FINAL REGULATORY IMPACT ASSESSMENT

Title of Proposed Regulations:

1. This Regulatory Impact Assessment relates to the Marine (Scotland) Bill.

Purpose and intended effect of measure

Objective

2. The Scottish Government is committed to delivering a Marine Bill which will put in place mechanisms to improve stewardship of the seas around Scotland. In addition to simplifying existing marine legislation, the proposed Scottish Marine Bill aims to enhance the long-term viability and potential growth of the various marine industries with greater stewardship of Scotland's special marine environment.

3. In a statement to Parliament on 3 September 2008, First Minister Alex Salmond laid out the Scottish Government's legislative programme for the coming year, including a Marine Bill for Scotland. The Bill proposes a new legislative and management framework for the delivery of sustainable economic growth in the marine environment, with proposals relating to delivering a new system of marine planning, reducing the regulatory burden, nature conservation and improving our understanding of the seas. Delivery is planned through a Scottish marine management organisation - Marine Scotland.

Background:

4. Scotland's seas are rich and biologically productive, a dynamic, robust and yet delicately balanced resource, and having an immense economic and iconic value to Scotland. They generate annually at least £2.2 billion of marine industry - excluding oil and gas - and support approximately 50,000 jobs. Scotland's seas are also home to 40,000 marine species, including 6,500 animal and plant species, as well as important historic assets of all periods from prehistory to the recent past.

5. There are many competing demands on Scotland's marine and coastal environment - demands from the energy sector, shipping, fisheries, tourism and conservation. In recent years there has been a growing consensus in Scotland that change is needed to balance resource use and resource protection. In addition, a series of legislative changes are also occurring at UK, European and international level that support the need for change.

6. The seas around Scotland are subject to a complicated mix of reserved and devolved regulatory activity. Further details are contained in "Sustainable Seas for All – a consultation on Scotland's first marine bill."[1]

7. At the UK level, the UK Government has brought forward the Marine and Coastal Access Bill. Following successful discussions at the Joint Ministerial Committee between

[1]Sustainable Seas for All : http://www.scotland.gov.uk/Publications/2008/07/11100221/0

the UK Government and devolved administrations, an agreement was reached in November 2008 which provides for a significant expansion to Scottish Ministers' responsibilities in offshore waters adjacent to Scotland as part of a wider framework for managing UK seas. The agreement involves executive devolution of the new powers in the UK Marine and Coastal Access Bill on marine planning, licensing, conservation and enforcement in the Scottish offshore region from 12-200nm. This achieves alignment with existing responsibilities for fisheries management in the offshore zone and existing devolved responsibilities inside 12nm.

8. As part of the agreement, a Marine Policy Statement produced and adopted by Scottish Ministers, UK Government and other devolved administrations will guide marine planning. Subject to approval by the Secretary of State, Scottish marine plans will be binding on UK bodies and Departments exercising reserved functions. The Scottish Ministers will be able to designate Marine Protected Areas from 12-200 nautical miles and there is a process which enables the Secretary of State to approve MPA proposals. Scottish Ministers will be the licensing and enforcement authority for the marine licences included in the UK Bill in offshore waters adjacent to Scotland.

9. This should provide the most effective and practical way of improving the management of the seas around Scotland and delivering UK and EU priorities.

10. At European level, the Marine Strategy Framework Directive (MSFD), adopted in June 2008, proposes a framework whereby European Marine Regions will be established on the basis of geographical and environmental criteria. Marine strategies will have to be developed by the different Member States in the marine region setting out a programme of cost-effective measures to achieve "good environmental status" by 2020. Marine spatial planning will be a key area of development under the Directive. The MSFD forms the environmental pillar of the EU's maritime policy.

11. Finally, at international level, the Oslo and Paris Convention (OSPAR) obliges signatory countries to develop an ecologically coherent network of well managed marine protected areas by 2010. The Scottish Government has agreed that it should have the responsibility for delivery of marine nature conservation, including the network of marine protected areas, to meet such international obligations.

12. In addition to simplifying existing marine legislation, the Scottish Marine Bill aims to balance the long-term viability and growth of all these industries with enhanced protection of our special marine environment. The case for change has notably been presented in two reports published in 2007, a report of the previous Parliament's Environment and Rural Development Committee (ERDC)[2] and the report of the Advisory Group on Marine and Coastal Strategy (AGMACS).[3]

13. The ERDC report focused on how to manage effectively the pressures on the marine environment from the inter-connected impacts of different uses, conflict between competing uses, and natural processes. Recommendations called for a new statutory system of marine spatial planning in Scotland, and the need for steps towards a less complex, single integrated regulatory system for all marine activities. It also considered marine protected areas to be a

[2] http://www.scottish.parliament.uk/business/committees/environment/reports-07/rar07-04-00.htm
[3] http://www.scotland.gov.uk/Publications/2007/03/08103826/0

significant objective of legislative reform and separately noted the need for further developments on marine data and research, objectives and indicators. In relation to delivery arrangements, they considered it essential that a marine management organisation for Scotland must simplify governance and not add another layer to existing regulation, and that any new management system must be properly accountable to the Parliament.

14. The Advisory Group on Marine and Coastal Strategy (AGMACS) also recommended changes to the legislative framework for the marine environment, calling for statutory marine spatial planning and a three pillar approach to nature conservation, with specific measures for species conservation, policy, and site protection. They additionally called for a Scottish marine management organisation (Marine Scotland), which would also have responsibility for national coordination of integrated coastal zone management and marine spatial planning delivery with national and local dimensions. They also recommended that consideration should be given to a Scottish marine management organisation having responsibility for marine nature conservation and fisheries out to 200 nautical miles (nm).

15. Building on this work, in January 2008 the Cabinet Secretary for Rural Affairs and the Environment convened the Sustainable Seas Task Force (SSTF)[4], a 25 member stakeholder group with the remit to input into the development of the Scottish Government's proposals for a Scottish Marine Bill, building on and taking forward the work of ERDC and AGMACS. The SSTF developed more detailed proposals and these were presented in the consultation paper.

Rationale for Government Intervention

16. The Scottish Government's key purpose is to focus on creating a more successful country with opportunities for all of Scotland to flourish through increasing sustainable economic growth. The Marine Bill will support this overall purpose, managing Scotland's coasts and seas in a way that balances the interests of resource use and resource protection, to create a more stable environment making it more attractive for long-term investment. Change to produce higher sustainable economic growth is needed in the management of Scotland's marine environment. Successive inquiries have identified a number of changes:

- to clarify overall objectives for the marine environment and seek to meet them more effectively and affordably;
- to manage growing, often competing demands for use of marine space, including balancing environmental and socio-economic considerations. This includes a need to provide greater certainty for those proposing developments in marine areas;
- to meet existing and new marine obligations and aspirations. We need to make improvements to marine nature conservation and develop and implement ecosystem-based approaches to marine management to integrate and manage the range of demands placed in the natural environment in such a way that it can indefinitely support essential services and provide benefits for all;
- to improve integration and reduce complexity of marine management and regulation, in line with wider Scottish Government and EU policy aims;

[4] http://www.scotland.gov.uk/Topics/Environment/16440/SSTF

- to give local communities a stronger voice in marine matters and to ensure accountability at the local and Scottish levels on marine decision making;
- to ensure a strong and coherent Scottish voice and play an effective role in the wider management of UK seas; and
- to lead the way in Scotland on how the seas in North West Europe can be managed to strike the right balance between economic, social and environmental priorities.

17. If there is no government intervention, integration of planning activities would be constrained, with the potential risk of conflicts between different users of the marine and coastal areas which could result in costly delays, a less efficient use of marine space and the deterioration of the marine environment. While it has been recognised that considerable efforts have been made by some sectors in recent years to develop more strategic and inclusive approaches to development planning, these remain essentially sectoral initiatives and there continues to be deficiencies in the integration and co-ordination of planning across Government.

18. No change in the current licensing system arrangements would mean that the licensing regime would remain complex and resource intensive, with multiple licences often required from a range of licensing bodies with different process and consultation requirements.

19. In relation to nature conservation, Scotland would continue to seek to meet the current conservation objectives and legal commitments through existing legislation. However the "do nothing" approach would mean there would be no new species conservation or site protection measures, gaps in the current nature conservation regime would remain; it would not support achievement of existing national and international commitments and could lead to a deterioration of the marine environment. In addition, those with a legitimate interest in designated marine historic assets may continue to be dissatisfied with existing provisions, and existing legislation does not provide the scope to enable Scottish Ministers to protect the full range of marine historic assets that can be found on the seabed. Overall, there would be no long term benefits.

20. The conservation of seals is currently dealt with under primary legislation that is 40 years old, and the Marine Bill proposes to improve and clarify the level of protection afforded to seals while at the same time balancing this with the need to maintain sustainable fisheries and aquaculture.

21. Not setting up a new integrated body (Marine Scotland) with responsibility for policy, marine planning, science and regulation and licensing would mean that existing activities would continue to be carried out by organisations that are currently responsible for them, and they would take on any new requirements such as marine planning. There would be no long term benefits and the risk of failure to deliver the objective of streamlined decision-making, the potential for inconsistency in decision making and uncertainty amongst stakeholders about responsibilities for the marine environment.

Consultation

Within Government

22. The following government agencies and departments have been consulted on the measures contained within the proposed Bill: relevant colleagues within Environment, Education, Economy and Justice Directorates within the Scottish Government; Fisheries Research Services (FRS); Historic Scotland (HS) and the Scottish Fisheries Protection Agency (SFPA).

