

## **COST Seminar**

**14 October, Brussels**

### **Marine Board Activities**

*Dr Niamh Connolly*  
**Marine Board Executive Secretary**



## Content

- **Marine Board-ESF**

Aims, activities  
role in the European marine research -  
policy landscape

- **Marine Board perspectives -**
  - **European Marine and Maritime Research Strategy**

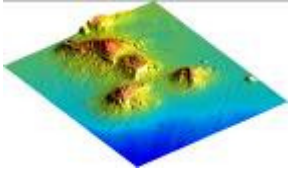


## ***Marine Board***

# Marine Board, Ostend, Belgium – InnovOcean site



# Marine Board - ESF



- Marine Board-ESF = **European forum** for marine science policy: future funding priorities
- Established in **1995**; by Member Organisations; in consultation with the European Commission
- **29 Member Organisations** (funding RFOs - ; performing RPOs) **19 countries** (funding from Member Organisations); (31-20 end 2008)  
- Romania to join in 2009
- **Node for:**
  - **Interaction** - national RFOs, RPOs
  - **Dialogue** - Commission - permanent observers DG MARE, DG RTD
  - **Forum** - other networks & IGO/NGOs - EuroGOOS, ICES, WaterBorne TP

European focal point for marine science

Forum ~~Strategy~~  
Voice ~~Synergy~~

## Marine Board-ESF Governance



- **Executive Committee**
  - Chair: Lars Horn (Research Council of Norway)
  - 5 Vice Chairs: Jan de Leeuw (POGO; NIOZ), Jan Mees (VLIZ-Belgium, MarBef), Kostas Nittis (MedGOOS), Antoine Dosdat (Ifremer-France), Ed Hill (NOCS-UK)
- **Marine Board Secretariat**
  - 1 Head of Unit
  - 3 Science Officers
  - 1 administrative assistant
- **Meetings**
  - Plenary - twice yearly
  - ExCoM - three times+ depending on the need
  - Marine Board Forum (first held on 15th May 2008 in Ostend)



## Science Strategy and Policy elaborated collectively via:

### 1- Specialist Workshops / Conferences

- **EurOCEAN 2004:** >500 participants; Programme organiser => *Galway Declaration*; proceedings
- **EurOCEAN 2007;** Programme organiser => *Aberdeen Declaration*; proceedings
- **Lisbon EU Presidency 2007** – Linking Science and Policy
- **Marine Board biennial Forum; proceedings**

### 2- Follow policy developments >Statements

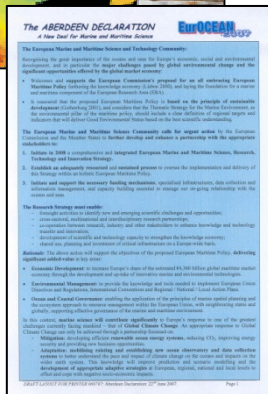
- ESFRI, GMES, BONUS Art. 169, FP6; FP7 (cross-cutting issues)...
- *Green Papers:* Future European Maritime Policy, Climate Change, the ERA, Invasive Alien Species, Offshore Wind Energy...

### 3- Hatchery: ERA-Nets, foresights projects

- MarinERA, AMPERA, MariFish, FEUFAR

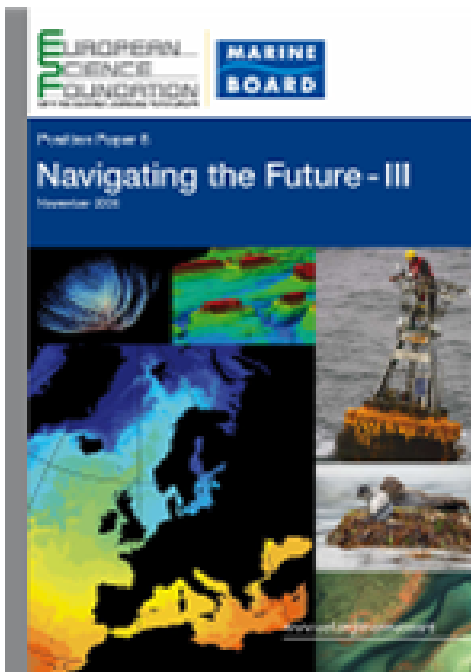
### 4- Marine Board Working Groups

### 5- Navigating the Future I > IV



## Marine Board's integrated strategic reports

### → Navigating the Future Series



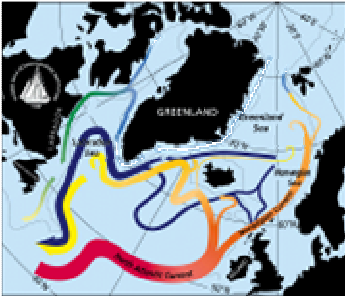
## Navigating the Future III

(65pp. - November 2006)

- **Presents thematic research priorities and** challenges on the spectrum of marine science
- **Developed and agreed** by major European marine RFOs and RPOs
- **Research priorities for Europe** (FP7 priorities, European Maritime Policy, national research programmes, the European Marine Environment Strategy and the Aberdeen Declaration 2007)
- **Important tool** for developing a joint European strategy for marine research and to develop FP7 and national WPs
- **Endorsed** by MarinERA ERA-NET project; informed funding priority.

