivered an unequivocal message on the societal and economic benefits Europe derives from the seas and oceans and of the crucial role that research and technology must play in addressing the Seas and Oceans Grand Challenge.

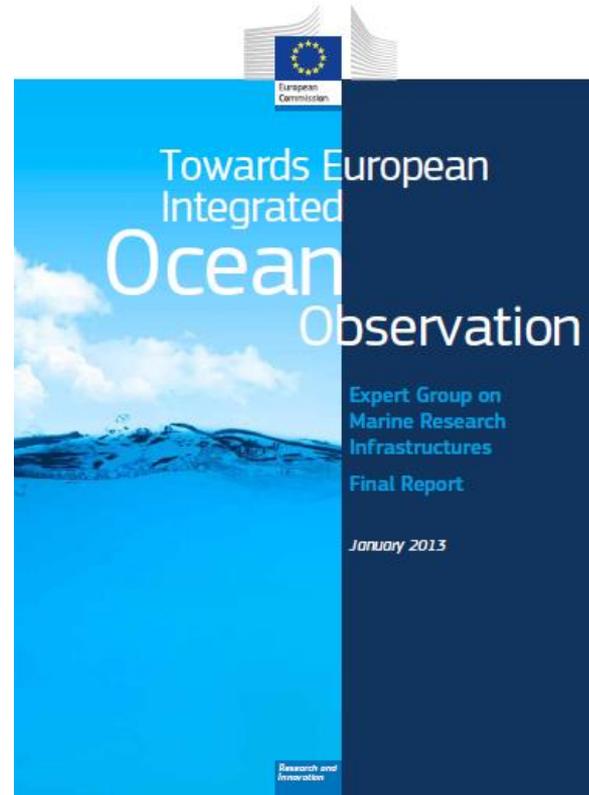
The European marine science and technology community, building on existing achievements and initiatives, is ready to address this challenge in partnership with industry and the public sector, and calls upon the European Union and its Member and Associated States to facilitate this response by delivering the following proactive and integrating actions:

- 1. Joint Programming**
Develop an integrating framework, combining the assets of European programmes with those of Member States, to address the Grand Challenge of the Seas and Oceans, including the identification and delivery of critical marine research infrastructures. The **Joint Programming Initiative on “Healthy and Productive Seas and Oceans”** has the appropriate scale of integration and should be actively supported by the European Commission and Member States.
- 2. European Ocean Observing System**
Support the development of a truly integrated and sustainably funded “**European Ocean Observing System**” to (i) re-establish Europe’s global leading role in marine science and technology; (ii) respond to societal needs by supporting major policy initiatives such as the **Integrated Maritime Policy** and the **Marine Strategy Framework Directive**; and (iii) support European contributions to global observing systems. This could be achieved through better coordination of national capabilities with appropriate new investments, in coordination with relevant initiatives (e.g. ESFRI, EMODNET, GMES) and the engagement of end-users.
- 3. Research to Knowledge**
Establish appropriate mechanisms to keep under review current marine and maritime research programmes and projects with a view to enhancing their impact by (i) exploiting the results of this research; and (ii) identifying existing and emerging gaps. This should be supported by a **repository for the reports and findings of national and EU marine and maritime research projects, programmes and initiatives**, with capacity for archiving, translating, analysing, reporting and developing integrated knowledge products to facilitate policy development, decision making, management actions, innovation, education and public awareness.

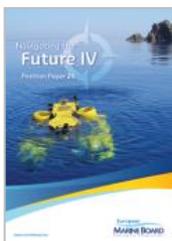
Towards a European Ocean Observing System



Output of OceanObs'09 Task Force.
Used as a guiding document by
GOOS. Final report, 2012



European Commission Expert Group on
Marine Research Infrastructures
Final report, January 2013



NFIV Chapter 11:
Community Paper on
EOOS

www.marineboard.eu

Navigating the Future IV (EMB, 2013)

- Research Frontiers and transformative technologies driving next generation ocean observation
- A new era in biological observations
- Integrated observations for ocean governance
- Oceanographic information in the new data age
- A **Concept for EOOS**





NFIV Chapter 11:
Community Paper on
EOOS

Selected Key Recommendations :

- A common vision for EOOS
- Promote excellence and Innovation in ocean observing
- Develop the concept of Essential Ocean Variables
- Training skilled personnel
- Sustainable funding mechanisms

EOOS at EuroOCEAN2014



Jan Mees, EMB Chair

EuroOCEAN²⁰¹⁴

“...a call for action on behalf of the marine scientific and operational oceanography communities to develop a roadmap, timeline and governance structure for EOOS and implement a flagship initiative building on existing resources and commitments.”

