Dear Sirs,

1. The call for evidence dated 16th May 2008 states that the Committee would like to invite written submissions to assist in its scrutiny of the Marine Bill, and that the areas it will examine include:

- The challenge of assessing whether the legislative framework for marine spatial planning set out is fit for purpose in the absence of the government setting out what the objectives for the planning system are (the Marine Policy Statement).
- How well the regulatory framework proposed will operate, given the wide range of responsibilities involved.
- The proposed powers, structure and regulatory role of the Marine Management Organisation.
- How well the provisions of the Bill will fit with the aims and policies of the devolved assemblies.
- Will the system proposed be sufficient to meet the requirements of the forthcoming European Marine Strategy Directive and achieve 'good environmental status' as defined under the Directive.
- Whether the proposed Marine Spatial Plans will be based on adequate scientific data and provide certainty about where activities and developments will be permitted in a given time frame.
- Whether improvements to the management and enforcement of inshore marine fisheries can deliver required conservation and sustainable development objectives.
- Should there be a statutory requirement on a UK body to ensure that the network of Marine Conservation Zones is created?
- Is there sufficient biological data to identify a potential network of Marine Conservation Zones, especially in offshore areas, and what data will be required to measure their effectiveness? What proportion should be highly protected?
- Should socio-economic criteria as well as scientific criteria be used in identifying areas to be Marine Conservation Zones? What lessons on the designation of protected areas can be learned from existing SACs and Marine Nature Reserves?
- Will the Government’s 3GW renewable energy target create a demand for marine sites that have potential as conservation areas?
- The suitability of including regulatory issues concerning inland waters within the Marine Bill.
- The appropriateness of the measures contained in the draft Bill aimed at creating an English coastal route.

2. The National Oceanography Centre, Southampton (NOCS) is the country’s focus for oceanography and represents an unparalleled investment in marine and earth sciences and technology in the UK. The centre opened in 1995 in a purpose-built, £50 million waterfront campus on the city’s Empress Dock. A collaboration between the Natural Environment Research Council and the University of Southampton, the centre houses around 500 staff and 750 undergraduate and postgraduate students. NOCS is home to the fleet of Royal Research Ships, the National Oceanographic Library and the National Marine Equipment Pool. Our staff include members of the IPCC,
Fellows of the Royal Society, experts who advise HM Government on aspects of sea floor territorial sovereignty, and on maritime policy.

3. We have been involved in consultations on the Marine Bill from the beginning and have a strong interest in helping to establish fit for purpose legislation that will protect and enhance the marine environment, and fit in with the forthcoming European Marine Strategy Directive.

4.0 Below I have inserted comments on each of the Committee’s bulleted points:

4.1 • The challenge of assessing whether the legislative framework for marine spatial planning set out is fit for purpose in the absence of the government setting out what the objectives for the planning system are (the Marine Policy Statement).

4.1.1 It is reasonable to assume that the Marine Policy Statement will be aligned with the Defra target of clean, safe, healthy, productive and biologically diverse ocean and seas, and the European Marine Strategy Directive which requires Member States to develop Marine Strategies that contain a detailed assessment of the state of the environment, a definition of ‘good environmental status’ at regional level and the establishment of clear environmental targets and monitoring systems.

4.1.2 Given the assumption is 4.1.1, the planning system that has been set out does seem to offer a good chance of being fit for purpose. The exclusion of the offshore oil and gas sector would appear to be a major omission, and the legislative framework may need to be adjusted in the light of operational experience.

4.2 • How well the regulatory framework proposed will operate, given the wide range of responsibilities involved.

4.2.1 There will be a steep learning curve for the operators of the proposed regulatory framework, especially as so many areas will be covered. The lack of environmental data and mapping at start-up could create planning bottlenecks, especially if there are no budgets to commission surveys to support planning decisions.

4.2.2 The staff employed to operate the regulatory framework will in some cases be pioneers. This will make the work exciting, but prone to not always having the expected results. It will important that lessons are learned quickly and applied.

4.2.3 An open reporting system that allows a knowledge base to be quickly built up and shared for the arising community would be welcome.

4.2.4 In order for science data to be gathered we are 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.’ NOCS would strongly recommend retaining the paragraph 23 exemption within the scope of the present Bill. Not retaining it would greatly impact the ability of scientists to collect data about the marine environment.

4.3 • The proposed powers, structure and regulatory role of the Marine Management Organisation.