## Navigating the Future III

→ Major trends, opportunities and challenges for European marine sciences



- **Climate change and the oceans**  
*Impact of CC on the oceans, particularly on ocean ecosystems*
- **Continental margins**  
*Sediment instabilities, gas hydrate behaviour, deep-sea ecosystems, deep-sea observatories*
- **Marine biodiversity**  
*Role, evolution, protection and exploitation*
- **Coastal ecosystems**  
*Toxic algae, viruses, eco-toxicology, spatial planning*
- **Ecosystem approach to resource management**  
*Fisheries, aquaculture, harbour development, ICZM*
- **Operational oceanography**  
*GMES, real-time access and exchange of in-situ data*
- **Marine technology**  
*In-situ observing systems, software, technology transfer between disciplines*
- **Marine infrastructures**  
*Enhanced use of resources; developing capacity*



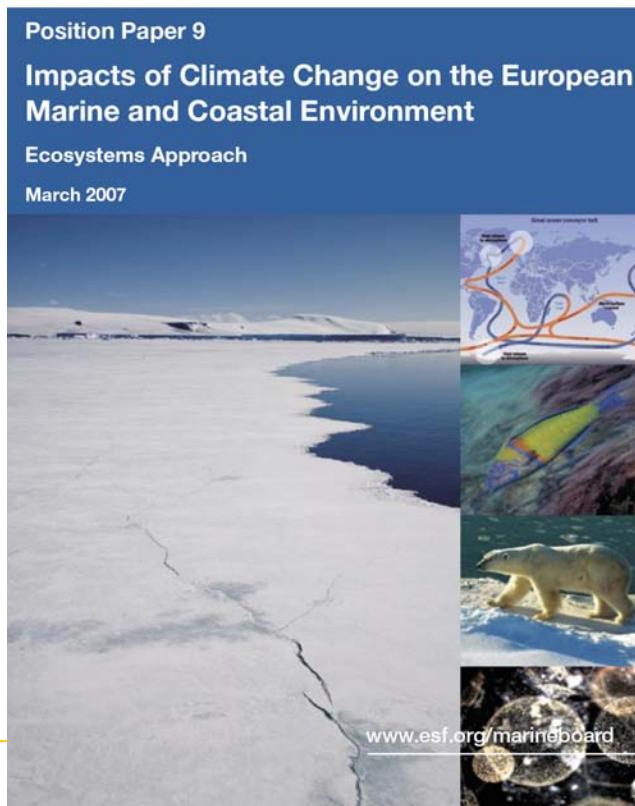
## Climate Change Impacts on the European Marine and Coastal Environment



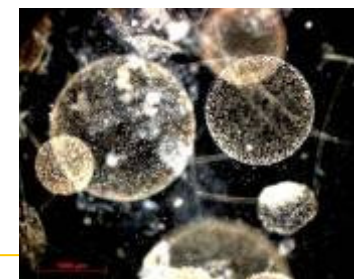
Position Paper 09  
Published in  
March 2007

Chair:

Dr. C. Philippart (NIOZ)



- Scenarios
- CC indicators
- Science/policy interface
- Future research needs





## European Ocean Research Fleets



Position Paper 10  
Published in  
March 2007

Chair:

J.Y Binot (Ifremer)

Position Paper 10

### European Ocean Research Fleets

March 2007

Towards a Common Strategy and Enhanced Use



- Survey of research fleets and large equipment
- Regional challenges
  - management processes
  - recommendations



marineboard



## Remote Sensing of Shelf Sea Ecosystems



Position Paper 12  
Published in February  
2008

Chair:

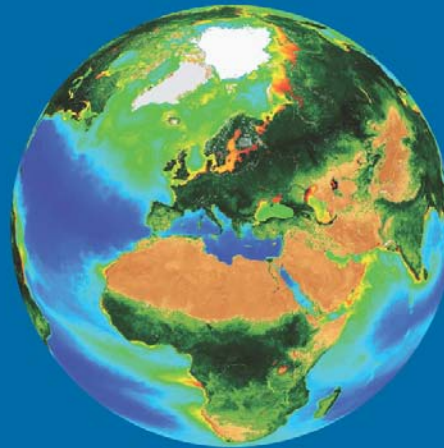
I.S Robinson (NOCS)