EuroOCEAN 2014 report, EOOS session



Erik Buch, EuroGOOS Chair

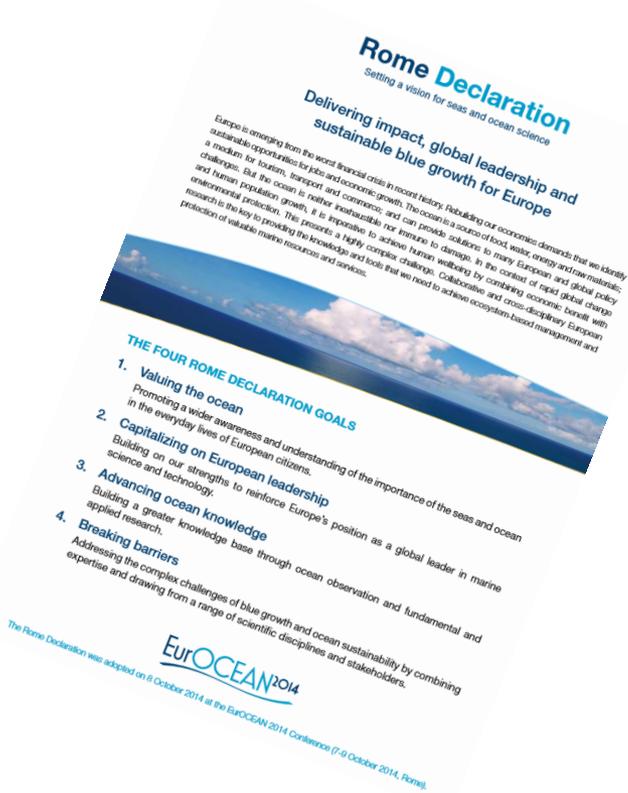


EuroOCEAN²⁰¹⁴

Rome Declaration: Community vision for seas and oceans science

**Key priority area:
Advancing ocean knowledge**

Goal: Building a much greater base through ocean observation, fundamental and applied research



Expert workshop on *in situ* EOOS



12-13 May 2015 at BELSPO, Brussels

Co-organizers:



Experts spanning marine science and operational oceanographic communities

Expert workshop on *in situ* EOOS

Main aims and purpose of workshop:

- Participatory brainstorming with experts acting in a personal capacity
- Develop a broad consensus on the scope, need, purpose and rationale for a future EOOS *in situ* component, and what it would consist of, and
- Start to create a shared vision and map out a process to develop an integrated and sustained *in situ* EOOS.



Expert workshop on *in situ* EOOS: Scope

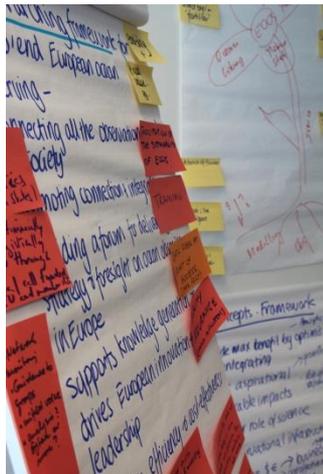
Defining the scope and key principles of EOOS

Sustained and integrated

Scientific and user driven system to understand the current state, key processes of European seas and oceans

A framework for European strategy, coordination, dialogue and leadership in ocean observation

Creates knowledge to drive innovation and Blue Growth and underpin sustainable management of marine resources



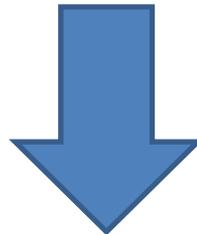
Defining the scope and key principles of EOOS

Sustained and integrated

Scientific and user driven system to understand the current state, key processes of European seas and oceans

A framework for European strategy, coordination, dialogue and leadership in ocean observation

Creates knowledge to drive innovation and Blue Growth and underpin sustainable management of marine resources

