

**SUSTAINABLE SEAS FOR ALL: PROPOSALS
FOR SCOTLAND'S FIRST MARINE BILL:
a response to the Scottish Government**

Summary

- *There is a strong case for a new legislative framework for the regulation, conservation, exploitation and management of the marine environment around the Scottish coast that provides for further devolution of these responsibilities to the Scottish government. This responsibility should extend to 200 nm beyond the coastline.*
- *At the same time it must be recognised that nature does not recognise national or administrative boundaries, and that the devolution of responsibility to the Scottish Government must be associated with effective mechanisms to ensure the broadest collaborative approach to conservation and management in UK waters and with other European administrations.*
- *The challenge for a new regime will be to create effective mechanisms for long-term marine protection and conservation whilst allowing for responsible use of marine resources in the shorter term. We are concerned that the Government's consultation has an undue emphasis on short-term exploitation, and will look to see that this balance is corrected in any forthcoming legislation and regulation.*
- *The RSE strongly supports the creation of Marine Scotland, and also the Marine Science Scotland (MSS) "pooling" initiative which has the potential to enhance the excellence of the Scottish marine science base and provide vital access to the underpinning science that Marine Scotland will need. If it is to do this effectively, it must broaden its base beyond its current biological theme to include physical studies and coastal and offshore engineering. We also advocate the transfer of the marine components of SNH to Marine Scotland.*
- *We do not support the view that Marine Scotland should be a part of the Scottish Government, but rather it should be developed as a non-departmental public body that will be more readily be able to forge the external relationships that will be required.*
- *The relationship between the Crown Estate and the proposed marine management organizations at UK and Scottish levels should be reviewed, and it should be made clear how the revenues generated by the Crown Estate can be used to support marine policy objectives.*
- *If the new regime is to be effective and efficient, it is important that the plethora of bodies responsible for management and those undertaking research are brought together in more coherent groupings so that both short-term exploitation and long term sustainable management, and the science required to underpin them, provide a comprehensible and accessible frame for those wishing to use the marine environment.*
- *Scottish Ministers should concentrate on the steps through which the key process of developing an evolving database and related monitoring, and the development of a Scottish Marine Observatory can be achieved, rather than second-guessing technical issues of delivery, such as the choice of a geographical information system (GIS).*