Position Paper 12

### Remote Sensing of Shelf Sea Ecosystems

*State of the Art and Perspectives*

February 2008



- Ecosystem parameters from optical measurements
- Satellite ocean colour products
- Availability of high quality climatologies and time-series of ecosystem properties



## Marine Mammals and Acoustics

Position Paper 13 published  
in June 2008

**Chair:**  
**I. Boyd**

(SMRU-University of St  
Andrews, UK )

Position Paper 13

### The effects of anthropogenic sound on marine mammals

*A draft research strategy*

June 2008



[www.esf.org/marineboard](http://www.esf.org/marineboard)

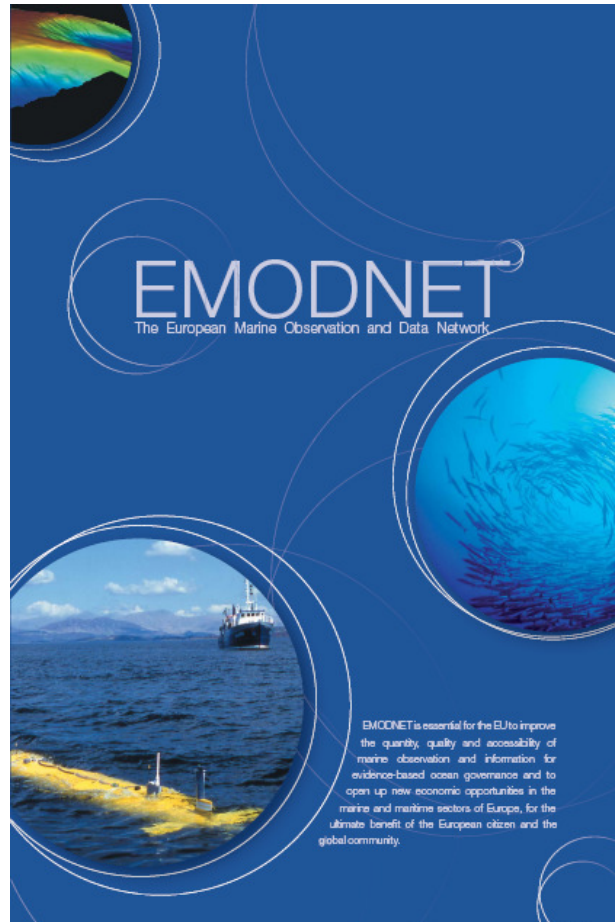
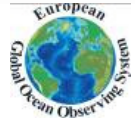


[www.esf.org/marineboard](http://www.esf.org/marineboard)

- Define a strategic framework for future research;
- Guidance on prioritisation of research;
- Suggest a process of implementation

# European Marine Observations and Data Network

## EMODNet Panel



### Main Goals

- Review the background policy documentation addressing EMODNET;
- identify the concepts relevant for the EMODNET
- Science and policy dimensions of these concepts
- Develop a **Vision Document** targeted towards policymakers

### Co-Chairs:

A. Dosdat (Ifremer) & P. Ryder (EUROGOOS)

Published in October 2008

## Existing and emerging chemical pollutants

### Main Goals

- **Review relevance & need to monitor and assess substances** currently monitored and/or assessed in the marine environment
- Review literature for which **new and emerging chemicals** should be incorporated in monitoring and assessment schemes
- Review existing knowledge on the **environmental effects and risks of chemicals** released by the offshore **oil-industry** in the North Sea
- *Review existing methods to **evaluate impact/risks of chemicals in marine systems** and propose improved procedures and identify future R&D needs*



## Science dimensions of **Ecosystem Approach** to **Management of Biotic Ocean Resources** **WG-SEAMBOR**

### Main Goals



- 1. The Ecosystem Approach to Management** (review of concepts, best practices etc.)
- 2. Specify and evaluate the science dimensions** of:
  - the *dynamics and resilience* of populations, communities, and ecosystems.
  - Describing and analyzing the *dynamics of human uses* from the multiple perspective of ecology, economy and governance
  - Analyzing the functioning and effectiveness of *management* and governance systems
- 3. Identify concomitantly the *main obstacles* that may be slowing the *implementation* of the Ecosystem Approach to Management**
- 4. Develop a *work plan*:** an improved science base for the implementation of Ecosystem Approach to Management of ocean resources