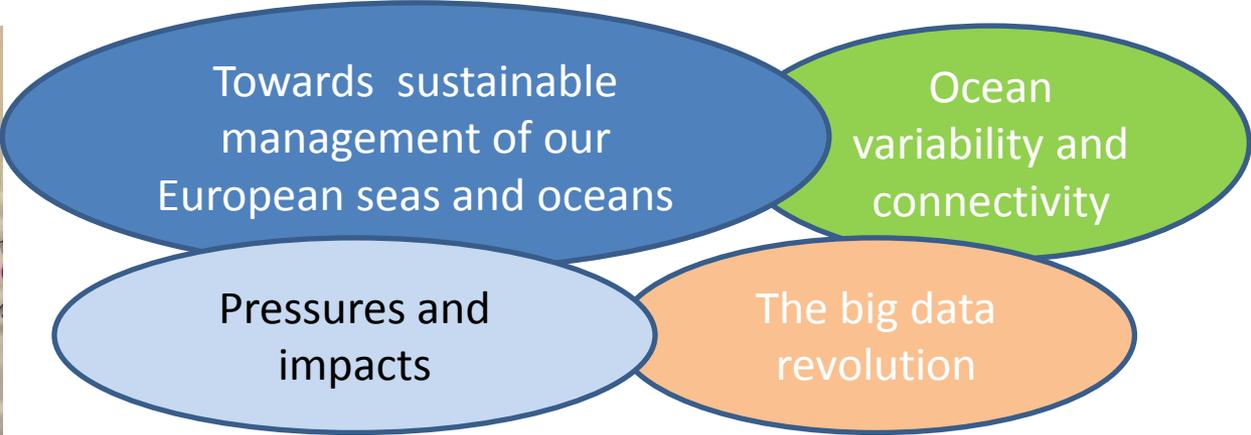
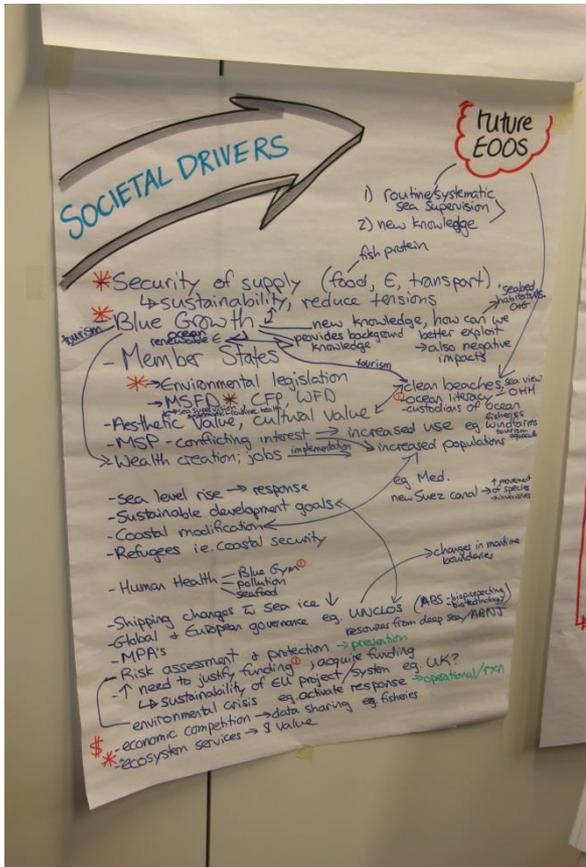


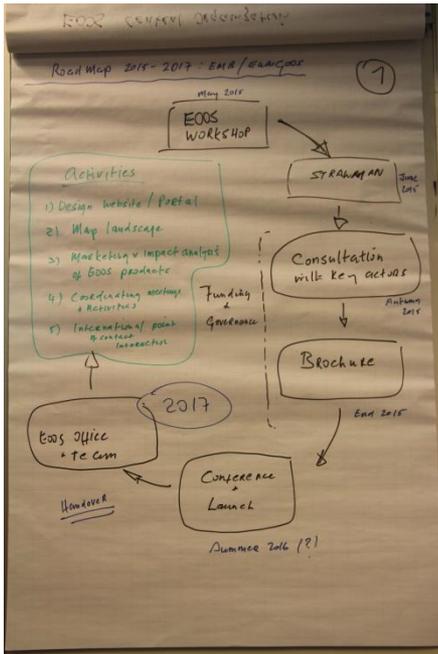
Added value for Europe

Enhancing European contribution to International initiatives

Expert workshop on *in situ* EOOS: Drivers

Horizon scanning on key drivers for EOOS: Societal, environmental, research and technological...





Actions during 2015

- EMD2015, 28-29 May 2015, Athens
- AtlantOS KoM, 10-12 June 2015, Brussels
- EOOS workshop strawman report
- Stakeholder consultation and input
- Consultation, communication and dissemination led by EMB and EuroGOOS

Thank you

klarkin@esf.org

www.marineboard.eu