

COMMENTS FROM THE NATURAL ENVIRONMENT RESEARCH COUNCIL ON THE DRAFT MARINE BILL OF APRIL 2008

Introduction

1. The Natural Environment Research Council (NERC) is one of the UK's seven Research Councils. We fund and carry out impartial scientific research in the sciences of the environment, and train the next generation of independent environmental scientists. Our mission is to gather and apply knowledge, create understanding and predict the behaviour of the natural environment and its resources, and communicate all aspects of our work.
2. Details of NERC's Research and Collaborative Centres are available at www.nerc.ac.uk. NERC's comments are based on input from the British Geological Survey (BGS), National Oceanography Centre Southampton (NOCS), Plymouth Marine Laboratory (PML), Proudman Oceanographic Laboratory (POL), Scottish Association for Marine Science (SAMS), Sea Mammal Research Unit (SMRU) and Swindon Office staff.

Comments

3. NERC welcomes the publication of the Draft Marine Bill and the opportunity to comment.
4. We agree that the proposed Marine Act 2009 is a major step towards the sustainable management of the marine environment. We hope that time will soon become available for the Draft Bill to be introduced into Parliament.
5. Given the significant developments in marine and maritime legislation at the European level (Annex A of the Policy Paper, pages 59-61), and the continuity within the marine environment, NERC would urge the UK Government to work with the devolved administrations to ensure that as much marine legislation as possible is harmonised.
6. The current Draft Bill could result in considerable challenges regarding the legislative position in waters adjacent to Scotland. Annex D of the Policy Paper states that a Scottish Marine Management Organisation is planned which will lead delivery of the proposals (of the Sustainable Seas Task Force, we assume) within UK territorial waters adjacent to Scotland and where matters are devolved. Hence it will be necessary to at least ensure that the responsibilities of the two MMOs are clear (to outsiders as well as internally), and that if separate legislation applies to overlapping areas it is consistent.
7. The remit of the proposed legislation does not include the UK's Overseas Territories. These contain very large areas of ocean within their 200-

nautical-mile Exclusive Economic Zones (EEZs), and most have limited ability to police their marine estates. Some of the UK's remote territories have important and fragile ecosystems which could particularly benefit from being offered assistance within the legislation.

Part 1: The Marine Management Organisation

8. The Marine Management Organisation (MMO) will have power and influence over a very large area. It is therefore very important that the MMO's policies and planning are based on the best available scientific evidence relating to all relevant marine environments from estuaries to coastal and shelf seas and deep waters. The MMO will therefore require access to high-quality data and expert advice, good links to relevant research organisations, and a budget sufficient to enable it to commission research when required.
9. We note that science and data needs are acknowledged and outlined in paragraphs 3.28 and 3.30-3.34 of the Policy Paper, and that the Scottish Government has also acknowledged these (Page 21). We would strongly encourage the MMO, in following the provisions of paragraph 23 of the Draft Bill, to look not only to Defra (Box 3.1 of the Policy Paper) but also, at least as importantly, to other organisations and institutions, including the NERC science community in research centres and universities, to meet its research needs. Paragraph 23 allows the MMO to undertake or commission research, but the section on Financial Provisions in Part 1 of the Bill makes no reference to designation of a research/commissioning budget, and we are concerned that the levels of resource required to meet the - necessary - aims set out in the Draft Bill are well beyond current expenditure in this area.
10. The MMO should work closely with, and become a member of, the Marine Science Coordination Committee (MSCC) that is superseding the Inter-Agency Committee on Marine Science and Technology. The MSCC is aiming to produce a UK Marine Science Strategy, and the Draft Bill could be explicit about the intention to develop this and the aims behind it. The strategy should help Defra and the MMO define their research needs in the context of research being done by other government departments and agencies and research institutions, including those funded by NERC. It will also help to distinguish between fundamental and applied research and the different contributions each can make to supporting policy development and implementation. The Draft Bill could specify a role for the MMO in helping to define policy requirements for science and identify links between the Marine Science Strategy and policy.
11. Ideally, the MMO will be in an excellent position to coordinate and fund new surveys and make maximum use of marine data to underpin the sustainable development of UK waters. At present the role of marine survey is divided amongst many organisations and the Bill as written seems a missed opportunity to bring together the efforts of research and survey organisations such as BGS, PML, POL, SAMS, the UK

Hydrographic Office (UKHO), the Maritime and Coastguard Agency (MCA), the Environment Agency (EA), the NERC Earth Observation Data Acquisition and Analysis Service (NEODAAS), the fisheries research centres and conservation bodies. There is little mention of the Crown Estate, and their data holdings, or indeed regulation to capture commercial data to assist in developing the underpinning data necessary for successful marine planning. NERC strongly supports application of the principle of “collect once, use many times” where marine (and other environmental) data are concerned. Different uses imply different specific analyses, each adding value to the data but also demanding investment. Consideration must be given to the costs that the MMO might incur obtaining data held by Trading Funds in particular.

12. The Marine Environmental Data Action Group (MEDAG) and the Marine Data Information Partnership (MDIP) merged on 1 April 2008 to form a single organisation, the Marine Environmental Data and Information Network (MEDIN). MEDIN should be a major partner for the proposed MMO. The focus of MEDIN’s activities is to improve access to and management of UK marine environmental data and information for the benefit of the whole marine community. MEDIN will have unified funding arrangements, and NERC will continue to provide administrative support and office support for MEDIN staff at the British Oceanographic Data Centre (BODC) in Liverpool. Current sponsors are Defra, NERC, the Scottish Government and BERR. Both BODC and BGS are designated as marine data archive centres and are ideally placed to provide the underpinning data and contribute to the GIS capability within the MMO.
13. One option to consider is that survey data (scientific, geological, biological and oceanographic) collected during licensed activities be required to be lodged with Data Archive Centres, either confidentially, with time-limited confidentiality, or (freely) available.
14. The Draft Bill has not made use of an opportunity to address deficiencies in the Conservation of Seals Act 1970. We recommend that the Bill legislate for removal of the “netsman’s defence” from that Act, and that it also define the meaning of “vicinity” and “fishing gear” with respect to the licensing of shooting as part of fisheries management.