4.3.1 The powers of the MMO are appropriate for the planning and enforcement role that is envisaged.

4.3.2 The reporting line of the MMO is not completely clear.

4.3.3 The regulatory role appears to be comprehensive, except for the exclusion of the offshore oil and gas industry. This sector is such an important part of UK offshore activity, and is likely to be in place for another quarter century – perhaps much longer if the same infrastructure is used for carbon capture and storage purposes. It is hard to see how a marine management organisation that excludes this sector can truly be said to be operating a comprehensive marine spatial planning system.

4.4 • How well the provisions of the Bill will fit with the aims and policies of the devolved assemblies.

4.4.1 The current Marine Bill draft recognises that devolved assemblies have a range of powers regarding adjacent waters, and that the Scottish Government in particular has an aspiration to have leadership where Scottish waters are concerned.

4.4.2 It will be important that there is a strong interface between the MMO and the equivalent responsible bodies in Scotland, Wales and Northern Ireland to ensure a coherent approach to the management of all inshore and offshore waters adjacent to the UK. The committee will no doubt wish to scrutinise whether this is likely to be the case.

4.5 • Will the system proposed be sufficient to meet the requirements of the forthcoming European Marine Strategy Directive and achieve 'good environmental status' as defined under the Directive.

4.5.1 The UK Marine Bill is intended to deliver the objective of clean, safe, healthy, productive and biologically diverse ocean and seas. The European Marine Strategy Directive requires Member States to develop Marine Strategies that contain a detailed assessment of the state of the environment, a definition of ‘good environmental status’ at regional level and the establishment of clear environmental targets and monitoring programmes. The system proposed for the UK should be able to deliver a detailed assessment of the state of the environment. We will have to work with neighbouring Member States within our maritime region to agree on the definition of ‘good environmental status’ and to agree the environmental targets and monitoring
programmes. The draft Bill does not include provision for this sort of international cooperation but there appears to be a sound foundation for enabling cooperation within the timeframe required by the European Marine Strategy Directive.

4.5.2 The European Marine Strategy Directive requires Member States to deliver the Marine Strategy. This suggests that in the UK (the State) there will need to be cooperation between the English, Scottish, Welsh and Northern Irish marine management organisations (or their equivalents) to ensure that an agreed Marine Strategy can be defined, which will then need to be shared with other nations (France, Ireland etc.) who share the relevant Regional Sea. It is not clear what mechanisms are proposed to achieve this.

4.6 • Whether the proposed Marine Spatial Plans will be based on adequate scientific data and provide certainty about where activities and developments will be permitted in a given time frame.

4.6.1 There are major gaps in the availability of high quality scientific data for large parts of the UK continental shelf. Much of the existing data is held by trading funds such as the UK Hydrographic Office. Their present funding models would necessitate charging to release the data to the MMO(s). Consequently the issue is whether the MMO will be sufficiently resourced to procure such data and information, or whether other arrangements to overcome this potentially significant barrier are envisaged.

4.6.2 Sea floor surveys have been carried out since the 1970s in support of the offshore hydrocarbon industry but high resolution data is restricted to small areas around oil/gas exploration and production facilities, and a small swath either side of the routes used for pipelines and cables.

4.6.3 The Royal Navy and NATO allies will have highly detailed topographic maps for the areas where they operate submarines, in particular the west coast of Scotland, but these are not in the public domain.

4.6.4 At present there are no fully comprehensive, electronic, multi-layer, multi-user sea floor use maps of the whole UK marine estate. To produce one would be a substantial and expensive undertaking, but would provide an essential and welcome resource for the whole marine and maritime community. It is difficult to see how an ever more complex marine spatial planning system can avoid becoming sub-optimal without a vision to progressively develop and enhance such a resource over time.

4.6.5 The MMO should be able to procure research and development, and draw advice from the widest possible range of sources.

4.7 • Whether improvements to the management and enforcement of inshore marine fisheries can deliver required conservation and sustainable development objectives.

No input for this question
4.8 • Should there be a statutory requirement on a UK body to ensure that the network of Marine Conservation Zones is created?

4.8.1 On balance yes, in order to ensure that the network is created, and that there is an organisation able to champion the process.

4.9 • Is there sufficient biological data to identify a potential network of Marine Conservation Zones, especially in offshore areas, and what data will be required to measure their effectiveness? What proportion should be highly protected?