[www.esf.org/marineboard](http://www.esf.org/marineboard) **Position paper:** foreseen in Q4 ` 09

**WG Chairs:** Prof. **J.Rice**, DFO-MPO Canada; Prof. **R.Santos**, Azores

## Brief overview of the European marine research and policy landscape

**1-** Towards a knowledge based society –  
(renewed) **Lisbon Strategy**

**2- European Research Area (ERA)**

**3- Integrated Maritime Policy**

*Green Paper → Blue Book & Action Plan*

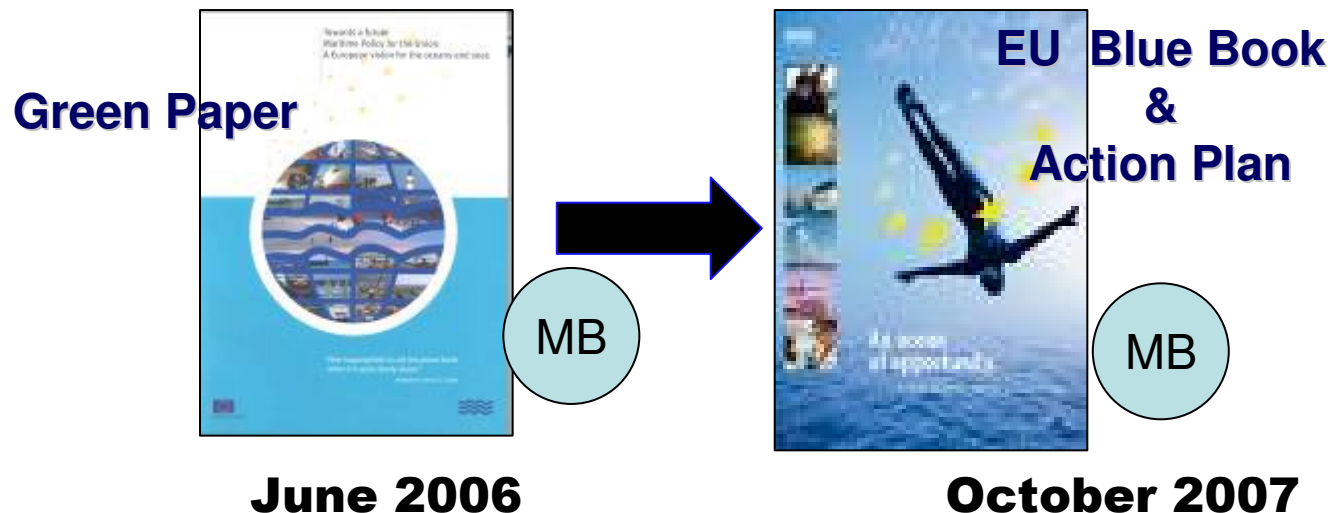
**4- Marine Env. Strategy and directive**

**5- European Marine and Maritime  
Research Strategy**

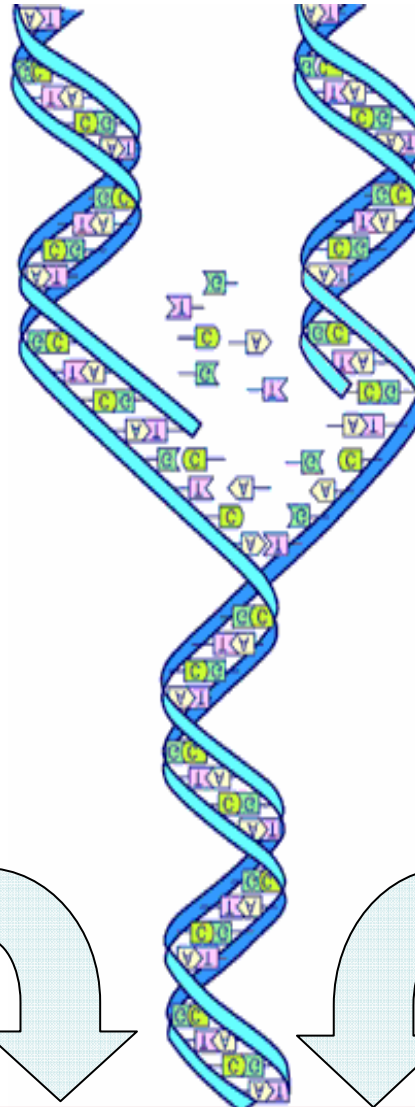
### 3. Integrated Maritime Policy

Developed from "... the particular need for an **all-embracing maritime policy** aimed at developing a thriving maritime economy, in an environmentally sustainable manner".