- 1 The Royal Society of Edinburgh (RSE), Scotland's National Academy, welcomes the Scottish Government's consultation on *Sustainable Seas for All* and the opportunity afforded to comment on the proposals for managing the marine environment around Scotland. The following response to the consultation has been prepared by a RSE expert working group with considerable expertise across the marine environment spectrum. Because of the breadth of experience and excellence represented by its Fellowship in issues associated with the marine realm, we believe that the RSE is well placed to play an important role in marshalling scientific, economic, social and planning expertise as both the Scottish Government and the UK Government develop the marine agenda. The RSE recently responded to the Defra consultation on the Draft Marine Bill and as many of the issues, policies and measures proposed by the Scottish Government reflect but do not necessarily replicate the UK approach, we would strongly urge the Scottish Government to consider our response to Defra. The RSE working group would be pleased to discuss further with the Scottish Government any of the comments or recommendations that have been made in these responses.
- 2 The Scottish Government is to be commended on the production of a concise, clear and highly readable document. A strong case for a new legislative approach to marine management has been made. If one accepts the premises that the current system of management is inadequate, that conflict resolution is becoming more difficult and that it is unlikely to be fit for purpose as additional demands are placed on coastal and marine environments, this is a thorough, well-written, forward-looking and reasonably comprehensive set of proposals. Its format for consultation and the way it describes and sets out the key issues seem to reflect the consensus position of more than a decade of effort and consultation and is a good example of a process of informed policy development, including participation of an appropriate range of interests, expertise and knowledge in its formulation and development.
- 3 We recognise that *Sustainable Seas for All* has to be read in conjunction with a body of prior reports as listed in its Annex E, notably *Scotland's Seas: Towards Understanding their State*, the Scottish Sustainable Marine Environment Initiative (SSMEI), now concluding Phase II, and the Advisory Group on Marine and Coastal Strategy (AGMACS).
- 4 It is important that there be efficient and effective enabling mechanisms to facilitate both the long-term protection and conservation of the marine environment and responsible use of the marine environment and its resources set within the wider context of sustainability. Sustainability must mean economic, environmental and social sustainability and these aspects should be treated equally. Although not explicitly presented in the consultation proposals we recognise that there is a potential for an overarching basis for greater optimisation of the common resources in the marine environment. By this we mean an optimisation in terms of the maintenance of environmental health on the one side and human benefit on the other.
- 5 We would also strongly advocate, when dealing with natural systems that do not recognise national, regional or administrative boundaries, that there always is a presumption in favour of the broadest, collaborative approaches to science, monitoring, sustainability and exploitation, and that separate regimes are not created merely because they lie in Scottish waters. We should recognise and plan for integration and collaboration at Scottish, UK, European and international levels wherever that is the optimal approach, whilst recognising the importance of the local and regional and involving them in planning processes.
- 6 We are concerned that there is an undue emphasis towards the short term and in this regard there is a danger that fundamental science could become secondary to applied aspects. We strongly support the Marine Science Scotland (MSS) pooling initiative. It could make an important contribution in providing robust scientific information to the regional level. Although we recognise that MSS does include cross-cutting themes it should, if it is to have such a dual purpose of enhancing the Scottish science base, and providing access to scientific expertise needed by Marine Scotland, be broadened beyond its current biological basis to recognise non-biological aspects of marine science that are carried out in Scotland; an example of this is the omission of coastal or offshore engineering in the proposals. The capacity within Scotland to provide essential skilled services relating to coastal and offshore engineering is scarcely mentioned. We firmly believe that the pooling framework of MSS be re-visited from this perspective to ensure that it is thoroughly cross-disciplinary.

- 7 One should not assume that the Scottish seas and coastal waters are laden with intractable conflicts, hazards and potential environmental catastrophes. It could be helpful to characterise the whole of the continental shelf through a “zoning” process: there would be some areas where use of the zone would need to be prescriptive and others where a more liberal and multi-user approach is possible. Such zones would have to include the whole water column as well as the sea bed.
- 8 Boundaries and zones within the 3-tier structure need to be clarified. In this context it is important that adequate consideration be given to the UK and international levels as well as to the Scotland level. Furthermore, it is important to clarify how the regulatory powers and responsibilities allocated at the different levels are congruent with the overall decision-making process.
- 9 It is worth noting that firths and sea lochs have their own distinctive Scottish features, but are presently ruled out for consideration as whole systems by the way in which the habitats listed in the EC Habitats Directive have been officially interpreted in the UK; this is despite the fact that they are recognised to be fjordic systems and as such should be defined under the general heading of estuaries, one of the habitats listed in the Directive. This omission should be rectified as soon as the Scottish Marine Bill receives parliamentary approval, in accordance with the aspirations behind the creation of marine ecosystem objectives.
- 10 In the context of “joined-up government”, the role of The Crown Estate in the management of the sea bed must be carefully considered in the proposals, otherwise there could be conflict between marine management organisations at both the UK and Scotland levels on the one hand, and The Crown Estate on the other. While The Crown Estate could be considered as just another stakeholder, this does not reflect the real role of The Crown Estate as a nationwide authority controlling the sea bed.
- 11 There are additional issues concerning the role of The Crown Estate as a collector of revenues for the use of the sea bed. Currently, there is little connection between the use made of these revenues (because they are simply returned to the Treasury) and benefits accrued to the users of the marine environment and to marine management. In essence, the revenues generated from The Crown Estate amount to taxation on use of the sea bed. We urge a review of the relationship between The Crown Estate and the proposed marine management organisations at UK and Scotland levels. It should be quite clear how the revenues generated by The Crown Estate are to be used to support policy objectives within the marine policy statements.
- 12 In the following response only those questions where the RSE wishes to express an opinion have been addressed.
- Q1 Do you agree that change is needed to the management and legislative framework for managing Scotland’s seas?**
- 13 As indicated above, we recognise that the current system of management is inadequate. However, it would be worthwhile to set out in more explicit terms where there is a need to identify the scale of the problems in the marine environment. Here we describe examples of problems that cannot be adequately dealt with by the existing sectoral agreements and therefore necessitate change to the management of Scotland’s seas.
- 14 There are serious problems in relation to the boundaries between different types of marine areas and it is necessary to distinguish between the coastal zone and the marine zone.
- 15 We are also aware of procedural problems, particularly in terms of excessive bureaucracy. We recognise that there are many organisations operating in the marine environment that have overlapping responsibilities. This can result in regulatory confusion at the infrastructural and stakeholder levels.
- 16 Added to this, there are a number of disparate bodies involved in the marine science base which results in a piecemeal approach to marine science and fragmentation of research. In order to create a more joined-up approach we must ensure that marine science is carried out through a network of institutes located throughout Scotland, working together and sharing large capital facilities.
- 17 Scotland is the repository of a disproportionate amount of marine knowledge, and the seas around Scotland have been the site of fundamental studies in marine biology that have become classics in the history of marine science. Therefore it is important when considering Scotland’s marine responsibilities that close attention is paid to the UK level as well as to obligations emanating from Europe and internationally. Scotland must be outward looking and there are substantial benefits to be gained by ensuring a collaborative approach and open dialogue in developing the respective marine agendas. This would not preclude Scotland, where it has responsibility to do so, from pursuing different priorities from the UK where it is deemed necessary.

