Response to Draft Sectoral Marine Plans for Offshore Wind, Wave and Tidal in Scottish Water

by the Scottish Environment LINK Marine Taskforce

Date: 13 November 2013

Introduction
Scottish Environment LINK is the forum for Scotland's voluntary environment community, with over 30 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society.

Its member bodies represent a wide community of environmental interest, sharing the common goal of contributing to a more sustainable society. LINK provides a forum for these organizations, enabling informed debate, assisting co-operation within the voluntary sector, and acting as a strong voice for this community in communications with decision-makers in Government and its agencies, Parliaments, the civic sector, the media and with the public.

Acting at local, national and international levels, LINK aims to ensure that the environmental community participates in the development of policy and legislation affecting Scotland.

LINK works mainly through Taskforces – groups of members working together on topics of mutual interest, exploring the issues and developing advocacy to promote sustainable development, respecting environmental limits.

LINK Marine Taskforce comprises a number of LINK members committed to working on marine issues. The LINK Marine taskforce vision is of **healthy, well-managed seas, where wildlife is flourishing, ecosystems are protected, connected and thriving, and coastal communities are sustained.**

LINK members welcome the opportunity to comment on the draft Sectoral Marine Plans.

This response was compiled on behalf of LINK Marine Taskforce and is supported by:

Hebridean Whale and Dolphin Trust	Whale and Dolphin Conservation
Marine Conservation Society	WWF Scotland
National Trust for Scotland	Scottish Wildlife Trust
RSPB Scotland	Scottish Ornithologists' Club

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Draft Sectoral Marine Plans for Offshore Wind, Wave and Tidal in Scottish Water

RESPONDENT INFORMATION FORM

1. Name/Organisation

Organisation Name

Scottish Environment LINK

Title **Mr** ☒ **Ms** ☐ **Mrs** ☐ **Miss** ☐ **Dr** ☐ ***Please tick as appropriate***

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3. Permissions - I am responding as…

Individual ☐ / **Group/Organisation** ☒

Please tick as appropriate

(a) Do you agree to your response being made available to the public (in Scottish Government library and/or on the Scottish Government web site)?

Please tick as appropriate ☐ **Yes** ☐ **No**

(b) Where confidentiality is not requested, we will make your responses available to the public on the following basis

Please tick ONE of the following boxes

Yes, make my response, name and address all available ☐

or

Yes, make my response available, but not my name and address ☐

or

Yes, make my response and name available, but not my address ☐

(c) The name and address of your organisation ***will be*** made available to the public (in the Scottish Government library and/or on the Scottish Government web site).

Are you content for your ***response*** to be made available?

Please tick as appropriate ☒ **Yes** ☐ **No**

(d) We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

Please tick as appropriate ☒ **Yes** ☐ **No**

Plan Development

1. Do you agree with the approach (outlined in Section 3 of the Sectoral Marine Plans) used to develop the Plans?

   Yes ☒ No ☐

We agree and support the approach taken to develop the Plans. We particularly welcome the early integration of strategic environmental assessment (SEA) and habitats regulations appraisal (HRA) into the plan preparation process. Environmental assessment was initiated at an early stage and most importantly stakeholder engagement was sought.

Notwithstanding our support for the approach taken we consider that the environmental assessment element can be improved. We recommend that future iterations of the plan integrate the following:

- Currently the plans have largely been informed by simple data, including resource, spatial constraints (including designated sites) and analysed species distribution data of limited resolution.

  We recommend that future iterations develop the accuracy for identifying suitable Plan Options by utilising sophisticated modelling tools. Modelling that incorporates a number of co-variables (e.g. bathymetry, hydrology, sea temperatures, species distribution) to predict environmental sensitivities within regions will contribute towards the reduction in risk (environmental, social and economic risks) that is required in identifying areas for development and supporting the delivery of offshore renewables.

