

Celebrating European Marine Science

Building the European Research Area

Communicating Marine Science

Galway (Ireland) $10^{th} - 13^{th}$ May 2004.

EurOCEAN 2004.

The Galway Declaration

To ensure that recognition is taken at Member State and European Community Level of:

- the crucial role of the oceans in climate, carbon cycle and Life on Earth.
- the major contribution maritime industries can make to the achievement of the objectives outlined in the Lisbon Agenda.
- the essential role of marine science and technology in generating the knowledge needed to fuel this economic achievement in harmony with the environment.
- the critical role the European Research Area / 7th Framework Programme must play in supporting world class excellence in marine science & technology.







EurOCEAN 2004 – The Galway Declaration

The seas and oceans have historically played a formative role in the development of many European coastal states. From the utilisation of fish as a food source, to the development of international trade, commerce and maritime transport, European society has thrived and prospered from its partnership with the sea. Much of this prosperity can be traced back to the application of science and engineering. Critical developments, underpinned by science and technology, which gave European countries dominance over international trade in the middle ages included shipbuilding and the development of navigational aids

In May 2004, over 500 leading marine scientists, policy-makers and representatives of the marine industry sector, from all corners of the European Union (EU+25), gathered in Galway (Ireland). Their objective - to determine how marine science and technology can contribute to the achievement of European Union objectives as stated in the Lisbon, Gothenburg and Barcelona Declarations. Namely, *to make the European Union the most competitive knowledge-based economy in the world*, based on the application of science and technology and the principles of sustainable development.

The EurOCEAN 2004 Conference noted that:

• The European Union has a significant marine dimension, with over 50 % of the territory under the jurisdiction of its Member States being underwater. This territory extends from the Baltic through the Atlantic to the Mediterranean and Black Sea.

- The ocean plays a crucial role in planetary/ecosystem function. It
 influences climate, the carbon cycle and supports an impressive
 diversity life forms.
- The European seas and oceans are of major strategic importance to the economic and social development of Europe as well as its security.
- The application of science and technology to our seas and oceans
 presents new and exciting opportunities for economic growth and
 innovation in the maritime sector.
- New and emerging scientific knowledge and technologies are
 providing unprecedented access to marine resources. The flip
 side of this coin is that increased exploitation (e.g. over fishing,
 environmental impacts of oil exploration, urban expansion, etc) is
 having a negative impact on the sustainability of marine
 resources.
- The participation of European researchers and the European Union in global research partnerships is vital if we are to truly understand earth ecosystem function.
- The development of mutually supportive and complementary links between the marine industry sector (particularly SMEs) and the research community is essential in order to develop new exploration technologies, support the sustainable development of

marine resources and to ensure the transfer, utilisation and commercialisation of research results.

• the European Union Framework Research Programmes, supporting marine science, coupled with national marine research programmes, have created a strong element of co-operation and a truly "European Marine Science Community".

Future challenges include:

- the implementation of an ecosystem-based approach to sustainable development and improved stakeholder input to management decisions;
- o integrating the exciting new discoveries in marine science (e.g. the role of the picoplankton, deep sea extremophiles and sub-seafloor micro-organisms, etc.) to our understanding of marine ecosystem function and their possible commercial application.
- o development of renewable ocean energy to diversify energy sources and contribute to our Kyoto commitments on CO₂ reduction;
- development of coastal shipping as an environmentally friendly and economic mode of bulk transport whilst improving safety and reducing negative environmental impacts;
- o the development of the ocean component of a Global Earth Observation (GEO) System as advocated by the Johannesburg Conference and the G8 Summit.

- conserving marine biodiversity, whilst utilising its unique biodiversity for social and economic purposes (e.g. new bioactive compounds for medicinal, pharmaceutical and industrial purposes).
- the exploration of the deep ocean and continental margins,
 one of the last frontiers of our planet, in order to uncover
 its mysteries and assess its resource potential.
- o responding to the implications of global climate change and its impacts on marine and coastal environments and communities.
- o developing a new paradigm to promote inter-institutional co-operation in the context of an expanded Europe (EU +25).

Responding to the new challenges will require:

- recognition of the actual and potential value of the marine resource in EU development policies / strategies.
- a partnership approach between Member States and the European Commission in developing and implementing a European Marine Resource Development Strategy.
- recognition of the critical supportive role of marine science and technology in the sustainable development of our shared marine resource.

More specifically, the EurOCEAN 2004 Conference:

• Calls for the recognition of marine science and technology as a clearly identified component of the European Research Area.

- Welcomes the Commission's draft proposals on the structure of the 7th Framework Programme (2007 - 2011) with its six axes: Collaborative Research, Competition in Basic Research, Technology Platforms, Human Resources, Research Infrastructures and Enhanced Coordination.
- Undertakes to advise, through its National Authorities, how these new structures can best be utilized to support marine research and its contribution to sustainable development and economic growth.
- Welcomes the draft DG Environment Marine Strategy with its emphasis on an ecosystem approach to sustainable development as well as the evolution of fishery and security policies.
- Notes that the Marine Science Community must
 - o impress on their respective National Authorities the important contribution that marine science can make to the realisation of the Lisbon, Gothenburg and Barcelona Agendas, such that this message is brought by the Member States to the Council of Ministers and the European Commission.
 - improve its communication skills in explaining the contribution that its work can make to economic and social development.

- o increase its efforts and capabilities to quantify, in social and economic terms, the actual value of maritime industries & marine resources.
- o develop procedures to ensure that data collected under publicly funded schemes is made available to the private sector who in many cases are more able to develop value added products and services.
- Notes that long-term ocean observations, such as are proposed under the GEO and GMES initiatives, are critical if we are to implement an ecosystem-based approach to resource management and that it is the responsibility of the EU <u>AND</u> the Member States to find appropriate ways, including Public-Private Partnerships, to finance the operational aspects of these observations.
- Notes that young researchers are the backbone of research and the life blood of the future. Accordingly, better career structures must be put in place if we are to secure the best researchers in the marine sector.

WHAT MUST WE DO NOW:

Working through our respective National Authorities, to ensure that recognition is taken at Member State and European Community Level of:

• the crucial role of the oceans in climate, carbon cycle and Life on Earth.

- the major contribution maritime industries can make to the achievement of the objectives outlined in the Lisbon Agenda.
- the essential role of marine science and technology in generating the knowledge needed to fuel this economic achievement in harmony with the environment.
- the critical role the European Research Area / 7th Framework Programme must play in supporting world class excellence in marine science & technology.

EurOCEAN 2004 Conference was sponsored by the European Commission, the Marine Institute (Ireland) (www.marine.ie) and the European Science Foundation – Marine Board (www.esf.org/marineboard) as an Irish EU Presidency Event and contribution to the sustainable development of the European Marine Resource.

For further information on the EurOCEAN 2004 Conference see www.eurocean2004.com