- Q4 Scottish Ministers believe there are strong practical reasons for further discussions with the UK Government on the allocation of responsibilities around the seas of Scotland. Do you agree with this approach?**
- 18 The proposed Scottish Marine Bill should take the opportunity to recognise the natural and functional continuum from the land to the limits of national territorial waters. This would be consistent with the ecosystem approach recommended in the document, which is not only appropriate from a scientific point of view but also takes social and economic aspects into account and aims at sustainability.
- 19 Given the rapid pace at which the marine agenda is developing at both the Scottish and UK levels, there is an urgent need for a resolution by the UK Government as to whether there is to be further devolution of marine responsibilities to Scotland. If these issues are not resolved soon, we are in great danger of implementing legislation that is unworkable, at least for the region around Scotland. The marine ecological system, as well as many stakeholders who use the marine environment, see no natural boundary at 12nm. In its response to the UK Marine Bill the RSE remarked that the most parsimonious solution would be to extend devolved responsibility for marine management to 200nm.
- Q5 Do you agree with the overall 3-tier approach to marine planning in Scotland?**
- 20 The terrestrial planning system operates successfully on a 3-tier basis and there is no reason why it should not work well for marine planning.
- Q10 Do you agree with the overall approach and function for Scottish Marine Regions?**
- Q12 Do you agree that Scottish Ministers should place a duty on Scottish Marine Regions to adopt the eight principles defining integrated coastal zone management?**
- 21 In principle, regionalisation of coastal management appears to be sensible and a component of any spatially explicit management system. However, there are concerns whether the substantial additional administrative burdens associated with regional management of the coastal zone will be justified by the resulting gains. Regional authorities have an important role to play but lack of expertise at the regional level is likely to be a critical issue. As an exemplar, it may be appropriate to obtain input from SNH, which tried operating with a number of Area Boards but this has since been revised.
- 22 There is likely to be a need for Scotland-wide management on specific issues that would lie within the remit of the Scottish Marine Regions. The powers and responsibilities of the marine regions will need to be defined very carefully and the general size and scope envisaged for the Scottish Marine Regions is unclear. The administrative relationship between the coastal zone and the marine zone probably needs further consideration, especially as most managerial pressures and potential problems, with the exception of fishing and oil and gas exploitation, are concentrated at the coast but may originate offshore. There is also a question about where coastal zone management responsibilities end and where the offshore zone begins. There may be a need to concentrate more effort in the coastal zone which is also the critical zone for multiple impacts – both physical and legislative.
- Q14 Does licensing remain an effective method of delivering both certainty for investment purposes, and protection for the marine environment?**
- Q17 The proposed Marine Scotland should have general responsibility for the delivery of the marine licensing system. Do you agree?**
- 23 Yes – licensing is important, but this must be clearly separated from the science and monitoring necessary to inform and ensure compliance. The proposals on licensing should be carefully tested against future development of the proposed Marine Scotland. Without reference to some form of independent arbiter, such licenses may become the primary revenue stream for Marine Scotland and so distort its protection and conservation responsibilities. What safeguards will be built in, and how will the originators of the data used for such decisions be acknowledged?
- 24 It is also not clear from the proposals where the freshwater and marine boundaries lie in relation to each other. This is an area of many cross-cutting issues and a forum with clear responsibilities may be the most appropriate way to address such matters.
- Q15 Scottish Ministers propose to licence all new forms of dredging (i.e. those forms that agitate the sea bed). Do you agree?**
- 25 It would be important to licence dredging. There is already a requirement to control dredging in environmentally sensitive areas.