Public Consultation

23. On 14 July 2008 the Scottish Government published *Sustainable Seas for All – a consultation on Scotland's first Marine Bill* seeking views on proposals for the sustainable management of Scotland's seas and coast.

24. The Scottish Government has been assisted by the Advisory Group on Marine and Coastal Strategy (AGMACS) and the Sustainable Seas Task Force (SSTF) in developing the proposals under the consultation document. AGMACS and the SSTF included representatives of a wide range of interests in the marine environment.

25. Consultation documents were issued to 1012 stakeholders, and a number of consultation documents were issued following the launch in July 2008. Stakeholders that have been involved in the consultation process include the Food Standards Agency (Scotland), Rural Affairs and Environment Committee of the Scottish Parliament, Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage (SNH), the Forestry Commission Scotland and the Crofters' Commission. The consultation was also made available on the Scottish Government website and members of the Scottish Government Marine Directorate held public meetings around Scotland over the consultation period to provide an opportunity for members of the public, relevant organisations, businesses and other interested parties to discuss the proposals.

26. The consultation ran until 6 October 2008. In total 9,135 respondents replied to the public consultation, including 8,873 campaign responses. Responses to the consultation demonstrated general, broad support for the proposals. However, there had been substantial campaigns (over 4000 campaign responses) calling for an outright ban on killing seals. Independent analysis of consultation responses and events was undertaken by contracted analysts. The analysis was published on the Scottish Government website on 23 January 2009.[5]

27. Risk and Policy Analysts Ltd. and ABP Marine Environmental Research Ltd. were commissioned to undertake a Regulatory Impact Assessment (RIA) for the Scottish Marine Bill on behalf of the Scottish Government. In preparing their report, they also consulted with a number of organisations in order to obtain baseline information and to determine the potential impacts of the options. Their report takes account of the responses to the consultation, the response received to consultation on the Partial RIA, and to the separate consultation undertaken by Scottish Ministers on the detailed proposals for marine historic

[5] http://www.scotland.gov.uk/Publications/2009/01/22160605/0

site protection. Their 194 page detailed report forms the basis of this document and will be published on the Scottish Government website.

28. This RIA sets out the costs, benefits and other impacts of the Scottish Marine Bill. The main parts of the Bill are as follows:

- Marine Planning
- Marine Licensing
- Marine Protection and Enhancement: The Scottish Marine Protection Area
- Conservation of Seals.

29. Science and data generation, and the creation of Marine Scotland are not directly covered in the Bill but are included in the consultation "Sustainable Seas for All". They are required for the purpose of the Bill to be achieved, and are therefore covered in the Annex to this RIA.

MARINE PLANNING

30. A new statutory marine planning system is proposed to ensure sustainable economic growth in the seas around Scotland. This will allow decisions to be made in agreement with a variety of stakeholders working together to produce a suite of Marine Plans at national and regional levels. The Scottish marine planning system would cover all activities, constraints and obligations in the marine environment around Scotland to the extent that they are within devolved competence. Scotland currently has the power to legislate for marine planning out to 12nm.

31. It has been agreed with the UK Government that marine planning will be extended to reserved matters under powers in the Scotland Act as part of a wider package of closer working arrangements on marine matters.

32. Marine Planning will ensure that the resource needs for marine space of different sectors are properly taken into account and managed. Marine Planning should be based on a 3 tier system: Scotland level (including a Scottish Marine Plan); international level beyond Scotland (to deal with planning matters that are external to Scotland, setting Scottish waters within the wider UK, EU, North Atlantic and global frameworks); and regional level within Scotland (to deal with local planning and management possibly requiring 10 local plans within Scottish Marine Regions).

SECTORS AND GROUPS AFFECTED

33. A planning system affects all activities and interests in the marine environment around Scotland. Key industry sectors affected include: marine renewable energy; fisheries (finfish and shellfish); ports and harbours; shipping; aquaculture; oil and gas extraction and related pipelines; telecommunication and power cables installation and operation; sand and gravel extraction; recreational and tourism, and other activities covered by regimes such as

marine licensing and environmental consents. Other groups affected include recreational users of the marine environment, non-governmental organisations with interests in the marine environment and the general public.

34. Affected public sector organisations include those that are responsible for managing and licensing the activities listed above, not all of which are devolved to the Scottish Government. They include not just Scottish Government but also local authorities and regulators, as well as the UK Government.

OPTIONS and COSTS/BENEFITS

35. There are two main options in relation to marine planning. These are:

Option 1: do nothing

Option 2: implement a statutory marine planning system.

Option 1

36. Under **Option 1**, there would be little or no formal integrated planning of activities. Although high-level marine objectives might exist, stemming from national and international initiatives (UK Marine and Coastal Access Bill, MSFD), there would be no formal system to 'unpack' these and to deliver objectives at lower levels in an integrated way. Decision-makers would need to take account of the high level objectives through the various sectoral licensing systems.

37. There are a number of risks associated with this option. These are summarised in **Table 1** below.

Costs

38. Continuing with the current system of marine management would not result in any direct additional costs. However, if the risks identified are realised, they may give rise to costs for government, businesses, society and the marine environment.

39. Costs may result from the need to resolve conflicts between different users, marine resources and ecosystem components. Resolving conflicts would require time and resources for the organisations involved to negotiate and resolve. The costs associated with resolution of conflicts are, by their nature, case-specific.

Table 1: Summary of Potential Risks of Option 1	
Type of Risk	**Description**
Sectoral conflicts	Without a planning system to provide an integrated and proactive approach to marine management, the marine licensing system on its own may not be effective enough in addressing conflicts that arise between marine activities
Modified, delayed or refused development applications	Lack of clearly expressed and integrated policies could result in unclear and ambiguous requirements for developers. Decision-makers could face significant difficulties in evaluating whether proposed new developments did or did not support the achievement of high-level objectives. This might result in additional and disproportionate requirements being placed on developers to seek to demonstrate how development activities were consistent with the achievement of high-level objectives, leading to uncertainty and delay. Sectoral conflicts among users may also result in further modifications to development designs, and delayed or refused applications. Additional costs would be incurred by public bodies and industry
Cumulative impacts	Lack of an integrated assessment of the cumulative impact of sectoral activities on each other, on the environment, and on society may result in unsustainable development, potentially affecting all those with interests in the Scottish marine environment
Less efficient use of marine space	As pressure for the use of marine resources increases, a lack of planning may result in the inefficient use of marine resources. Spatial planning can investigate the potential to maximise the sustainable economic revenue from a particular resource or site. This may ultimately reduce the amount of marine resource that is 'sterilised' (i.e. excluded from other uses); for example, cables, pipelines and offshore energy installations may exclude the extraction of marine aggregates and fish through dredging
Deterioration of the marine environment	The lack of an integrated system to deliver high-level objectives at the local scale and to assess cumulative impacts from multiple activities may result in continued deterioration of marine ecosystem components on which the economy depends and processes with indirect impacts on the economy, society and other environmental aspects
Lack of preparation and long-term vision	With new technologies being developed and new activities occurring in the marine environment (e.g. carbon capture and storage, renewable energy devices), there is a risk that, without long-term spatial planning, Scotland will be unprepared to deal with the new demands
Inefficient collection and use of data	Without a strategy coordinating research funding and efforts, data collection may remain inefficient, potentially resulting in gaps and overlaps

40. Conflicts among users and unclear environmental requirements may also result in further modifications to development designs, and delayed or refused applications. In the absence of a plan, decision-makers could face significant difficulties in evaluating whether proposed new developments did or did not support the achievement of high-level objectives. This might result in additional requirements being placed on developers to seek to demonstrate how development activities were consistent with the achievement of high-level objectives, leading to uncertainty and delay.

41. Most of the costs of delays, modifications or refusals will tend to fall on developers. For some projects, it may be possible to accommodate delays within the overall planning and construction timetable for the project. However, for projects on a critical time path, such delays could be extremely costly and jeopardise the viability of the project.

42. Stakeholders responding to the consultation indicated that delays in granting planning permission are a particular issue for the aquaculture industry, potentially leading to significant costs through loss of revenue. The lack of a clear planning framework makes it difficult for businesses to identify preferred locations and for local authorities to evaluate applications.

43. Conflicts among users and unclear environmental requirements may also result in the need for compensatory measures. A lack of an integrated assessment of the cumulative impact of sectoral activities on each other, on the environment and on society may result in unforeseen consequences for all interests. As pressure for the use of marine resources increases, a lack of planning may lead to the inefficient use of marine resources. Spatial planning can investigate the potential for interests to overlap and reduce the amount of marine resource that is 'sterilised' (i.e. excluded from other uses). There may also be associated costs on the loss of goods and services provided related to the deterioration of the marine environment.

Benefits

44. There are no additional long term benefits from Option 1. There may be short-term benefits in that policy-makers, businesses and marine users will not have to change their behaviour. However, it is likely in the longer term that pressures on the marine environment will ultimately require alternative solutions and consequent modifications in activity.

Option 2

45. Under **Option 2** Marine Planning would be on a statutory basis, on a 3 tier system: Scotland level, international level beyond Scotland, and regional level. Not all areas would need plans; they are only necessary where there are, or are likely to be, activities to plan and potential conflicts.