- In Scotland, a number of commercial offshore wind projects are currently in planning. The wealth of information and research provided and commissioned by both developers and the competent and statutory authorities, during determination of these applications, must be integrated into future iterations of the Plan. Addressing lessons learned by the current round of applications will help inform future Plan Option selection and refinement. This is particularly relevant when considering the environmental capacities across the Scottish marine area and the need to manage renewables activities within these capacities.

We support the establishment of the proposed Sectoral Plans Review Group and would suggest that timely review of the plan is appropriate to ensure it is able to respond to increased knowledge and understanding.

2. Do you have any views on the findings of the Sustainability Appraisal Report? Do you think that all the social, economic and environmental effects (positive and negative) have been identified? Are there other issues that should be taking into account in the preparation of the Final Draft Plans?

We support the approach taken by the SA, and believe that the environmental assessment has considered the majority of environmental information and potential impacts that would be expected of the various assessments. However, there exist a number of omissions that we recommend should be included in the final report, including:

- The Saltire Prize Identified Areas are present in some but not all maps showing the draft Plan Options. Have the Saltire Prize areas been incorporated and assessed under the SEA and SA? Whilst existing competitors and their lease sites are known, is there potential for new competitors to enter the competition?

- The potential for indirect effects of Plan Option development have not been represented within the SA or SEA. For instance, potential exists for development to impact on populations of prey species, which could have significant effects on important and protected mobile marine species. We acknowledge that this could be covered by the proposed mitigation that includes sedimentation and hydrology modelling and its associated effects on biodiversity. However, potential for indirect effects are not specified and they should be.

- Terrestrial conservation features are not represented in the SEA in the way that SPA bird qualifying features have been within the HRA. It is important to consider the potential impacts of offshore wind in particular on some receptor species, most notably migratory species such as geese. Marine Scotland has commissioned a paper on the potential cumulative impacts of offshore wind on migratory species, however this should go further to consider both onshore and offshore wind energy (Strategic assessment of collision risk of offshore wind farms to migrating birds (WWT) ref: CR/2012/04).

- It is important that the final Sectoral Plan gives due prominence to the important role that marine renewables will play in tackling climate change and ensuring Scotland meets both its targets under the Climate Change Act and the commitment to a decarbonised power sector by 2030. With a significant proportion of the EU's marine renewable resource Scotland has an important role to play in a future low carbon, integrated European grid.

3. The SEA has identified a range of potential effects from the Draft Plans. Measures for the mitigation of these effects have been identified in the SEA environmental report. Do you have any views on these findings? Do you think that the proposed mitigation measures will be effective? Do you have any additional suggestions?

We strongly support the proposed mitigation measures presented within the SEA and wish to highlight the importance of the recommended focus on undertaking further research and project level monitoring. This research is crucial, contributing towards the improvement of understanding and informing higher standards and robustness in decision-making. Further recommendations for mitigation and adaptive management include:

- Proposed mitigation includes the avoidance of designated conservation areas by development. In this vein, any overlaps of draft Plan Options with possible MPAs or MPA search locations must be adjusted so that these overlaps are minimised.
- Impacts on species and habitats in general, including important areas for fish, should be reduced through appropriate project design.
- Ultimately, to contribute towards the delivery of a sustainably managed renewables industry, we call on Government to establish a body or programme which facilitates and/ or delivers strategic industry specific environmental monitoring and research. Frameworks or templates that are in existence and could be applied to this effort include the Scottish Wind Bird Steering Group.

4. The Socio-economics Report has identified a range of potential impacts on existing sea users. Do you have any views on these findings? Do you think that the proposed mitigation measures will be effective? Do you have any additional suggestions?

No comment.

5. Taking into account the findings from the technical assessments, do you have views on the scale and pace of development that could be sustainably accommodated in Scottish Waters?

There is a necessity to approach development of offshore renewables with a degree of precaution given the novel challenges these industries present and the potential risks to the environment. See response to question 7 below for further details.

6. Are there aspects of the Draft Plans that you believe should be improved? Are there any aspects you believe should be taken forward differently?