Q20 Do you agree with the proposed approach to consultation, involving local stakeholders?

26 The involvement of local communities and interest groups is crucial to ensure the transparency and legitimacy of decision making. A deliberative approach to public engagement is necessary.

Q27 Do you agree that our system of marine nature conservation should be based on the three pillar approach?

27 We accept the three pillar approach but argue that pillar II needs to be extended to 'species and habitat conservation'. The EC Habitats Directive lists both species and habitats in the marine environment that should be protected. Protection is predominantly by site protection, but there is a difference between habitats and sites. Most of the proposed marine sites (the SACs) contain a number of different habitats, and at times some of the listed species.

Q28 Please provide your views or comments on the application of Marine Ecosystem Objectives for marine nature conservation.

28 Objectives are important in marine nature conservation. They are a statement of intent in what would otherwise be an ill-defined set of criteria for conservation. Unlike exploitative use of the marine environment in which there can be clear objectives set in terms of wealth creation, conservation objectives are more difficult to define. However, care must be taken to set them in the knowledge of normal ecosystem variability, and they may be pointless unless there is integrated management across the whole of the Scottish marine region, i.e. to 200 nm.

Q29 Do you agree it would be worthwhile to have a biodiversity duty in the offshore area around Scotland?

29 Yes – the 12 nm limit does not reflect biogeographic zoning and distribution. Some key habitats (offshore reefs and deep water corals) lie beyond the 12 nm limit.

Q31 Do you agree with the proposals for a science-based review of whether new marine species need to be added to the existing list of protected species?

30 Yes, this is important. Many species are highly mobile within seas where multiple jurisdiction applies, as such it is important to designate species at the European and international levels.

Q37 Do you have any views or comments on whether a single integrated power should be used to deliver these proposals?

31 This is essential.

Q38 Do you agree with the proposals for how sites will be managed, including the site by site based approach and the overall context of sustainable development?

32 This is the ideal approach and the RSE agrees that it should be pursued if possible. However, it will be administratively burdensome and there has to be a question about whether it can be made to work in practice without a substantial increase in resources. Regulation and policing of site use may be almost impossible in some cases.

Q39 Please provide us with your views on the role that a wider planning system should have in the identification of Marine Protected Areas.

33 There should be very strong support for Scottish Ministers to have the power to introduce Conservation Orders. It is not always possible to predict all situations in which protection of sites or species may be required and these Orders provide legislative flexibility. They have worked well within the context of the Seals Act.

34 In addition, it is essential for Scottish Ministers to have the power to create MPAs. This is required for the planning system to be effective.