- **Such a policy should be supported by excellence in marine scientific research, technology and innovation"**



## 4. Marine Env. Strategy and MSFD



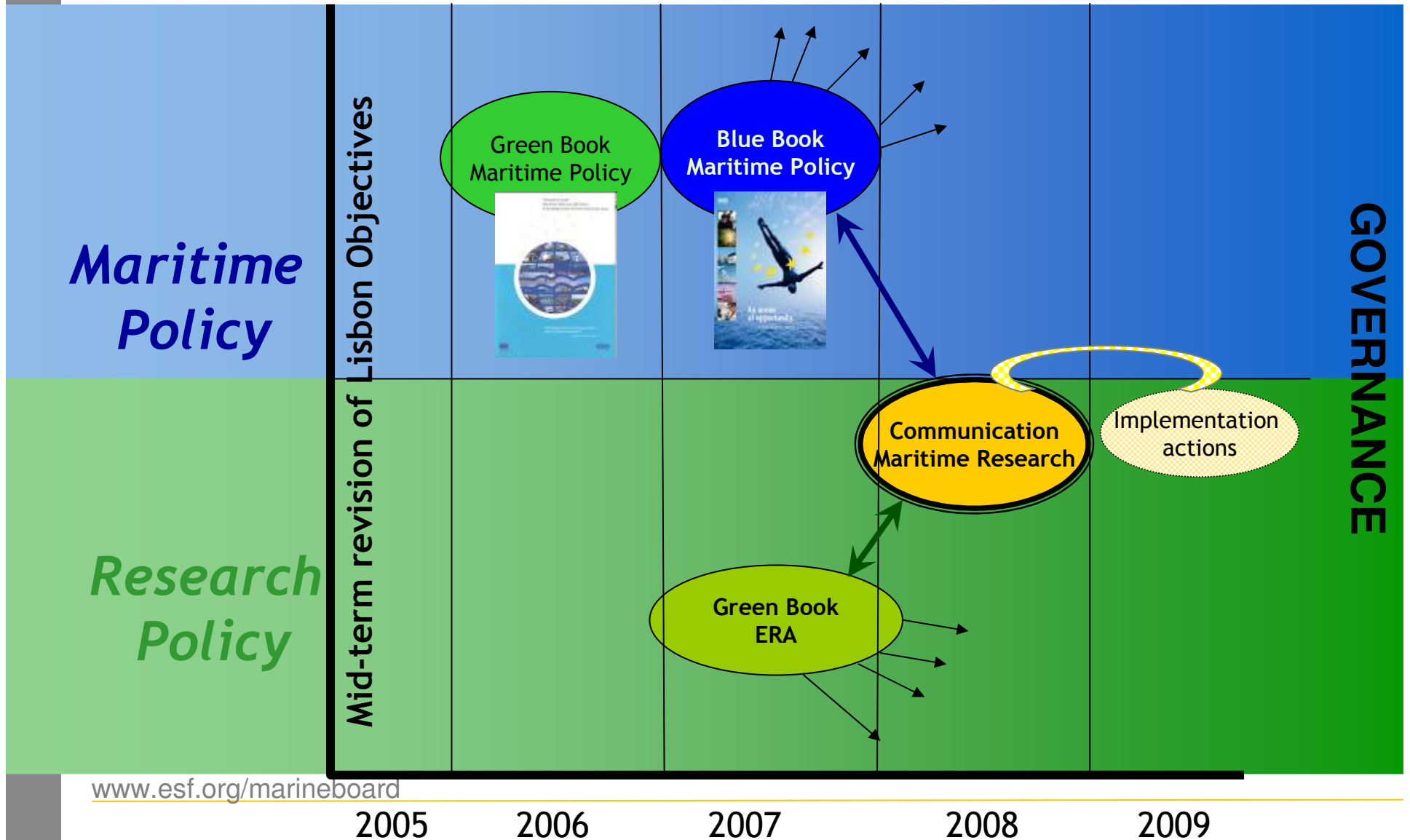
Integrated  
**Maritime Policy**  
(announced  
Commission  
Barroso 2004)

**Marine Environment  
strategy**

(one of seven thematic  
strategies under 6<sup>th</sup>  
Environment Action Plan  
2002-2012)

**The Marine Strategy Framework Directive**  
= environmental pillar of the Maritime Policy  
(European Council, 14 December 2007)

## 5. Marine and Maritime Research Strategy



# The Communication on the Marine & Maritime Research Strategy

Adoption: **September 2008**

## Objectives

- **Integration** among sectors: industry, marine / maritime S&T, society, policy
- **Synergy** within and between Member States and Regions
- ▶ Provide a **coherent research framework** in support of the sustainable use of the sea: towards a new model of governance
- ▶ Definition of a long term **Strategic Research Agenda** for Europe to be implemented by marine and maritime science partnership