4.9.1 There is not sufficient biological data to identify a potential network with complete certainty, there has not been a comprehensive biological survey of the sea floor of the entire UK shelf seas.

4.9.2 Of the data that has been gathered, not all is in the public domain. In offshore areas the quality of some of the mapping is high but the area of coverage is small.

4.9.3 There is enough biological data to inform the process of identifying a potential network to a limited extent – i.e. a start can be made - but much more data is needed.

4.9.4 Without the required data, it is highly possible that interested parties could mount legal challenges against the designation of a certain area as a Marine Conservation Zone.

4.9.5 The data required to measure their effectiveness would be an initial multi-beam bathymetric survey (to obtain a detailed 3d view of the seafloor, identify rocky outcrops, wreckage, human structures on the sea floor etc.) and a before-and-after survey of the Marine Conservation Zone, using seafloor images, fish catch statistics, and ecosystem assessment. To do this rapidly, at moderate cost, and to a high enough quality standard for potentially a large number of sites requires a quick turnaround operational assessment system that does not currently exist in the UK.

4.9.6 A typical figure of around 20-30% of UK Shelf seas area is favoured by the biologists we have spoken to, this could provide a sufficient density to enable areas under pressure to be repopulated from adjacent areas. We understand that the Royal Commission on Environmental Pollution suggested that 30% of our seas should be placed under Highly Protected Marine Reserve status.

4.10 • Should socio-economic criteria as well as scientific criteria be used in identifying areas to be Marine Conservation Zones? What lessons on the designation of protected areas can be learned from existing SACs and Marine Nature Reserves?

4.10.1 Humans are part of the ecosystem so socio-economic criteria should be combined with scientific criteria in identifying areas to be marine conservation zones. For example, small scale rod and line fishing is very much less damaging to the marine ecosystem than netting and trawling and it might be possible to allow
economic activity such as rod and line fishing over an area that is a marine conservation zone.

4.10.2 Humans can interact in beneficial as well as harmful ways with their local marine environment, and a feeling of ownership for a particular area enhances the protection for that area.

4.10.3 One lesson that can be taken on board from existing protection is that designation must be rapid, and enforced. In the case of the Darwin Mounds (a cold-water lophelia coral reef west of Shetland) protected status was sought, but by the time the protection was in place trawlers had largely destroyed the features that were meant to be protected. This happened because it is possible that the fishers knew that the area was likely to be closed to them, so there was an incentive for them to maximise catch before closure. This suggests that temporary, enforceable bans might be required to prevent destruction of valuable habitat whilst the designation process is underway.

4.11 • Will the Government's 3GW renewable energy target create a demand for marine sites that have potential as conservation areas?

4.11.1 Renewable offshore energy and conservation areas are not necessarily incompatible - it is possible that offshore renewable energy schemes could actually enhance local biodiversity, by providing safe havens for species that might otherwise be trawled, dredged, or otherwise disturbed and by providing a suitable seafloor habitat around the generator structures for marine animals to colonise.

4.11.2 It would be difficult to avoid habitat damage during the construction phase, and marine noise from activities such as installing pilings, or low frequency noise from the generators being transmitted into the marine habitat, might have a detrimental affect on some species. However the benefit to the ecosystem of reduced greenhouse emissions – avoiding ocean acidification, rising temperatures, more extreme weather events etc., should also be taken into account.

4.11.3 Aquaculture is an industry that can share sea-space with offshore renewable energy, (e.g. fish farm cages inside the footprint of an offshore wind farm) and work would be needed to see if this would conflict with the preservation of natural ecosystems.

4.12 • The suitability of including regulatory issues concerning inland waters within the Marine Bill.

4.12.1 If regulatory issues concerning inland waters were to be included in the Marine Bill, in a similar manner to the incorporation of coastal access measures, it could provide an opportunity to clarify and update regulations concerning freedom of access to inland waters for recreational use, navigation rights and scientific data gathering.

4.13 • The appropriateness of the measures contained in the draft Bill aimed at creating an English coastal route.
4.13.1 The Marine Bill offers a means to introduce coastal access provision within the current Parliament, and so is to be welcomed.

5. We welcome the opportunity to provide input to the Committee, and can provide greater detail and background information if required.

Stephen Hall CMarSci FIMarEST FSUT June 2008
sph@noc.soton.ac.uk
www.noc.soton.ac.uk