46. International planning requirements such as consultation, interacting with other planning authorities and delivering international commitments (e.g. the MSFD) would still need to be carried out, with associated costs for the Scottish Government, regardless of the implementation of a marine planning system.

47. There are a number of potential risks associated with this option. The implementation of a system of marine spatial planning represents a considerable investment and there is always a risk that it will not achieve the anticipated benefits. This risk can be mitigated by ensuring that the planning process is adaptable with regular review throughout the plan process and provision for consultation and public hearings.

48. A second risk is that the system may become overly complex or bureaucratic, leading to uncertainty and delay (with associated costs) for developers and excessive costs to Government during the initial plan-making process; or that plans, once produced, are not adhered to. The risks of delay during plan preparation can be mitigated by ensuring that a robust planning process is established, with clear responsibilities and time scales for plan preparation.

49. Implementation of a statutory system of planning, with a requirement on decision-makers to follow the plan unless material considerations indicate otherwise, should ensure that the requirements of plans are generally adhered to. Ensuring that relevant stakeholders are fully engaged in the preparation of plans and that a participative process is developed to support their implementation will improve acceptance and understanding of plan objectives.

50. Incompatibility among policies may occur between neighbouring marine and terrestrial plans and may cause confusion for users of the system, and reduced effective management. In addition, the boundaries for marine spatial planning are administrative ones (i.e. Scottish and regional borders, seaward limit of 12 nm). Such boundaries may be artificial from an ecological perspective and, as a consequence, it may be difficult to deliver an ecosystem approach and integrated nature conservation planning. Ensuring a broad level of early consultation on plans and continued involvement in UK and international planning initiatives will improve the integration of Scottish marine plans with neighbouring marine and terrestrial ones.

51. Studies by AGMACS, the SSTF and the Irish Sea Planning Pilot identifies a range of potential benefits of marine planning. These are summarised in Table 2.

52. There are potential benefits from marine planning for the full range of stakeholders. The scale of the benefits will depend on the way in which planning operates in practice, and the specific features of each plan. Marine planning could significantly reduce the costs of conflicts, delays and compensatory measures associated with the current system, which can cost from several hundred thousand pounds to millions of pounds per development. Marine related goods and services (excluding oil and gas) are estimated to contribute over £2 billion annually to the Scottish economy. If reducing conflicts and delays were to increase gross added value by 1%, this would be equivalent to around £20 million per year for the Scottish economy. Marine Planning would also create a more stable marine environment in the long-term, making it more attractive for businesses to invest in Scotland. For example, the value of the Scottish marine renewable energy generation is forecast to reach over £200 million by 2017. If marine planning resulted in more rapid approval of marine energy projects, so that this value was achieved by 2015 instead of 2017[6], the net present value would be increased by around £5.5 million[7]. This may help Scotland in leading the way in the development, testing and accreditation of marine energy generation and delivery systems.

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6 Forum for Renewable Energy Development in Scotland (2004). Harnessing Scotland's Marine Energy Potential. Marine Energy Group Report 2004.

7 Assuming a current value of £5 million per year and a constant annual rate of growth to 2017 as a baseline, with a higher annual rate of growth to achieve the same total by 2015 instead.

Table 2: Summary of Potential Benefits of Marine Planning	
Type of Benefit	**Description**

General	• Reduced planning risk and uncertainty;
	• A more informed site selection process;
	• Delivery of sustainable development;
	• Optimising administrative costs and resources, including:
	  • more efficient management of consent applications;
	  • better understanding of future demands for consents;
	  • improved environmental objective setting; and, possibly
	  • reducing the costs of undertaking sectoral SEAs by virtue of the fact that these can draw strategic information from the plan and the planning process;
	• Meeting international obligations such as the EU Integrated Maritime Policy;
	• Helping to deliver the aims of the EU Marine Strategy Framework Directive for member states to develop national marine strategies to achieve for Good Environmental Status for their waters by 2020; and
	• Improving prospects of increased awareness and ownership of marine conservation features and issues, particularly amongst users, regulators and decision-makers.

Economic	• Allows greater confidence for industry when planning new development and a reduction in conflict between competing users; • Provides for rational allocation of space in the marine environment that will help to deliver a strategic vision for Scottish seas in accordance with government priorities and optimise future allocations; • Promotes efficient use of space and resources, in a way that reduces impacts on other users and the environment.
Environmental	• Ensures there is space for biodiversity and nature conservation measures and places biodiversity commitments at the heart of planning and management; • Safeguards the marine historic environment; • Provides a system of objectives, targets and actions in order to achieve nature conservation objectives; • Provides a broad framework within which to understand and maximise the value of a network of multiple-use sites and highly protected marine areas. • Offers a key tool to pre-empt or address cumulative effects on the natural environment.
Social	• Improves the opportunity for stakeholder involvement, particularly in lower level planning. However, it is important that stakeholder engagement is timely, transparent and not simply focussed on data gathering in order to ensure a more participative decision-making process.

Costs for the National Plan

53. The estimated costs to the Scottish Government for preparing a National Plan is summarised in Table 3.

Table 3: Potential Costs of Preparing the Scottish National Marine Plan[1]	
Activity	**Cost**
Preparatory research	£120,000
Consultation document production	£40,000
Consultation process	£50,000
Final document production	£30,000
Staff costs (based on a core team of 4)[2]: - Assistant Chief Planner (£53,000) - 2 x Senior Planners (2 x £31,900) - Administration assistant (£15,100)	£264,000
Total cost of plan preparation	**£504,000**
Notes 1. One-off cost, spread over two years 2. Based on a core team of four, including overheads, for two years	

54. In addition to the preparation costs the plan will require a Strategic Environmental Assessment, estimated to cost the Scottish Government £250,000.

55. The ongoing and annual costs of a National Scottish Marine Planning team is set out in Table 4

Table 4: Annual Costs of the Possible National Scottish Marine Planning Team[1]		
Team member[2]	**SE Pay Band**	**Total Average pay**
0.5 x Head of Division	C3	£28,234
2 x Senior Planners	B3	£68,803
2 x Planners	B1	£43,265
1 x Administrative Assistant	A3	£18,322
0.5 x Personal Assistant	A3	£9,160
Salary cost per year		***£167,064***
Overheads (87% of staff costs[3])		£145,346
Total annual cost (2008-09 salaries)		**£312,410**
Notes: 1. Based on 2008-09 salary scales 2. Four staff to prepare the plan ; six to implement the plan; remaining staff will participate in reviews and international planning activities. 3. Based on DCLG 2006 overheads as a percentage of staff costs		

56. It is anticipated that the National Marine Plan will be reviewed every 5 years. The estimated cost to the Scottish Government for this is the non staff cost of preparing the initial plan (research, consultation and document production) i.e. £240,000, plus the cost of an SEA £250,000- in total £490,000.

Costs to Scottish Government for Local Plans

57. The Marine Bill proposes a power to identify Scottish Marine Regions (SMRs) and to delegate the planning function to partnerships or public authorities in those Regions.

Although the specific format of local marine planning has not been prescribed it is likely to be developed at the scale of 10 - 15 Scottish Marine Regions (SMRs).

58. Table 5 sets out the costs of Local Planning.

Table 5: Summary of Illustrative Costs of Local Planning

Initial Plan Preparation	Plan Preparation Public Inquiry Strategic Environmental Assessment Data Collection	£680,000 to £1,350,000 £310,000 £200,000 £1,000,000
Implementation	SMR Stakeholder Authorities Plan Management	£100,000 per region £100,000 per region
Review	Review every 5 years	£680,000 to £1,350,000

59. It is unlikely that each local plan will require a public inquiry costing £310,000. Similarly, it is highly unlikely that a region could spend £1 million on data collection for the initial regional plan. It is assumed that the data collation/collection will cost £250,000 in the initial plan and the remaining £750,000 at the first review. The cost to the Scottish Government of local plans will depend on the number of SMRs established. In broad terms, the cost of the national plan and 10 local plans is likely to cost the Scottish Government between £4-£5 million from 2014-15 onwards. There is scope for reducing these costs, for example, some of the national resource could be used at the local level reducing the costs of delivering a local plan.

60. In accordance with international commitments under the European Convention on the Protection of the Archaeological Heritage (the Valetta Convention), the marine planning system will also take account of the historic environment. Historic Scotland (an executive agency of Scottish Government) has identified that provision of advice on the development, implementation and review of a national marine plan to ensure that it includes satisfactory consideration for the historic environment, advising on Strategic Environmental Assessments (SEAs) of the national and regional plans (Historic Scotland is a consultation authority under SEA) and marine licensing would cost the Scottish Government around £50,000 per year. A further figure of £75,000 per year for a period of 10 years in the first instance (i.e. if there are 10 SMRs this would equate to £7,500 for each) would be required by Historic Scotland to provide a support package to allow for sourcing of adequate archaeological advice and information and to ensure that regional planning can take satisfactory account of the historic environment.

Costs to Industry for local planning

61. As one of the aims of a system of marine planning is to provide better guidance to local regulators, industry is likely to benefit from the proposals. However, some industries have expressed concern that the implementation of a new system of marine planning might have the potential to delay development proposals, particularly during periods of plan preparation. A well-designed planning system should address the needs of all users of the marine environment, including industry, in resolving resource conflicts. Nevertheless, clear transitional arrangements will be necessary to ensure that delays to decision making are avoided.