## Implementation actions

- **1- Marine and maritime science partnership**
- **2- Support to infrastructure** and capacities within MS
- **3- ID Topics: existing ones + new ones (cross cutting)**
- **4- Improve and develop new tools for implementation**

# 1- Developing the Marine and Maritime Science partnership

## 1- Chronology of events

- *Brussels JAN '07*
  - platform *integrating research organisations* to deliver strategic advise on FP7 & EU Maritime Policy
- *Eurocean 2007 → Aberdeen Declaration*
  - a *consensus view* of the European Marine Science and Maritime Community **recommending actions including development of *Marine and Maritime Research Strategy and partnership***
  - *a willingness to co-operate (partnership approach) and participate with the Commission to realise the aims and objectives of the proposed EU Maritime Policy*
- *April 2008 Aberdeen+ Meeting → Task Force*
  - **TF to prepare Partnership Proposal & respond to FP7 call**
- *Task Force meets regularly; MB established it*

# Chronology of events Partnership Science -> Policy



Galway 2004



Brussels 2004



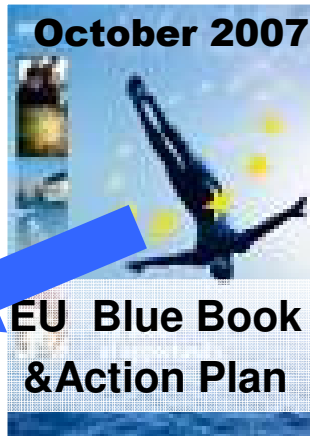
June 2006



2006



Brussels 2007



Sept 2008

Communication on the marine and maritime research strategy



Aberdeen 2007

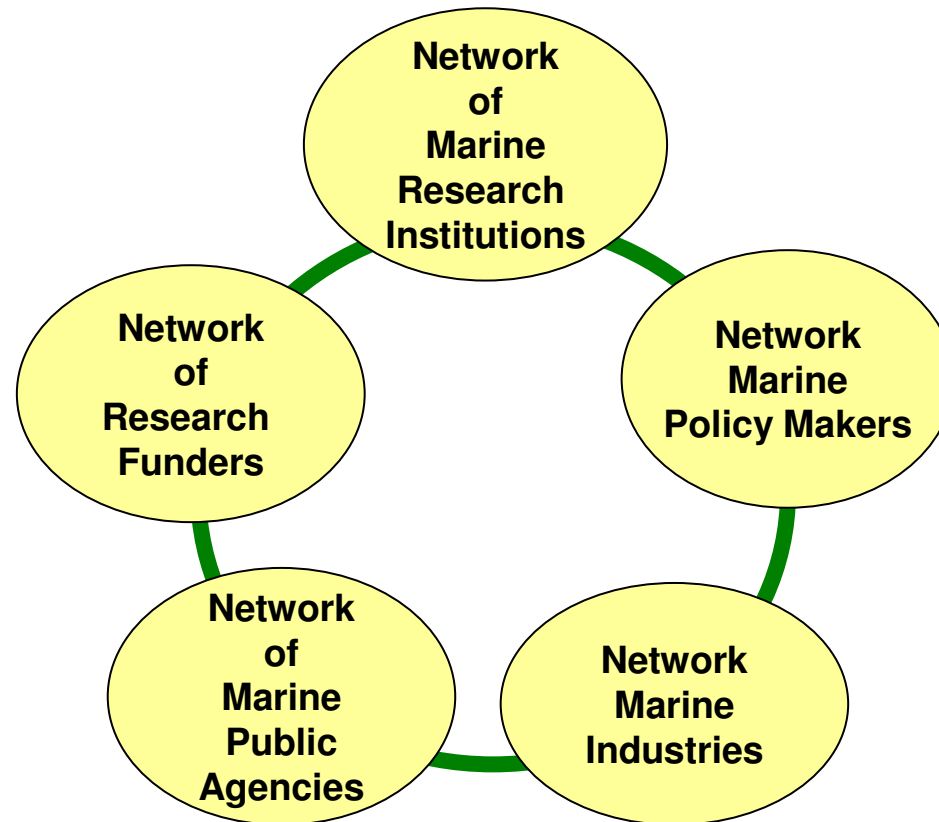


Bremen 2007

From Green to Blue & to Partnership approach

## 2- Why - Towards the partnership model

**Not a single voice – a choir of voices brought together in a holistic way that can be heard**



## Marine Board-ESF perspectives

Building the Foundation of a European Marine and Maritime Research Strategy

### 3- *Implementation tools and concrete actions*

#### ▶ **2 FP7 calls: enhance partnerships between the marine and maritime science communities:**

- DG RTD – **Transport Unit:** TOPIC – Level 2 - SST.2008 6.6  
Objective: *exploiting synergies between Marine and Maritime Research Communities*  
Call closed in May 08 – EMAR2RES proposal < €1M
- DG RTD – **Environment Unit**  
Objective: *Support the marine/maritime partnership (+ infrastructure); forum*  
Call closes Jan 09 - < €1M