35 It is regrettable that so few Marine Nature Reserves (none in Scotland) have been designated in the UK, and that implementation of the EC Habitats Directive has been tardy. Given the lack of progress with previous attempts to create such areas around the UK, perhaps the experiences of other countries that have successfully designated such areas (New Zealand, for example) could be considered. In Scotland, the AGMACS considered a broader designation of Marine National Parks reflecting the needs of a greater number of stakeholders linked to conservation and monitoring objectives. This would allow for the effects of climate change as well as human intervention to be considered. National Parks should be contained within, and not be alternative to, a broad planning strategy and need to be seen as a tool that will achieve better management of Scotland's marine assets as a whole. The current proposals would do well to consider the integrated nature of marine conservation in the face of multiple uses and threats at the ecosystem level.

Q42 How can we enhance the contribution which the wild marine environment makes to Scotland's economy?

- 36** Further to the last question we feel that insufficient attention has been paid in the past to the integrated management of marine areas which provide a wide range of “goods and services” for the benefit of both local and non-local populations. The concept of a Marine National Park provides the means to achieve a degree of integrated management on a regional scale.
- 37** Marine National Parks in Scotland should to a significant degree comprise working landscapes, fashioned over time by natural processes and the activity of local populations, and they can be expected to include communities in which a significant number of employed persons will be in jobs related directly or indirectly to the exploitation of natural resources, including fishing.
- 38** The main challenge for a National Park Authority should be to balance potentially conflicting demands in the management of three interrelated sets of resources:
- the conservation of the marine environment, including its habitats and ecosystems;
 - maintaining access to basic natural resources such as fisheries;
 - enhancing public enjoyment of the core resources of the tourism and recreation sectors, which include marine biodiversity, high quality marine and coastal landscapes, and open space.
- 39** The issue of public access and amenity raises some particular problems. Public access to coastlines is a major issue, but public access to the sea is not the problem that it often can be on land. There may be particular problems with the promotion of, and provision for, the public's enjoyment of a National Park's assets through tourism and outdoor recreation. The ‘successful’ promotion of a Marine National Park (measured in terms of increasing visitor numbers) brings with it the risk of eroding the very resources on which the attractions of the National Park are based. Moreover, visitor pressure may also impact on sensitive marine ecosystems and disrupt fishing activities. Assessing the ‘carrying capacity’ of the marine environment and managing visitor pressure may prove difficult especially where conventional control measures (e.g. the provision and withdrawal of public access, the diversion of visitors to more robust alternative locations through the provision of tourist facilities) are inappropriate. An advantage which some potential Scottish Marine National Parks

may enjoy is that their comparative remoteness from major centres of population will act as a natural brake on visitor numbers, especially in the case of day visitors.

- 40** During its *Inquiry into the Future of Scotland's Hills and Islands* the RSE Committee of Inquiry received a number of representations in favour of Coastal and Marine National Parks designation. The Committee was disappointed that such proposals by the previous Scottish Executive have been set aside by the present Scottish Government.

Q43 Do you have any views or comments on the options for improving conservation measures for seals?

- 41** These changes are to be welcomed and are long overdue. Aligning legislation for the management of seals in Scotland with the EC Habitats Directive is important and these changes should achieve that objective. The principle of equal treatment across all stakeholders is important and, following from this, the removal of the “Netsmen's Defence”, defining larger calibre weapons for controlling seals, and closely defining the meaning of “vicinity” are essential steps.
- 42** In general, we support the option to extend protection year-round and to allow management control only under licence. The current system of “open” and “close” seasons is potentially subject to abuse and it is difficult to see how Scottish Ministers could enforce the requirement to report any management actions without a system of year-round permits.

Q44 Do you agree that Scottish Ministers should develop a Marine Science Strategy to focus marine research effort, integrate socio-economic considerations, and to create a framework for wider stakeholder input?