62. A planning system may impose restrictions over currently unregulated industry activities, such as algal harvesting and tourism. Therefore, there is the potential for greater restrictions to be imposed on such activities, resulting in further costs for the industry sectors affected. This can be addressed, however, by ensuring that industry is engaged in the planning process, so that such costs can be identified and mitigated as far as possible.

63. The direct costs to other stakeholders of marine planning will arise from their participation in the planning process (e.g. in responding to consultations and participating in consideration of plans). The size of these costs will be dependent on how far a plan affects their individual interests and how far they wish to engage in the process.

64. Representatives on SMR Marine Planning Partnerships may include those from local authorities, marine industries, Local Coastal Partnerships, Inshore Fisheries Groups, River Basin Management Plans Area Advisory Groups and various recreational interests. There will be costs to these groups as part of their role on the Planning Partnerships. However, it may be argued that these functions are already carried out as part of the current marine management regime and the costs associated with this are therefore largely part of the baseline. If a local authority was to become a lead partner in a SMR and become heavily involved in the delivery of the local planning function, then the costs associated with their new role would be offset by a resource transfer from central government. Furthermore, as marine planning aims to streamline the management process, there may be cost savings. For example, it is possible that, with a development strategy in place, representatives will have fewer contentious development applications to respond to.

65. Costs to local authorities and other stakeholders of the public enquiry is dependent on the time incurred by participants. The number of participants varies considerably, depending on the number of interested parties and issues raised. However, it could be argued that costs of participating in the planning process will be offset by savings in the time taken in responding to contentious development applications.

Further Option

66. A further potential option, of implementing a non-statutory planning system would still involve the collation of marine data and information, accompanied by the setting of marine objectives and priorities, but there would be no statutory requirements for decision-making authorities to act in accordance with any spatial plans that are developed. The main risk with a non-statutory system of planning would be that plans, once produced, might not

be adhered to. The process and costs involved are largely the same as for a statutory planning system but with fewer benefits.

MARINE LICENSING

67. The current licensing regime in Scotland comprises a variety of licences, seeking either to protect features of the marine and coastal area from the impact of marine development, or to mitigate the impact of developments. The key aim of changing the current system is to deliver an effective, streamlined and modernised licensing system, with the objective of meeting existing and new obligations and aspirations, including implementation of the MSFD, the Birds and Habitats Directives and OSPAR; improving integration and reducing the complexity, of marine management; improving the efficiency and cost effectiveness of resource use; and meeting stakeholder requirements. Change to the licensing system will be a key delivery mechanism for marine planning and nature conservation measures and aims.

SECTORS AND GROUPS AFFECTED

68. A number of different groups will be affected, under the following categories:

Regulatory authorities: Fisheries Research Services (for administration of licences under FEPA); Scottish Government Transport Directorate (for administration of licences/consents under the Coast Protection Act and the Harbours Act); Scottish Environment Protection Agency (the regulating authority for the Water Environment (Controlled Activities) (Scotland) Regulations 2005); Scottish Natural Heritage; Scottish Government Planning Division; Local Authorities; Scottish Government Energy Consents Unit, Scottish Government Aquaculture, Freshwater Fisheries and Licensing.

Industry: the aquaculture industry; marine renewables; marine construction; and ports and harbours.

Other stakeholders: there are a number of other stakeholders and organisations that have interests that may be affected and/or are regularly consulted on consent procedures.

OPTIONS and COSTS/BENEFITS

69. There are four main options for streamlining the system of licensing and enforcement.

Option 1: no change to current arrangements;

Option 2: amalgamate FEPA Part 2, CPA Part 2 and CAR licences for marine activities into a single licence;

Option 3: amalgamate CPA Part 2, FEPA Part 2, CAR licences for marine activities, wildlife, aggregates and any other activity licences into a single licence; and

Option 4: create an activity-based licensing system.

70. There are also two sub-options, which could be combined with the main options:

Sub-option A: controls for capital and maintenance dredging. This sub-option can be combined with Options 1, 2 and 3;

Sub-option B: following a CAR-type approach for small projects – involving a graduated regulatory regime based on the level of risk posed by a development or activity. This sub-option could be combined with any of the options.

71. **Option 1** would maintain the current situation, with 16 types of consent administered by more than ten organisations/departments, at an estimated annual cost of £2.1 million to £2.7 million per year to the Scottish Government, £304,000 to £380,000 to local authorities and £123,000 to SNH, passed on to applicants (industry) in the form of licence fees. The advantages of this option are that no new legislation would be required; all stakeholders are familiar with the current situation and there would be no costs associated with streamlining the current licensing regime. The main disadvantages are that the objectives of the Scottish Marine Bill would not be met, and the licensing regime would remain complex and resource intensive.

72. **Option 2** would reduce the number of licence applications required, thus simplifying the licensing application and processing system for both industry and regulators; and would provide better integrated licensing, ensuring that a range of environmental/ecological and navigational issues are considered together. The benefit of this option would be that it could assist in the delivery of both existing obligations and objectives and new ones (e.g. in marine planning and nature conservation). This could generate annual savings to regulatory authorities (Scottish Government and SNH) of £150,000 to £168,000 and around £170,000 annually to industry. However, it would require the introduction of new legislation, incurring costs for Government and stakeholders and potentially causing (temporary) disruption to the licensing system. Staff would also need to be re-trained both within the industry and the regulators, although the impact on employment is expected to be negligible.

73. **Option 3** is similar to Option 2, but would go further by amalgamating the wildlife and aggregate licences with CPA Part 2, FEPA Part 2 and CAR licences for marine activities. This Option would have similar costs and benefits to Option 2 for authorities, but would have the added benefit of providing greater integration with regard to regulating the ecological impacts of marine developments. This could result in additional annual cost savings to industry of around £177,000 to £197,000, and to regulatory authorities (Scottish Government, local authorities and SNH) of £159,000 to £204,000.

74. **Option 4** presents an alternative approach to Options 2 and 3, by developing integrated licences for particular activities, such as a renewable energy licence, an aquaculture licence and other specific activity licences. This could generate cost savings for the Scottish Government, local authorities and SNH of £342,000 to £515,000 per year and direct cost savings for industry of £512,000 to £672,000 per year. The indirect cost savings to industry, from reduced delays, could be greater. The key risk with using only activity-based licences is in defining the activities to be licensed and that the impacts caused by other

activities might not be managed. However, a large number of different activity licences would risk repeating the complexities of the current system. Combining activity-based licences for some activities, with general licences for other activities, would also add to the complexity of the system. Stakeholder comments included that having a different licensing structure to that of the UK under this option would also create greater complexity in the regulatory landscape.

75. **Sub-option A** can be combined with Options 1, 2 and 3, or it could be a standalone option. There is currently no single act which regulates dredging operations in Scotland. However, methods of dredging such as low-cost hydrodynamic dredging techniques are exempt from FEPA licensing, as the sediments are not raised from the surface of the water and therefore no disposal takes place. The majority of, if not all, hydrodynamic and plough dredging techniques are associated with maintenance dredging. The number of occurrences per year may vary, depending on the requirements of maintenance dredging. Stakeholders have suggested that there may be a case for multi-year applications to cover ongoing maintenance dredging to reduce costs and the potential for delays in renewing licences. The main potential risk associated with this option relates to the potential impact on hydrodynamic dredging. The total costs of introducing licensing for hydrodynamic and plough dredging will depend on the number of occurrences, and the possible introduction of multi-year licences. The cost savings cannot be quantified, in the absence of a decision on the length of licence and the current costs of delays. It is likely that the costs for making and approval of multi-year applications could be higher than for single-year applications, to ensure that no adverse effects would arise over the longer period of the licence. However, there could still be significant savings for both government and industry.

76. The total cost to regulating authorities of 11-27 occurrences per year would be £71,500 to £175,000 and it is expected that this cost would be recovered from industry in the form of licence fees. This estimate is based on an annual licence and would be reduced by the introduction of a multi-year licence. Water injection dredging could have ecological and economic effects on the area of sea bed, therefore regulators and/or consultees may be more likely to seek an Environmental Impact Assessment (EIA).

77. For 11-27 occurrences, of which one requires an EIA, the cost to industry of providing reports for a licence application may be in the region of £415,000- £1 million. In addition to this, the licensing authority would be expected to charge licence fees so the total cost to industry of introducing licensing for hydrodynamic techniques may be between £487,000 and £1.2 million per year, depending on the number of occurrences, the quantity of material moved, the fees charged and the requirement for environmental sampling, modelling, monitoring and reporting. Stakeholders have indicated that any restrictions that impose additional costs on the operation of Scottish ports could place them at a competitive disadvantage compared to English ports. An additional issue raised by stakeholders is the potential costs associated with appeals. This is an issue of application and administration, rather than approach, and, as such, any impacts will be equally applicable across all options. Any increase in the costs may result in a decline in use of the techniques, thereby reducing the environmental benefits. The benefit of the option would be to ensure full evaluation of the chemical and physical impacts associated with the use of hydrodynamic dredging.

78. **Sub-option B** could also be introduced along with Options 2, 3 or 4, or as a standalone option. This would introduce a simpler system of registration for small, uncontroversial projects, where the administrative requirements are not justified by the

projects delivered. The costs of this option cannot be quantified but they relate to the potential difficulties associated with distinguishing between different levels of activities and their associated impacts. However, both FEPA and CAR currently apply tiered charging schemes and so the additional impacts are likely to be minimal. The benefit of this sub-option is that it may reduce the administrative burden and associated costs for both industry and the regulators. It may result in some savings; however these are assumed to be limited to small projects requiring FEPA and CPA licences. It is estimated that the total annual savings to the regulating authorities may be in the region of £121,000. The main risk associated with this Option is that it may cause further confusion, as stakeholders will have to distinguish between three different levels of activity in determining whether a licence is necessary for their activities.