#### ➤ **The Marine Board and its European marine and maritime partners committed to respond jointly to that long-term challenge – develop a common vision**

- DG RTD – **ERA-NET call: overarching marine ERA-NET; evolve from MarinERA-AmpERA-MariFISH; basin approach; infrastructure aspects; Closes April 09.**

## **2- Supporting the marine infrastructure component**

## Infrastructure Approach

- Regional fleet management aspects: **quickly ageing, need renewal > use the EC I3 tool to enhance regional integration (OFWG, MarinERA -> EUROFLEETS)**
- **EMODNET panel (MB-EuroGOOS)**
- **MarinERA infrastructure Workshops:** prospective approach (networking – access – policy); e.g. Observing and Monitoring systems (**EURO-ARGO, ESO-NET etc.**)
- Monitor **ESFRI** developments

## 4- Cross-cutting issues

## Cross-cutting issues

- Matters relating to Europe's oceans and seas are *interlinked*
- Sea-related *policies must develop coherently*, to deliver desired results
- Maximise *sustainable use of the oceans and seas, in balance with environmental protection*
- Ongoing identification of priorities

### Examples

- Actions strengthening the **ecosystem approach** to maritime activities, including RTD
- Tools to support **spatial planning**
- Integrated approach to **data** collection, processing, delivery

*Drivers for improved cooperation*

- Policy issues – climate, biodiversity
  - IPCC, IOC
- Large scale science – complex, global, decadal
  - IODP, FP
- Sustained observation – GEOSS
  - IOC/WMO, GEOSS, GMES, EuroGOOS
- Infrastructure – cost and access
  - Ship barter, ESFRI
- Skills – mobility, shortages
  - Marie Curie, ERC
- Business innovation – Knowledge transfer, Lisbon Agenda
- Global competitiveness – Asia, USA, India

## **5- Tools for implementation e.g. the ERA-NET Scheme**

## Example: the ERA-NET Scheme

*Towards a potential future overarching,  
basin scale, Marine ERA-NET project*

### Rationale: ERA-NET

- ... a **Network of Research Funding Organisations** conducted at national or regional level with a view to developing **closer co-operation** and ultimately the *mutual opening* of national or regional research programmes (They manage *competitive* research funding programmes (i.e. based on open and public call for proposals)).
- FP6: many ERA-NETs! Evolution towards simplification
- *Regionally focussed BONUS ERA-NET* (Baltic) works well - a strong regional focus.
- Need to *improve links with other EU regional funding initiatives* and schemes (INTERREG);