Part 2: Marine planning

15. The Bill as written has a very strong focus on fisheries and conservation. Large marine renewable projects, oil and gas, underground gas storage and coal gasification are omitted from the MMO responsibilities. It is important that these offshore industries are integrated into the marine spatial planning system, and links between the MMO and BERR should be looked at carefully. For example, although subsurface exploration and development of energy resources and storage can overlap with other marine activities and are not mutually exclusive to marine protected areas, increasing pressure to use marine aggregates for building purposes

(including sea defences) requires that activity as well as marine renewables to be clearly included within the overall planning structure.

16. The development of high-quality, high-resolution maps of sea-bed topography and sea-bed type (marine landscapes) is essential for marine spatial planning. The techniques to derive such maps depend on Lidar in shallow waters, and multi-beam swath bathymetry in deeper waters, complemented by sea-bed sampling. About 10-20% of the UK continental shelf has been mapped by multi-beam bathymetry: BGS and the Joint Nature Conservation Committee, (JNCC) were involved in a pilot, and NOCS and PML have considerable expertise, including in deeper waters of the continental margin and deep sea (that fall within the UK Marine Area). Consideration should be given to how a long-term programme, leading to progressive improvement of high-quality, publicly available sea-bed and habitat maps, can be undertaken to underpin the probably ever-increasing and complex demands of marine spatial planning.
17. The extent of sampling and long-term observing of the UK marine area is unlikely to be enough to cover the whole of it, and the importance of model simulations to fill gaps in under-sampled systems is therefore widely recognised. Models that couple hydrodynamic and ecosystem data (appropriately constrained with available observations) are now available as practical tools, developed for example by the NERC centres POL, PML and NOCS working with the Met Office through the National Centre for Ocean Forecasting. The MMO will need to have the ability to utilise model-derived outputs and products as one element of the multi-layer digital maps required for marine spatial planning.

Part 3: Marine licensing

18. The Bill makes significant progress, but 'one project; one licence' may still not be possible, in particular off Scotland where a project situated more than 12 nautical miles off the coast will fall into the remits of both the UK MMO and the Scottish MMO, which are not guaranteed to have common systems.
19. NERC is concerned that although exemptions to the need for a marine licence are mentioned in paragraph 67 of the Draft Bill, the Bill does not appear to include a section equivalent to *The Deposits in the Sea (Exemptions) Order 1985*, which contains a number of exemptions to the requirement for licences under *Part II of the Food and Environment Protection Act 1985*. Paragraph 23 of the *The Deposits in the Sea (Exemptions) Order 1985* provides for exemption in the case of 'Deposit of any scientific instrument or associated equipment (otherwise than for the purpose of disposal) in connection with scientific experiment or survey.' NERC would strongly recommend retaining the paragraph 23 exemption within the scope of the present Bill.

Part 4: Marine Conservation Zones

20. We strongly endorse the concept of Marine Conservation Zones (MCZs) as outlined in Part 4 of the Draft Bill, subject to their designation being informed by sound scientific advice. Where scientific knowledge is lacking, we support the use of the precautionary principle and the collection of required information to underpin designation.
21. We consider that sufficient data exist for the designation of MCZs to begin, even though further data gathering and ongoing monitoring will be essential. Indeed, delaying designation could put some ecosystems at risk, and temporary measures may be needed.
22. The UK marine area includes deep waters west of Britain which are particularly vulnerable to human activities moving further offshore, for example because of the long regeneration times of deep-water marine organisms. These organisms, like many from UK coastal and shelf waters, could yield high-value medicinal products and other novel materials. Protection of deep waters must be included alongside the protection of coastal and inshore regions where human impacts are more visible. The Darwin Mounds (cold-water coral habitat) were protected through amendment of the Common Fisheries Policy, but this took a long time, during which significant destruction took place. Hence the possible need to consider interim protection in some cases while designation as Marine Conservation Zones is debated.

Part 9: Coastal access

23. We have no comment on the coastal access provisions in the Draft Bill, other than to welcome in principle a move that could encourage the nation to more fully appreciate our island and maritime status, including the beauty of the coast, and that could make it easier for students and researchers to access the coastal zone without fear of being accused of trespass. However, we would be concerned if controversy surrounding this part of the Draft Bill were to delay introduction of the more truly marine elements of the legislation, and wonder for this reason whether it is appropriate to include the coastal access provisions in the Bill.

Schedule 1: The Marine Management Organisation

24. We note that the Board of the MMO is to have a chair and five to eight ordinary members. We support the proposal that at least one of these members should be a scientist, consistent with the Government's long-standing commitment (e.g. beginning with "Safeguarding Our Seas" and through the Green Paper and White Paper stages) to basing policy and regulation in this area on the best scientific evidence available.
25. In this context, we also argue that the MMO should employ at least some staff with scientific expertise so that the Organisation is able to intelligently commission research and understand scientific advice.

26. Serious consideration could be given to the possibility of the MMO appointing an independent and impartial Science Advisory Council (SAC); the SAC's primary purpose would be to provide scientific advice to the MMO on the strategic direction of its science requirements and activities and to periodically review the MMO's use of science.

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June 2008