MARINE PROTECTION AND ENHANCEMENT: THE SCOTTISH MARINE PROTECTION AREA

79. The proposals in the Bill intend to maximise sustainable economic growth for the marine environment using planning and management tools that deliver practical nature conservation at the ecosystem level and improvements to our system of marine nature conservation through focused improvements to protection of key locations and species. The Scottish Government has secured further devolution to Scotland for marine nature conservation out to the 200nm limit in order to safeguard our seas.

SECTORS AND GROUPS AFFECTED

80. Key business sectors that may be affected by measures for marine nature conservation include: marine renewable energy; fisheries (finfish and shellfish); ports and harbours; shipping; aquaculture; oil and gas extraction and related pipelines; telecommunication and power cables; sand and gravel extraction; recreational and tourism companies, and other activities covered by regimes such as marine licensing and environmental consents.

81. Social and environmental groups affected include non-governmental organisations, individual members of society and society as a whole through the educational value, cultural heritage and other non-use values such as bequest and existence values of the marine environment. The ecosystem services that marine biodiversity delivers to society also underpin economic activity and social well-being.

82. Government sectors affected include those responsible for designing, implementing and enforcing measures. They include not only the Scottish Government but also local authorities and other regulators including the UK Government where relevant.

OPTIONS and COSTS/BENEFITS

83. The three main options in relation to nature conservation are:

Option 1: no change;

Option 2: make better use of existing measures, e.g. voluntary reserves, marine nature reserves legislation; enhanced non-legislative measures, add to list of species receiving strict protection; extend the use of economic instruments and the better integration of environmental considerations into sectoral policies.

Option 3: implement new measures and policies.

Option 1

84. Under **Option 1** Scotland would continue to seek to meet the current conservation objectives and legal commitments, including more recent agreements to develop networks of Marine Protected Areas (MPAs) through existing legislation. However, the deficiencies identified in the section 'Rationale for Government Intervention' above would remain.

85. There would be no changes to marine nature conservation policy and no new species conservation or site protection powers. This option would not incur any direct additional costs for Government or other stakeholders, other than the necessary costs expected to implement measures we are committed to e.g. under the Marine Strategy Framework Directive. The Scottish Parliament has endorsed Ministers' commitment to deliver an ecologically coherent network of Marine Protected Areas (MPAs). For example, the 2003 OSPAR Ministerial Meeting in Bremen adopted Recommendation 2003/3 on a network of marine protected areas with the purpose of establishing an ecologically coherent network of well-managed MPAs in the North-East Atlantic by 2010. The aims of the OSPAR network of MPAs are:

- to protect, conserve and restore species, habitats and ecological processes which have been adversely affected by human activities;
- to prevent degradation of, and damage to, species, habitats and ecological processes, following the precautionary principle;
- to protect and conserve areas that best represent the range of species, habitats and ecological processes in the maritime area.

86. This commitment on a network of MPAs also stems from agreements at the World Summit on Sustainable Development and under the Convention on Biological Diversity and is now reflected in the MSFD, where it envisages MPAs as an important contribution to the measures needed to achieve good environmental status (GES). Relying on existing legislation would provide no long-term benefits; gaps in the current nature conservation regime would remain, it would not support achievement of existing national and international commitments and could lead to deterioration of the marine environment. If such deterioration resulted in a 1% reduction in the economic value of marine environment-related sectors, this could result in losses of £14 million over 20 years (based on net present values). Failure to meet international obligations and commitments on conservation may result in damage to Scotland's reputation and fines may arise from failures in meeting EC legal obligations. Although full legal action is generally avoided by taking corrective action, this represents a very realistic and potentially expensive risk. Ultimately, improvements in marine nature conservation, particularly the establishment of a network of marine protected areas, may be legally enforced upon Scotland if Option 1 was pursued.

Option 2

87. **Option 2** may lead to an improvement in the marine environment, with resultant economic, social and environmental benefits but is sub-optimal as some measures such as Marine Nature Reserves are considered to be ineffective. The benefit of making better use of existing measures under this option is that systems are already in place and understood by stakeholders; therefore no costs would be incurred by Scottish Government and regulators in designing new measures, consulting on them and implementing them. Option 2 would fail to deliver the Government's commitment to establish a network of marine protected areas, as MPAs could only be identified for those habitats and species protected by the EC Birds and Habitats Directives, although it might prove possible to protect some important sites through existing voluntary measures or existing marine nature reserve provisions. Gaps in species management and protection might be partly addressed by increased expenditure on voluntary measures such as Biodiversity Action Plans and strengthening the way in which the Biodiversity Duty in the Nature Conservation (Scotland) Act 2004 operates to deliver greater protection of key marine species; however, this may not secure the level of compliance necessary to result in measurable improvements.

88. A range of economic instruments is used to influence activity in the marine environment (e.g. accreditation schemes for the salmon industry, decommissioning of fishing vessels, and support to renewable energy generation through Renewables Obligation (Scotland)). To achieve better integration of environmental considerations into sectoral policies, policies would need to be reviewed and assessed for how well they integrate nature conservation objectives and amended accordingly. Policies already undergo regular review so, in this sense, there would be little cost to regulators but additional benefits may not be delivered and costs to industry may be significant depending on the additional restrictions imposed.

89. Biodiversity action plan related expenditure in Scotland (terrestrial and marine) is expected to increase to £97 million by 2010/11 at 2005/06 prices. However a recent report[8] considered that some habitat action plans and species action plans were considered to be resource constrained. The costs for extending the Biodiversity Duty to include new habitats and species can be estimated from the costs of establishing individual habitat action plans and species action plans across the whole of the UK.

90. The costs to the Scottish Government under this option will depend upon the number of biodiversity action plans set up (these cost between £23,000 and £500,000 per plan, with surveillance and enforcement costs of around £198,000 per plan) and the number of marine nature reserves. No marine nature reserves have been designated in Scotland but comparative data from existing reserves in England, Wales and Northern Ireland suggests that that each may cost around £24,000 to £33,000 to set up and £14,000 to £22,000 per year for surveillance and monitoring. The costs to industry would depend upon the specific controls that were introduced as a result of the option. There may be additional costs to NGOs and individuals, in relation to responding to consultation, of perhaps around £4,000 to £14,000 per consultation.

[8] GHK Consulting (2007) UK Biodiversity Action Plan: Preparing Costings for Species and Habitat Action Plans: Updating Estimates of Current and Future BAP Expenditures in the UK.

Option 3

91. **Option 3** involves the development of a new system of marine spatial planning, supported by marine objectives (ecosystem and socio-economic) and zoning initiatives where relevant as well as new MPA powers (see also paragraphs 100 – 111 on related amendments to conservation of seals legislation). This would include identifying marine objectives, new powers to identify, designate or recognise particular locations of biodiversity importance and species protection measures within the context of a marine planning framework. Marine objectives (including marine ecosystem objectives) will also need to reflect Scotland's international commitments such as those within OSPAR and the requirements of the MSFD. New MPAs would be based on science but there would be provision to take account of socio-economics in some circumstances when designations are being considered. There would also be provision to de-designate sites and to take account of socio-economics in site management.

92. The intention to progress new initiatives under this option mean there will be inevitable costs for the Scottish Government (see paragraph 94 for more details). The benefits under Option 3 would be similar to those under Option 2 where an improvement in the state of the marine environment compared to the current situation will give rise to economic, social and environmental benefits. The extent of these benefits will be greater than those under Option 2 and will depend on the degree of improvement of the state of the environment.

93. The total economic value of marine-related sectors (excluding oil and gas) to the Scottish economy (in 2004) is over £2 billion. Sectors such as fishing relate directly to the quality of the marine environment and account for a significant proportion of this. The value of sectors directly related to the quality of the marine environment total over £970 million per year. Nature conservation measures which enhance the sustainability of these sectors could therefore ensure that these significant economic benefits are retained. Social benefits such as leisure and recreation, cultural heritage and identity, and securing food provision for future generations could be at least equal to the economic benefits of marine biodiversity. As Scotland accounts for over 55% of the UK marine area out to 6nm, where the majority of benefits occur, this could imply potential social and environmental benefits from marine biodiversity (based on estimates in the UK Marine Bill RIA) of around £7 billion/year (although values are subject to significant uncertainty).

94. Developing zoning mechanisms within the marine planning system could cost around £485,000; this is part of the cost of marine planning. The Irish Sea Marine Spatial Planning Pilot provided the indicative costs of developing a nature conservation strategy Scotland and is shown in Table 6.

95. The main risk is that this could prove to be ineffective in protecting nature conservation features or that the level of detailed information required to support formal site protection is not readily available, or there may be other data gaps, leading to delays in identification and protection of a marine protected area network. These risks may be mitigated be seeking to ensure that the design of the marine planning system provides adequate protection to important nature conservation features (including where necessary negotiation at an international level) and that a sufficient investment in data collection is

made to support site protection measures. Any site protection measures that displace activities elsewhere may also result in increased environmental impacts and sectoral conflicts in areas outside the sites but there is scope to consider these issues, and introduce mitigation where possible, in parallel with the case for designation. Any restrictions on leisure activities might reduce the economic benefits of nature conservation to society.