- 43** The recognition of the important role of research within the proposals is to be welcomed, although there is not much reference to broader multinational aspects. It is vital to realise that climate change, weather patterns, the physical and ecological characteristics of the seas, including the behaviour of commercial fish populations, are not specific to any single country. That is why research in these areas is multinational.
- 44** One of the ways in which marine science is funded in the UK is by Research Councils. It is **crucially** important that Scotland should not detach itself from the UK system. Everyone involved in marine science at the Scottish level can and should draw on the benefits of UK science and wherever appropriate should continue to be active in the activities of UK Research Councils; this will help to maintain the critical mass required to fund modern scientific research.

- 45 The RSE agrees strongly with the need for a Marine Science Strategy. Scotland has a strong marine science community, but understandably its efforts may not always be directed explicitly toward the achievement of national goals in marine science. The role of national government should be to define strategic objectives, but it should be for bodies independent of government to take the primary role in driving the strategy. An example of this is the key role that the US National Academies play by working outside the framework of government to ensure independent advice on matters of science.
- 46 The RSE is disappointed that the chapter on the science base is so short (albeit backed-up by the substantial report *Scotland's Seas*). There is little mention of the need to support fundamental sciences, including the understanding of processes and mechanisms, in addition to the creation of an inventory of our seas and monitoring change as mentioned in the document. Examples of omission include sea-bed geology and sedimentation processes, (the latter are crucial to coastal management for erosion and flood protection). Although included in *Scotland's Seas*, physical, chemical and ocean/atmospheric factors in marine and coastal science are also under-emphasised. The focus on mapping the sea bed largely ignores the very important dynamics of the water column which are at least as important as the sea bed for the future wealth and security of Scotland. Moreover, the emphasis on the ecosystem-based approach to achieving "Sustainable Seas for All", which we fully endorse, makes it essential that the structure, function and boundaries of these ecosystems – i.e. their physical and biological oceanography – be well understood and their integrity consistently monitored over time.
- 47 A Marine Science Strategy could be used as the mechanism that links Marine Scotland to Marine Science Scotland. It seems essential that these two structures, which have emerged separately but from the same fundamental requirements (i.e. for better integrated research on and management of the marine environment across Scotland), should be linked together in a manner that ensures they work together. Marine science depends on expensive infrastructure. It would be timely to review the infrastructural provision for marine science in Scotland, across the whole range of institutions in which it is carried out, to ensure the most effective use of resources and, as far as possible, through efficient provision, to ensure that marine science in Scotland can keep up with the state of the art.
- 48 In adopting the ecosystem approach, it is essential that both marine policy and management prescriptions are based on the best available evidence which can only come from the research undertaken by natural and social scientists.
- 49 A general point that has been overlooked is the actual and potential capacity within Scotland to provide essential skilled services relating to marine exploitation and management. This might include fisheries management or coastal and offshore engineering which are transferable skills that could lead to global revenue streams for specialised, highly skilled Scottish companies in the future.
- Q45 Do you have views on how to integrate scientific evidence with stakeholder and local knowledge?**
- 50 Marine Scotland and Marine Science Scotland need to develop effective methods of communication. This needs to be two-way and probably needs to operate through a variety of mechanisms including stakeholder forums, targeted literature and liaison officers (this has worked well to deal with seal-salmon conflicts). Employing individuals from the stakeholder communities in the liaison roles, after appropriate training, may be most effective, and it may require offering scholarships or courses to deliver training.
- 51 The RSE sees the delivery of scientific evidence as something that is affected as strongly by the institutional and governance structures as it is by entrepreneurial approaches by individual scientists and stakeholders. It is essential that Marine Scotland should be established with the objective of acting as an enabling mechanism that will break down barriers and promote communication between different groups who often talk in very different terms, but who often have much to teach one another. As outlined in its response to Q56, the RSE does not believe this is a role to which government is well suited and it is one reason why Marine Scotland should not be a part of the Scottish Government.
- Q46 What do you think are the potential priorities for further work?**
- 52 In the longer term, we need to ensure that we understand the marine ecosystem in order that we can optimise use and stewardship of the common resources of the marine environment. At present we do not know the geology of the sea-bed very well. There are now techniques such as multi-beam bathymetry which are cheaper for mapping the sea-bed in greater detail than hitherto. A national sea-bed mapping programme should be initiated to provide a sound scientific basis for planning.

