Towards a future Maritime Policy for the Union: A European vision for the oceans and seas

Comments from the Marine Biological Association of the UK

The Marine Biological Association is a Learned Society established in 1884. The MBA has over 1000 members and runs The Laboratory in Plymouth where 60 staff work. MBA members have been at the forefront of providing scientific information to support marine environmental protection, management and education and much of the information that underpins decision-making about marine environmental protection has come from work undertaken at The Laboratory.

We have addressed those areas of the consultation in which we have experience and competence and have endeavoured to make our comments under appropriate headings following your numbering below.

1. Introduction
   Should the EU have an integrated maritime policy?

European Seas can be viewed as a connected large-scale ecosystem subject to similar pressures. Therefore, an interpreted view of European Seas is essential from both a scientific and policy perspective. We do feel that marine science underpinning policy needs to be integrated and that issues such as common standards for collecting and maintaining data and allocating responsibilities for developing standards across Europe need to be acknowledged and addressed. We draw attention to the Marine Biodiversity and Ecosystem Function (MarBEF) Network of Excellence which has done much to set such sharing in motion – but that network needs to be sustained, perhaps in a different and ‘for ever’ form to provide confidence of the benefits: the European Marine Research Network may fit in here and should encompass the concept of ‘Observatories’ (The European Marine Observation and Data Network mentioned in backing papers to the consultation) noted later.

2.2 The Importance of the Marine Environment for the Sustainable Use of our Marine Resources

The consultation clearly appreciates the importance of a healthy marine environment and draws especial attention to achieving stock levels that can be fished sustainably. We would suggest adding to sustainable fisheries “whilst maintaining and restoring biodiversity”. It is just being shown scientifically (see, for instance, Science 12 August 2005: Vol. 309. pp. 1036 – 1039; Science 03 November 2006 Vol. 314, p 787-790) how high biodiversity increases resilience of fish stocks and seabed wildlife but, also, how measures need to be agreed across the Union and in relation to fisheries that will provide real protection for important features of biodiversity. Spatial planning, being discussed extensively in the UK, may have an important role to play across Europe with fishing being treated equally with other marine activities such as aggregate extraction, energy generation, recreation and biodiversity conservation.
We support the need to regulate inputs of contaminants to our seas to prevent often unknown consequences and feel that the Water Framework Directive has great promise. It will be important to co-ordinate monitoring of ‘favourable condition’ in SACs with monitoring of ‘quality’ for the Water Framework Directive.

The Maritime Policy may miss the key requirement of ensuring that ‘special features’ are protected and maintained. The Habitats Directive was supposed to have done that but, at the time it was drafted, there was no well-developed habitats classification for the marine environment and threatened features had not been identified with any precision. Much good scientific work has been done within the EU and in fora such as ICES and OSPAR to identify special features and measures needed to protect them. A Maritime Policy needs to address shortcomings in the Habitats Directive to ensure that sensitive and threatened marine habitats are identified for protection in the context of a spatial planning regime for the marine environment.

Measures to reduce the impacts of non-native species are outlined in the Marine Strategy but need international action. The International Maritime Organisation and ICES have both looked in a scientific way at vectors of spread of non-native species including associated diseases and a Maritime Policy needs to address what action, based on scientific advice, can be taken to minimise likely importation of pest species and whether any action can be taken against imported species once they arrive.

2.3 Remaining at the Cutting Edge of Knowledge and Technology

EU countries share the seas around Europe and it makes the most compelling sense that we share research that will help us to understand variability in and health of those seas. Networks of observations stations such as those developed/proposed by EuroGOOS (the Global Ocean Observing System) are important to recognise and support as are coastal observatories at strategic locations around Europe where records are collected, maintained and made available so that large-scale fluctuations in ocean characteristics can be interpreted (The European Marine Observation and Data Network proposed in backing papers to the consultation and cross reference to section 4.1).

A European Marine Research Network should be developed in tandem with a European Marine Observation and Data Network. It is important that scientists, policy makers and other end-users have easy access to both observational data (e.g. descriptions of changes in species distributions or changes in physical and biological parameters over long periods) along with process studies that link to this information (i.e. research into why species are moving or research into what is driving changes in salinity or temperature).

It is especially important that scientists have open access to large datasets as often, as in meteorology and medicine, trends and patterns can only be detected using aggregated data. It is also important that biological data is included for commercial and non-commercial species. We are not certain how the European Research Area (ERA) proposals encompass networking of marine science.

2.4 Innovation under changing circumstances

There is a great opportunity to make more use of the seas as a source of energy and also a need to be innovative with regard to coastal defence. These activities are bound to have an impact on the marine ecosystem – perhaps destroying important habitats, perhaps offering opportunities to develop refugia from fishing or to develop new fisheries. It is important to understand the risks (for instance, solid structures providing stepping stones for the spread of harmful species) but also to make the most of opportunities to enhance biodiversity (for instance by the design of coastal defences to provide the structural complexity that creates high biodiversity). Understanding marine ecosystem functioning and the processes that drive that functioning will be of key importance and science should be directed to provide good advice.
4.1 Data at the Service of Multiple Activities

The development of a European Marine Observation and Data Network should be a key aim of an EU Maritime Policy. The value of long-term time series is now widely recognised along with the fact that they are often inadequately funded (see *Trends in Ecology and Evolution*. Vol.20 No.6 June 2005; *Parliamentary Office of Science and Technology* 234, December 2004). Current initiatives such as MarBEF (Marine Biodiversity and Ecosystem Functioning EU Network of Excellence) which are utilising long-term research programmes for large-scale comparative work should be continued and funding provided to draw on the knowledge and expertise that already exists within these projects to establish observation networks and long-term research programmes. Funding is required for coordination and knowledge transfer from observations that are securely funded but also to support observations that are recognised as important but find it difficult to obtain funding from standard research grants. This is true for many time-series that do not necessarily produce short-term research outputs and are therefore difficult to justify despite the fact that they are the key resource needed to understand impacts such as climate change.

4.3 Making the Most of Financial Support for Coastal Regions

The phrase “collect once, use many times” is relevant here and maritime policy needs to address the access to and pooling of data. Our experience is mainly of marine biological data and we are aware that, much as we would like to hope that there are data sets out there to fill knowledge gaps cheaply, the very large gaps in our knowledge of seabed and water column characteristics will require new, and expensive, work. There is therefore a need for a strategically targeted sampling programme in the European Seas that will help to understand and map biological resources: an essential requirement of spatial planning.

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