Table 6: Costs of Developing a Nature Conservation Strategy for a Typical Regional Sea	
Task	**Cost**
Engagement of regional sea governments and stakeholders	£15,000
Develop and implement a communication strategy	£100,000
Data collection and mapping	£95,000
Assess socio-economic context of the regional sea	£25,000
Marine landscapes: identify, map, assess, characterise.	£75,000
Nationally important marine areas: identify, network, map,	£35,000
Nationally important marine features: identify, map.	£30,000
Conservation objectives: identify targets with stakeholders.	£30,000
Develop a draft zoning plan and management measures.	£80,000
Total cost	**£485,000**
Source: Vincent *et al,* 2004	

96. There would be costs to Scottish Government for the designation of MPAs to meet international obligations and national priorities on conservation and for community and demonstration/research purposes. The potential cost to the Scottish Government for implementing and managing site protection measures are shown in Table 7. The figures for enforcement and implementation are annual costs, and it is assumed monitoring will be on a 5-year cycle.

Table 7: Summary of Costs to the Scottish Government for Implementing New Site Protection Measures	
Activity	**Cost per site**
Survey costs	£100,000 -£120,000
Site Selection	£20,000 - £25,000
Consultation	£50,000
Management schemes	£23,000
Statutory Instruments	£3,000 - £4,000
Total One Off Costs	***£196,000 - £222,000***
Implementation – reviewing of consents	£1,000
Monitoring	£150,000
Enforcement	£12,000

Historic Assets

97. There are also costs associated with the proposed new system of safeguarding marine historic assets (e.g. historic shipwrecks) within the Marine Protected Area measures. This will allow Scottish Ministers to protect a broader range of historic assets than is possible under existing legislation. Transferring to a Historic MPA system is likely to incur

transitional costs of £25,000 over 2 years over and above the required expenditure using existing mechanisms under the Protection of Wrecks Act 1973 and the Ancient Monuments and Archaeological Areas Act 1979. Once one-off transitional costs have been taken into account, carrying out prioritised assessments of the most important historic assets for designation as well as ongoing high priority recording/monitoring work on designated sites, advising on management of these, and providing grant support to key stakeholders for the purposes of beneficial management is likely to cost Scottish Government £200,000 per annum.

Costs to other bodies, individuals and businesses

98. It is difficult to estimate the costs to other organisations of complying with any specific management requirements associated with individual MPAs, particularly since decisions will be taken on a case by case basis and it is predicted that in most cases social and economic uses are likely to be compatible with the protection of the features for which a site is selected. The estimated range in potential costs per site by sector is shown in Table 8 and is derived from a recent Defra study and fisheries estimates for Scotland. None of the scenarios outlined in the Defra study equate to the proposed method of managing the new MPAs that would be designated in Scotland under the new power. The upper ranges represent the most restrictive case scenario rather than the actual intended policy.

99. Historic MPAs are likely to continue to be small in size, and given the small scale of these MPAs, it is not anticipated that there will be significant additional costs to sea users and industry. Indeed, by relaxing the requirements to obtain licences for all marine historic assets for 'diving on a look but don't touch basis', there should be cost savings and new opportunities for sustainable tourism, however, these have not been possible to quantify.

Table 8: Range of Discounted Present Value Costs to Industry of Complying with Measures Associated with Marine Protected Areas

Sector	**Costs per site[1]**
Telecommunication cables	£0 - £55,000
Power cables	£0 - £41,000
Offshore wind energy	£0 – £537,000
Wave energy	£0 - £90[2]
Tidal energy	£0 – £16,000
Oil and gas	£0 – £2,047,000[3]
Fisheries	£0 – £780,000[4]

Source:
Assumed to be equivalent to the costs of partial restriction measures in ABPmer *et al*, 2007. The range of costs is dependent on the marine protected area network scenario that was used in the study and the extent of spatial overlap with the marine resource.
Notes:
1. No total is provided, as it is unlikely that a single area will require measures for all sectors:
2. The degree of overlap was estimated to be low and, as it is a developing industry, it is predicted that mitigation costs of associated activities can be avoided by careful site selection.
3. High cost for oil and gas largely due to costs of monitoring and directional drilling to avoid laying pipelines through sensitive habitats.
4. The upper figure is the estimated value in terms of net loss (in undiscounted 2007 prices) of completely closing an area to fisheries. The figure is based on the higher estimate of fleet activity in the vicinity of areas in Scotland of importance to marine wildlife. It is not intended that such areas would be closed to fisheries.

100. Non-governmental organisations may incur costs under option 3 due to activities such as input into consultation exercise, providing evidence etc. These actions are often deemed discretionary (i.e. the activities would be carried out anyway). However, there are a number of functions that NGOs carry out, such as monitoring, executing research and site management, that might otherwise fall to Government under a more formal conservation strategy. The study for Defra indicated that, for a single organisation for a single marine protected area, one-off costs (e.g. providing site evidence and consultation) can range from £3,900 to £13,900 and annual operating costs (e.g. monitoring and site management) from £14,350 to £39,850[9]

CONSERVATION OF SEALS

101. The conservation of seals is currently dealt with under primary legislation that is 40 years old. The Marine Bill proposes to amend the Conservation of Seals Act 1970 to improve and clarify the level of protection afforded to seals while at the same time balancing this with the need to maintain sustainable fisheries and aquaculture.

SECTORS AND GROUPS AFFECTED

102. Key business sectors affected by measures for seal management include: wild capture sea fisheries; salmon fisheries; aquaculture (fish farms); anglers; and wildlife tourism companies and other tourism-related businesses. Wildlife tourism is estimated to be worth £160 million (2006) to the Scottish economy. Based on 2006 figures on the value to the Scottish economy, aquaculture is worth £382 million, and wild capture fisheries: £308 million.

103. Government sectors affected include departments of the Scottish Government responsible for licensing and relevant authorities, including Scottish Natural Heritage (SNH) and District Salmon Fisheries Boards (both responsibility for safeguarding the conservation interests of seal and salmon Special Areas of Conservation). Research institutes that need to be consulted with include the Fisheries Research Service (FRS) and Sea Mammal Research Unit (SMRU).

104. Social and environmental groups affected include non-governmental organisations, individual members of society and society as a whole through perception of seal welfare and conservation.

OPTIONS and COST/BENEFITS

105. Two options for reforming the licensing system for the management of seals were proposed in the Marine Bill consultation document. A 'No change' option and a further option involving an outright ban on shooting seals is considered solely for the purpose of this RIA.

[9] ABPmer, RPA & Jan Brooke. 2007. Cost impact of marine biodiversity policies on business. The Marine Bill. Report to Defra, 6 December, 2007.

Option 1: 'No change' – this option is considered solely for the purposes of the RIA as it represents the baseline for comparison with the other options.

Option 2: full Reform of the existing legislation

Option 3: extend licensing to fish farms

106. The 'No Change' option will not generate any additional benefits nor give rise to additional costs. There is the risk that seal management across all fisheries sectors may not be on an equal basis.

107. Under **Option 2** the need to apply for a licence to shoot seals would be extended beyond the 'close season' to apply all year round and the provision to apply for a licence would be extended to fish farmers to protect cages or stock. The current risks to seal conservation, and the risk of unequal treatment of sectors, should be eliminated under this Option 2. The number of licences issued is likely to increase from the present level as a result of the extension to fish farms and year round application, but is not known by how much. The actual number of seals shot under licence would also increase from current levels, but a marked difference in the total number of seals killed is unlikely (as estimated 1,000 outside the licence process in 2008). It might be argued that since seal killing will be more closely managed and monitored, the total numbers shot might reduce over time.

108. Extending licensing all year round should reduce the potential risk of any impacts on wildlife tourism. Any measures which result in significantly greater numbers of seals being killed may have a detrimental impact on the revenue of the tourism industry; however this can be mitigated by consideration of the importance of local tourism interests as part of the licence process.

109. The removal of the 'netsmen's defense' under Option 2 should be compensated for by inclusion in the licence process, but may possibly result in increased damage or loss of fishing gear in a few cases. The potential costs cannot be assessed due to lack of information on the current encounter rates of seals with fishing gear and the level of damage inflicted.

110. The only reform to the current legislation under **Option 3** would be to extend the licensing powers to fish farms, enabling them to apply for licences to shoot seals during the close season or under conservation order, for the protection of cages or stock. This would allow for limits to be set on the number of seals shot during closed seasons and would require reporting of numbers shot. This option carries a potential risk to seal conservation status, although this is reduced by the power to introduce seal conservation orders to protect vulnerable populations. It would mean that all fishing sectors would be subject to the same controls and monitoring as required by the EU Habitats Directive. The potential costs to the aquaculture sector would be similar to those under Option 2.

111. There will be costs for the Scottish government associated with changes to seals legislation. This would involve the development of new licensing and reporting system for seals; preparatory research on seal interactions with fish farms and netting stations; initial implementation of a new licensing and reporting system; the integration of seal licensing with other marine management on a regional basis; and monitoring and compliance and enforcement. The initial one-off set up costs are estimated at £150,000. Assuming there are

12 regions identified for seal management purposes, the initial one off implementation costs for the Scottish Government is estimated at £400,000. However, seal management measures may not be required at the full costs in all 12 regions, and there may be scope for reducing these costs. It is not anticipated that there would be any costs on local authorities.