- 53 We strongly support the efforts to collate current information and knowledge in a manner that makes it useful for management, but we also point out the need for Scottish Ministers to use the Marine Bill to guide the activities of other government bodies that support scientific research in order to ensure that their activities are aligned with the broader needs of government and stakeholders. This requires a strong interaction between Marine Scotland and those other government bodies to ensure common understanding of respective priorities, so that Ministers can agree common goals and facilitate joined-up government. It is important that this effort is adequately resourced because the benefits of building on, and guiding, expenditure on science in other areas of government would result in very rapid payback in terms of the quality and quantity of science delivered in support of policy and management.
- 54 As part of this we need to ensure that data already collected or about to be collected is used effectively and made available across industry and disciplines. It should be noted that the UK is setting up Data Archive Centres where such data can be stored and made readily available.
- Q47 Scottish Ministers propose that the strategic role for monitoring and assessment of Scotland's seas lies with Marine Scotland, do you agree?**
- 55 The RSE agrees that in order to ensure that the science underpins monitoring, an independent review of the monitoring requirement is needed to ensure that it is 'fit for purpose', but any effort by Marine Scotland needs to be linked strongly with the parts of the marine science community that will lie outside Marine Scotland. Arguably this is where the bulk of the expertise, knowledge and, in some sectors, data will lie. Again, this is a function of Marine Scotland that needs to be linked with Marine Science Scotland.
- Q48 Scottish Ministers propose to instruct Marine Scotland to take forward the development of GIS as a matter of priority. Do you agree?**
- 56 This is a slightly odd objective in the context of the proposals. GIS is simply a tool to help management and to focus only on GIS seems to be a detail that is out of place within this document. It would be much better for Scottish Ministers to instruct Marine Scotland to develop the concept of a Scottish Marine Observatory which would collect and collate data about the marine system and may use GIS to display those data.
- 57 We recommend that Scottish Ministers should focus on the strategic issue rather than the specific delivery mechanism. Technological advances may render GIS obsolete in due course but the legislation needs to recognise the principles of data accessibility rather than the mechanism. The proposal made for a Scottish Marine Observatory (which is not new) would focus attention upon the issue of data and information in a manner that simply creating a GIS would not. Moreover GIS needs to be used within a broader mechanism for information delivery and is not an end in itself.
- 58 Creation of a Scottish Marine Observatory might also ensure that there is sufficient emphasis on data management within Marine Scotland to argue for enough resources to do the job properly. Scottish Ministers should not underestimate the massive job there is to be done in making present data about the marine environment accessible and useful to non-specialist managers.
- Q53 Do you have any views on the role that FRS should take?**
- 59 The conflicting roles of FRS will continue to be a problem. Professional scientists cannot (and should not) be asked to deal with conflicts of interest in the way that currently exists within FRS. On the one hand, they need to be seen to be completely independent and to be able to speak freely and express their own views freely about their interpretation of data. On the other they need to be able to advise Ministers and speak for the government line and to support this position. It has long been clear that FRS cannot occupy both these positions simultaneously. Much has been done to defuse past conflicts caused by the perception that the FRS science was supporting only the side of the argument being pushed by government but these problems could re-emerge easily when conflicts arise and difficult decisions need to be made.
- 60 The RSE does not consider that the current proposals go far enough to insulate FRS from these difficulties. In particular, the currently favoured position that involves placing Marine Scotland as part of Government simply exacerbates this problem. FRS will be seen to be even less independent under this arrangement than it is now. There may be mechanisms to balance this by exploiting the independence of Marine Science Scotland, but Ministers need to understand the primacy of scientific independence when dealing with an organisation like FRS. The position of the Freshwater Fisheries Laboratory is unclear.