## The Call

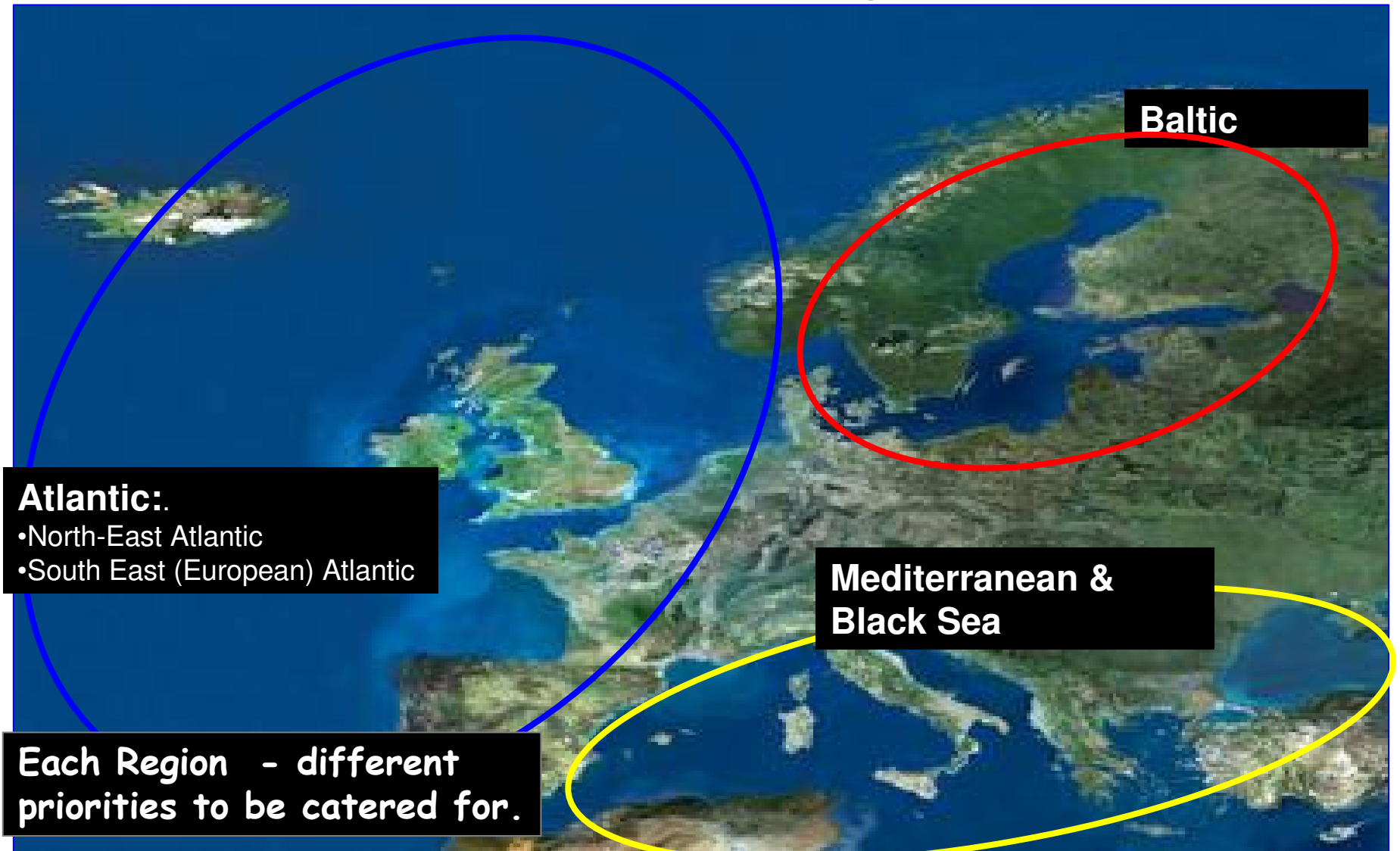
(**timeline:** publish January 08 – deadline in April 09):

- 1 FP7 **Single marine ERA-NET** = 1 European marine overarching structure
- European **sea basins approach**
- Develop common strategies and programmes in implementing **globally important marine research**
- **coherent vision** of the planning and use of research **infrastructures** (in line with ESFRI roadmap)

Link with Joint Programming Initiative and Strategy Research Agendas

# A Regional, Basin Scale, Approach

## What is a Basin?



### Challenges to improve science – policy interface (1)

- *What mechanisms can deliver integrated and inclusive interface*
  - How to ensure that *advice imparted is consolidated* rather than a collection of fragments?
  - How to ensure *Member States are engaged*?
  - How to *articulate longstanding bodies with temporary initiatives* (agencies - research projects)?
- E.G. **Climate Change impacts**: requirement for an **increased dialogue between scientists and policy makers** to allow assessment of whether there is sufficient sound scientific evidence on which to base new policies

## *Challenges to improve science – policy interface (2)*

- Research Community (RFOs & RPOs) must come together to answer key questions:
  - How can a *European Marine and Maritime Research Strategy* evolve to further deepen our knowledge and promote new technologies?
  - Should a *European Marine Research Advisory Panel* be developed?
  - What *mechanisms can best use knowledge towards economic development*
  - In what way should stakeholders be involved?

# Conclusions

- *Maritime Policy Green Paper, Aberdeen Declaration, and Blue Paper* are significant achievements
- *Marine and maritime RTD at the core of the maritime policy: informal partnership to date between science and policy*
- *Need to consolidate this partnership*
  - Transparency, integration, inclusion
    - Develop *shared visions*
    - Articulate *common needs*
    - Provide *consolidated advice / information*
    - Many voices brought together in a *holistic* manner

# Conclusions

- *An integrated governance framework for maritime affairs requires tools for informed policy-making*
- *Knowledge of the integrated dynamic ocean system needs information and understanding*
- *Availability of, and access to, comprehensive range of natural and human-activity data and information on the oceans is the basis for sound strategic decision-making*
- *Onus on research community to organise and inform the use of tools in the implementation of the*

*Integrated Maritime Policy for the EU*

# *Thank you for your attention*

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