112. Although not proposed in the consultation paper, many responses to the consultation voiced support for a complete ban on the killing of seals. This would take place under **Option 4**, with no exceptions. There are significant increased risks under this option to aquaculture and wild capture fisheries, through increased damage to fish cages, escape of fish from damaged cages (which creates a risk to genetic diversity of native salmon stocks as a result of cross-breeding of native and farmed fish) and predation on stock. Option 4 may result in improved seal welfare and conservation, potentially leading to increased growth and economic value of wildlife-related tourism. It is not possible to estimate the potential economic cost to fisheries due to lack of information on the current level and cost of seal impacts on fisheries and aquaculture nor how such damage might change in the absence of control measures. In addition, economic costs may be incurred through increased investment in alternative non-lethal methods of predator defence. Any negative impacts on native fish populations could potentially impact on the significant economic value of these fisheries.

Small/Micro Firms Impact Test

113. Many small businesses and firms are represented under various groups with an interest in the marine environment and those groups have contributed to the development of the consultation document. Small firms have been consulted on the proposed Marine Bill for Scotland.

MARINE PLANNING

114. Almost all of the industry sectors identified include some small and micro-sized firms. As one of the aims of a system of marine planning is to provide better guidance to local regulators and industry, small firms are likely to benefit from the proposals. A well-designed planning system should address the needs of all users of the marine environment, including small-scale activities, in resolving resource conflicts. This may lead to better representation of small firms that tend to be overlooked in such negotiations, particularly if they are not members of a relevant industry body or association.

115. However, a planning system may impose restrictions over currently unregulated activities, such as algal harvesting and tourism. Many of these activities will be dominated by small businesses. Therefore, there is the potential for greater restrictions to be imposed on such activities resulting in further costs for small businesses. This can be addressed, however, by ensuring that small businesses are engaged in the planning process, so that such costs can be identified and mitigated as far as possible.

MARINE LICENSING

116. Many of the industry sectors identified include some small and micro-sized firms. However, the impact on small firms will be limited, as it is generally larger companies which undertake significant developments requiring more than one licence. The exception to this

may be in the aquaculture industry where multiple licences are regularly required. However, small firms are likely to benefit equally from the proposed options and should not incur disproportionate costs.

117. As one of the aims of reforming the licensing system is to simplify and streamline the approach, small firms are likely to benefit from the proposals.

MARINE PROTECTION AND ENHANCEMENT: THE SCOTTISH MARINE PROTECTION AREA

118. If proposals for improved marine nature conservation result in improvements to marine resources, this could result in benefits for small fisheries and tourism operators that rely on those resources for business as well as a stronger ecosystem to underpin the long term economic use of the sea by other industry sectors. However, there may be a need for restrictions to some economic activities on a case by case basis in MPAs and there are likely to be complicated trade offs. For example, increases in seal population numbers might benefit tourism but could have adverse impacts on small salmon fisheries.

119. The increased restrictions and measures associated with nature conservation proposals are expected to result in further costs for small firms. However, many of these measures are more likely to result in modifications to activities, rather than preventing them from taking place.

120. The proposals for implementing a new system of Historic MPAs intend to reduce the regulatory burden as much as possible and this should reduce costs for small firms, such as charter boat diving operators, in terms of administration and effort. Beyond that, the controls in place on Historic MPAs are more likely to result in modification of activities, rather than preventing them from taking place.

CONSERVATION OF SEALS

121. The proposals in the Marine Bill aim to improve the clarity and level of protection afforded to seals. The aquaculture, fisheries and tourism sectors that will be affected may include small businesses. The aim is to balance seal protection with the need to maintain sustainable fisheries and aquaculture. The proposals could therefore benefit those firms as a result of damage being avoided. Any measures that would increase the numbers of seals being killed may have a detrimental impact on the revenue of the tourism industry. This could be mitigated by consideration of the importance of local tourism interests as part of the licensing process.

Legal Aid Impact Test

122. It is not expected that the Marine Bill will have any impact on the current level of use that an individual makes to access to justice through legal aid or on the possible expenditure from the legal aid fund. As we are streamlining the licensing process and simplifying the system, there are likely to be fewer appeals, and we do not see any likely impact on appeals.

"Test Run" of business forms

123. No forms are necessary for the introduction of this piece of legislation. We will be simplifying the application process for licensing and in some cases projects may only need to be registered. New forms are not yet developed but are likely to be simpler than the current system, however, they will be test run with appropriate business representatives.

Competition Assessment

MARINE PLANNING

124. The benefits of a system of marine spatial planning include:

- Increased transparency from clear policies
- Reducing the uncertainty to developers in the marine area,
- Allowing the needs of all users to be considered, and
- Equal access to information and data on the marine area.

All of these benefits are likely to have a positive impact on competition, by producing a more equitable situation both across and within different industry sectors.

MARINE LICENSING

125. The benefits of a streamlined and modernised licensing system are:

- improved efficiency and cost-effectiveness;
- equal treatment of all marine activities; and
- reduced complexity of marine management.

All of these benefits are likely to have a positive impact on competition, by producing a more equitable situation both across and within different industry sectors.

MARINE PROTECTION AND ENHANCEMENT: THE SCOTTISH MARINE PROTECTION AREA

126. New measures for nature conservation are not expected to have a significant impact on the number or range of suppliers, to limit the ability of suppliers to compete or to reduce suppliers' incentives to compete vigorously. Measures would be applied equitably across the various sectors. Implementing a new system of Historic MPAs is likely to reduce some risks inherent in visitor licensing under the Protection of Wrecks Act 1973 which can generate competitive conflicts between sea-users with similar interests in designated wreck sites.

CONSERVATION OF SEALS

127. The measures for conservation of seals are not expected to have a significant impact on the ability of suppliers to compete. The aim of the seal conservation measures is to balance the need to maintain sustainable fisheries and aquaculture sectors with the improved protection for seals.

Enforcement, Sanctions and Monitoring

MARINE PLANNING

128. Responsibility for compliance, monitoring and enforcement of plans would be carried out by the plan-making body, which would be Marine Scotland. Reserved issues would continue to be addressed by the respective departments within the UK Government. The plan would be delivered through the licensing system and measures for nature conservation.

MARINE LICENSING

129. Responsibility for compliance, monitoring and enforcement of the revised licensing arrangements would be carried out by the relevant regulating authorities as at present, with some improvements in efficiency. Alternatively, this could fall under the remit of Marine Scotland. Reserved issues would continue to be addressed by the respective departments within the UK Government.

MARINE PROTECTION AND ENHANCEMENT: THE SCOTTISH MARINE PROTECTION AREA

130. Responsibility for compliance, monitoring and enforcement of conservation measures would lie with the Scottish Government. These responsibilities would be taken on by Marine Scotland. For historic assets, decisions on licensing will continue to be made on the basis of field assessment and informed professional judgement by Historic Scotland. Compliance will be tested in the same manner as now, that is, through reporting and inspection. Historic Scotland will continue to lead on this area of work though there may be opportunities for close cooperation with Marine Scotland to improve effectiveness of enforcement at sea. Reserved issues would continue to be addressed by the respective departments within the UK Government. Certain of the measures would be delivered through the licensing system.

CONSERVATION OF SEALS

131. Responsibility for the enforcement of the conservation of seals measures will fall to the police and marine enforcement officers of Marine Scotland.

Implementation and delivery of plan

132. The Marine (Scotland) Bill will be introduced to the Scottish Parliament in April 2009. It is anticipated that the main provisions in the Bill will come in to force following Royal Assent in 2010.

Post-Implementation review

133. The Act will be reviewed three years after it has been fully commenced. It is not yet clear what method will be used to review, however we intend to put in place a programme of monitoring and evaluation.

Summary and Recommendation

134. Following extensive consultation, consideration of the responses and the costs/benefits of the proposals, the following are considered the best options:

MARINE PLANNING

Option 2 - implement a statutory marine planning system.

MARINE LICENSING

Option 3 and Option 4. The Bill amalgamates CPA Part 2, FEPA Part 2, extends the framework to include dredging and includes wildlife licences. Ministers are considering how to integrate the CAR consent, although this is likely to be an administrative process. Ministers are also considering exempting maintenance dredging using established techniques where this is in pursuit of ports' and harbours' statutory duty to maintain navigable channels and allow the safe passage of vessels. The most likely outcome is an activity based approach for the renewables industry and integrated FEPA, CPA, CAR, wildlife and aggregate licences.

MARINE PROTECTION AND ENHANCEMENT: THE SCOTTISH MARINE PROTECTION AREA

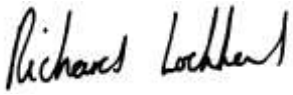
Option 3 – implement new measures and policies for nature conservation and safeguarding marine historic assets within the Marine Protected Area measures.

CONSERVATION OF SEALS

Option 2 – full reform.

DECLARATION AND PUBLICATION

I have read the regulatory impact assessment and I am satisfied that the benefits justify the costs.

Signed  **Date** 28 April 2009

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ANNEX

NON – STATUTORY PROPOSALS

There are 2 proposals included in the consultation "Sustainable Seas for All" that are not directly covered by the Scottish Marine Bill, but are required for the purpose of the Bill to be achieved. These are discussed below.