Q54 What are your views on the creation of Marine Scotland and the proposed range of functions it should deliver?

Q56 Ministers believe Marine Scotland should form part of the Scottish Government with appropriate safeguards for science and the appeals process.

61 We understand the desire of the Scottish Government to simplify public services with the intention of improving integration and achieving best value for public money in research in the cognate areas of rural, agricultural, terrestrial land-use and marine environmental management. However, in its response *On Delivering More Effective Government: Proposed Government Institute/Commission Mergers*, the RSE stated that it was important first to review the principles that should underlie reorganisation rather than to move immediately to consider possible re-combinations and mergers between existing bodies. To do otherwise would miss an opportunity.

62 The RSE strongly supports the creation of Marine Scotland. Transfer of the marine components of SNH to Marine Scotland should be considered because otherwise there will be inconsistencies in the balance between conservation and wealth creation interests. It is also unclear what safeguards for science will be available in the current proposals. There may be a convenient solution if Marine Scotland were created as a Non-departmental Public Body. Marine Scotland would then have the capacity to develop with the support of a Board with broad stakeholder representation. Thus we do not support the view that Marine Scotland should be a part of the Scottish Government. See also the response to Q45 above.

63 The name “Marine Scotland” is also worthy of retention. Losing this as a result of becoming part of the Scottish Government would be detrimental to public engagement in the wise management of our seas.

64 It would have been helpful if there had been more discussion of the advantages and disadvantages of the choice between Directorate, Agency and Non-departmental Public Body referred to in the proposals.

65 The concluding chapter on “Managing Our Seas” is a good summary of how frameworks, policies and initiatives need to be translated into implementation and uses many of the SSMEI Phase I approaches (including “best practice” as compiled from other nation states). The emphasis within this set of proposals is understandably based on concepts such as “holistic” and “integrated”.

The real question, however, is whether it is possible to create Marine Scotland and to retain the original aim of a “light touch” without an added layer of bureaucracy. The regional approach to integrated coastal management and the explicit interactions this will bring with local authorities will need some careful thought to prevent a burgeoning bureaucracy. Re-deployment and adaptation of existing administrative functions is the most effective way to achieve the objective of establishing Marine Scotland.

Additional Information and References

This submission represents the views of an expert Working Group of RSE Fellows, and not necessarily the views of all of the Fellowship.

In responding to this consultation the Society would like to draw attention to the following Royal Society of Edinburgh responses which are of relevance to this subject:

- The Royal Society of Edinburgh’s *Inquiry into the Future of the Scottish Fishing Industry* (March 2004)
- The Royal Society of Edinburgh’s submission to the Scottish Executive Environment Group consultation on *Developing a Strategic Framework for Scotland’s Marine Environment* (July 2004)
- The Royal Society of Edinburgh’s submission to SNH’s consultation on *Developing Proposals for Coastal and Marine National Parks* (December 2005)
- The Royal Society of Edinburgh’s submission to the Scottish Government *On Delivering More Effective Government: Proposed Government Institute/Commission Mergers* (May 2008)
- The Royal Society of Edinburgh’s submission to Historic Scotland on *SHEP: The Marine Historic Environment* (May 2008)
- The Royal Society of Edinburgh’s submission to the Defra consultation on the *Draft Marine Bill* (June 2008)
- The Royal Society of Edinburgh’s *Inquiry into the Future of Scotland’s Hills and Islands* (September 2008)

Any enquiries about this submission and others should be addressed to the RSE’s Consultations Officer, Mr William Hardie (Email: evidenceadvice@royalsoced.org.uk)

Responses are published on the RSE website (www.royalsoced.org.uk).

The Royal Society of Edinburgh (RSE) is Scotland's National Academy. It is an independent body with a multidisciplinary fellowship of men and women of international standing which makes it uniquely placed to offer informed, independent comment on matters of national interest.

The Royal Society of Edinburgh, Scotland's National Academy, is Scottish Charity No. SC000470

THE ROYAL
SOCIETY
OF EDINBURGH