SCIENCE AND DATA

1. Scotland's seas are generally regarded as clean and safe, in good health and are certainly productive. However, there is no certainty that they will remain in the current state even if current activities do not expand. To realise our aims for delivering a sustainable marine environment, and to meet our obligations e.g. MSFD that we need to deliver on, we need decisions to be backed by robust and informative science and research. We have already published the report on the State of Scotland's Seas: Towards Understanding Their State in 2008, and we are working towards producing a comprehensive State of Scotland's Seas report in 2010. A considerable amount of work on marine science and data has already been carried out, and this work will have to continue in order for us to achieve good environmental status as required under the MSFD.

2. Scientific insight and the available data determine our understanding of the many natural processes in the marine and coastal areas and are central to our efforts to provide greater stewardship of the seas. More information is needed to establish a comprehensive socio-economic picture of a particular activity or geographical area of our seas, and we need to develop our understanding of the likely impact of a change of economic activity in a small area and the consequent social effects. Similarly, we need to improve our understanding of climate change and the likely impacts of this on the seas around Scotland. We also need more information on Scotland's deeper offshore waters to assess their health and cleanliness.

3. In order to carry forward the range of measures in the Scottish Marine Bill, there is a need for further science and a mechanism to agree its interpretation. There is also a need for greater co-ordination between the academic community and the wider stakeholders and policy makers. The control and organisation of data flows will be key to delivering sustainable development in Scotland's seas. The need for control suggests that some form of geographic information (GIS) system is unavoidable.

OPTIONS and COSTS/BENEFITS

4. All of the above would suggest there is a need for a marine science strategy. Responses to the consultation were highly supportive of the development of a Marine Science Strategy. This could provide a mechanism for directing scientific effort into areas of importance, focusing research effort, and allowing stakeholder input into the scale and direction of marine science in Scotland. It could also co-ordinate science and industry involvement with a view to providing more coherent data capture and storage. A science and data strategy could also have a significant role to play in developing objectives to determine

both our use and the limits on our use of the seas, all within the context of delivering sustainability. There are a range of possible bodies that might have the responsibility for the marine science strategy, and the proposition that Marine Scotland should have that responsibility received overwhelming support form respondents to the consultation.

5. If we are to monitor and assess Scotland's seas consistently and to rigorous standards then responsibility for these activities must lie with a single body. Responses to the consultation were highly supportive that Marine Scotland should have a strategic role in marine monitoring and assessment. It is proposed that Marine Scotland carry out this duty with the assistance of a group of scientific advisors for science and data. The costs involved for robust and informative science and research are difficult to quantify at this stage given that decisions on the focus of scientific effort have not yet been made.

6. Scottish Ministers believe that FRS' marine science capabilities and resources are best integrated into Marine Scotland. It is proposed that the Scottish Marine Bill allows for the development of secondary legislation as deemed necessary e.g. for setting data collection and storage standards.

7. Responses to the consultation also showed overwhelming support for the proposal that Marine Scotland should also take forward the development of GIS. The costs involved in this are unclear at this stage. Information taken from the UK Marine Bill Impact Assessment estimates capital costs of a GIS for the UK Marine Management Organisation (MMO) at £4.3 million, with annual running costs of £86,900 per year for hardware and software maintenance and data management. The total set-up and running costs for a GIS for marine data system over the next 20 years were estimated at around £5.6 million. A similar order of magnitude would be anticipated for a Scottish system, however further work and analysis on the costs will be necessary and consideration given as to whether Scotland does this in isolation or jointly with other UK Departments. The risk of creating a separate GIS system for Scotland is that could cause problems for the integrated management of the seas around the UK and potential difficulties in meeting the requirements of the MSFD. One respondent to the Partial RIA indicated that there is a need for an EU-wide GIS system. The Marine Environmental Data and Information Network (MEDIN) initiative aims to deliver a data management system, supported within Scotland by funds of £150,000 per year from the Scottish Government. As part of this initiative, a GIS has been identified as a priority.

8. The implementation of sustainable development in the marine area will provide a series of challenges from a data and science perspective. Where relevant, a key aim of the Scottish Marine Bill will be to create the right conditions and framework to foster the development of scientific capacity and expand scientific understanding of our seas.

MARINE MANAGEMENT ARRANGEMENTS

1. The proposals for a new organisation – Marine Scotland - to be set up to champion Scotland's seas were strongly supported by those who responded to the consultation. There were options as to its status - an NDPB, an Agency or part of Scottish Government. A decision on the most appropriate approach depended on a number of factors, including its final agreed role and remit, which was subject to the outcome of the consultation process and Ministerial views. Key considerations included: the need to deliver integrated and aligned (science, policy and delivery) functions effectively and efficiently; costs (and time) involved; a need for accountability and transparency; and the need to attract and retain key skills and experience.

2. Ministers announced on 9 February the establishment of Marine Scotland as a Directorate of the Scottish Government, from 1 April 2009. At that stage, it amalgamated the functions and resources of the Scottish Government Marine Directorate, Fisheries Research Services and the Scottish Fisheries Protection Agency. 2009-10 will be a transitional year for Marine Scotland as it integrates those functions and resources and prepares to take on new functions following enactment of the Scottish Marine Bill in 2010.

3. Marine Scotland is the lead marine management organisation in Scotland. Its Mission is, itself and by working with others, to manage Scotland's seas for prosperity and environmental sustainability, towards the Scottish Government's overall purpose of sustainable economic growth. By integrating existing science, policy and delivery functions, along with key new functions such as marine planning and improved marine nature conservation measures, Marine Scotland will provide holistic marine management measures and advice efficiently and effectively, to the benefit of Scotland.

SECTORS AND GROUPS AFFECTED

4. The stakeholders affected by the new marine management arrangements are all of those carrying out activities, or having other interests, in the marine environment.

5. Industry sectors include: marine renewable energy; fisheries (finfish and shellfish); ports and harbours; shipping; aquaculture; oil and gas extraction and related pipelines; telecommunication and power cables installation and operation; sand and gravel extraction; recreation and tourism, and other activities covered by regimes such as marine licensing and environmental consents. Other groups affected include recreational users of the marine environment. In the public sector key stakeholders are the Scottish Government and its agencies; Non Departmental Public Bodies (NDPBs); local authorities; existing research communities. Other interested groups and the general public may also be affected.

RISKS, COSTS AND BENEFITS

6. Changing existing arrangements carries some risks, in that change could be complex, disruptive and costly. However, these risks are mainly short term, arising during the transition period for Marine Scotland. They are being mitigated by establishing Marine Scotland now, allowing it to manage the integration of existing functions and resources, in advance of new functions, including those anticipated under the Scottish Marine Bill.

Preparing the way in advance means that these new responsibilities, such as marine planning, can be taken up immediately by Marine Scotland, once the legislation is in place. Other functions, such as transfer of licensing responsibilities, may be phased, to ensure continuity and minimise disruption.

7. There are also some potential risks associated with the disruption of existing arrangements and linkages, including 'horizontal' linkages across policy areas and across the marine/terrestrial divide; and in ensuring the availability of sufficient resources and expertise to operate an integrated licensing system. These risks have been recognised and mitigated by deciding on the scope of Marine Scotland's role as at the date of its establishment: and by arrangements – including planned establishment of a Marine Strategy Forum - for it to cooperate and coordinate with other organisations on marine issues. Further work is to be undertaken, as part of the transition arrangements for Marine Scotland, on licensing and consenting arrangements, but one mitigation strategy would involve Marine Scotland as a single access point to the licensing framework, rather than carrying out all licensing work itself. Under this scenario, for instance, Marine Scotland would act as the front door for licensing, but SEPA would in fact continue to regulate impacts in the water environment under its Controlled Activity Regulations arrangements.

8. The creation of Marine Scotland will generate significant benefits in co-ordinating the actions needed to meet the Scottish Government's marine objectives and to achieve its overarching aim of sustainable economic growth. This will particularly be the case when new obligations such as marine planning and integrated licences are introduced. This will increase the certainty that the objectives will be met: in short, establishment of Marine Scotland is a key element in ensuring achievement of the benefits anticipated from the Scottish Marine Bill, set out in the main body of this Regulatory Impact Assessment.

9. Establishment of Marine Scotland by integrating 3 existing bodies as part of Scottish Government will also generate efficiency savings. Current estimates suggest savings – on a like for like basis and following an initial transition period – of at least £1.5 million annually in staff and other costs. Other efficiencies will accrue from integrating new with existing functions (for example, from integrating marine planning with existing marine policy and strategy development responsibilities) within Marine Scotland. It is difficult at this stage to place a precise value of such benefits, pending the outcome of Parliamentary consideration of the Marine Bill and further consideration of delivery arrangements. However, such savings and efficiencies will contribute, amongst other things, to the costs of delivering new marine management functions. Stakeholders responding to the consultation indicated there could also be benefits for local and democratic accountability from Marine Scotland working in partnership with local authorities.

10. The cost of preparatory work to establish Marine Scotland has been estimated at around £0.4 to £0.5m. Other costs are likely to accrue - in particular to integrate IT arrangements for Marine Scotland - and which seem most appropriately attributable to establishment/transition of Marine Scotland (rather than the costs of marine management function delivery). Final costs will depend on strategic and detailed decisions on arrangements.

11. In summary, there would be limited direct costs involved in continuing with current marine management delivery arrangements. But the objectives of the Scottish Marine Bill may not, in those circumstances, be met, inefficiencies would continue and the anticipated

benefits from the Marine Bill may not be (certainly fully) achieved. There are one-off transitional costs related to the establishment of Marine Scotland, but potential longer-term benefits are expected – including from efficiency savings.

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