We consider the environmental assessment approach can be improved. In addition to recommendations in our answer to question 1, we summarise these following improvements:

- More clarity in assessment of Impact Risks;
- More transparency in how uncertainties are dealt with in the risk based approach;
- An SEA Objective should include both pillars of the EU Habitats Directive; the Natura 2000 network and species protection.
- Putting the mechanisms in place to enable strategic analysis of data collected by individual developers;
- Ensure that data is made available in a timely fashion:
- Allowing development at a pace that seeks to be informed by the provision of data addressing key data gaps, including through field data and completion of ORJIP projects
- Overlap with proposed MPAs and Search Locations should be minimised, as well as with designated sites or other sensitive habitats, species and ecosystem functions;
- Ensuring that high level mitigation measures are carried through to the project level, including enforcement;
- Improving our understanding of cumulative impacts;
- Better representation of cetacean data in maps;

7. Do you believe an appropriate balance, between tackling climate change, maximising opportunities for economic development and dealing with environmental and commercial impacts been achieved in the Draft Plans?

Yes ☒ No ☐

Rapid and large-scale deployment of renewables, including offshore renewables, is recognised to be a vital part of the solution to helping tackle climate change. Climate change presents long term, systemic risk to the marine environment. The Marine Atlas cites human activity contributing to climate change as one of two greatest impacts on Scotland's seas[1] The recent publication of the 5th IPCC Report reinforces the already established scientific evidence regarding climate change, increasing the levels of confidence and providing more detailed understanding of climate change than previous reports. In particular:

[1] Baxter, J.m., Boyd,I.L., Donald, A.E., Malcolm, S.J., Miles, H., Miller, B., Moffat, C.F. 2011. Scotland's Marine Atlas, Information for the National Marine Plan. Marine Scotland, Edinburgh

- Scientists are now 95% to 100% certain that humans have caused the majority of climate change since the 1950's. This is an increase in certainty from 2007 (90% to 100%) and a significant increase since 2001 when scientists were at least 66% certain.

- Without an aggressive mitigation strategy that sees greenhouse gas emissions stabilize this century, global temperature looks set to significantly exceed 2°C warming above pre-industrial levels by 2100 – crossing a threshold into catastrophic warming with devastating global consequences.

- The oceans are acidifying and have been since the beginning of the industrial era, with devastating consequences for the marine environment.

  The recently published State of the Oceans report 2 states that oceans are becoming more acidic at the fastest rate in 300m years, due to carbon dioxide emissions from burning fossil fuels, and a mass extinction of key species may already be almost inevitable as a result.

However, the potential scale of existing proposals and future development in the marine environment will bring unprecedented change and with it, the risk of significant environmental harm. As a result of the level of uncertainty around the potential impacts, due effort is required both within Plan preparation and at project level to ensure that where ever possible these are avoided. This is acutely relevant given the importance of Scotland's wildlife rich marine environment that supports some of the largest European seabird colonies, globally important populations of Great skua and globally significant numbers of other marine species, including 50% of the EU's harbour seals and important populations of globally vulnerable basking sharks.

In this regard, the draft Plans do offer significant potential for new renewable offshore energy projects with high scenarios presenting as much as 20GW energy capacity delivered by 2030, as laid out in the socio-economic report. Scottish Environment LINK strongly stresses the importance of taking a precautionary approach to the development of renewable technologies in Scotland. This approach must be strategic, which includes establishing a comprehensive understanding of the potential cumulative environmental impacts of the Plan, whilst ensuring the process is iterative and takes into account the outcomes of existing case studies and future environmental research and monitoring.

[2] See http://www.stateoftheocean.org/research.cfm

Draft Plan options

8. The Draft Plan for Offshore Wind Energy proposes 10 Draft Plan options. What are your views on the Offshore Wind Draft Plan options? Are they in the correct place? Are there reasonable alternatives that should be considered?

Scottish Environment LINK has been involved in the pre-consultation stages of the draft plans and has sought to inform the preparation of their boundaries. The content of this previous engagement encompasses our key concerns. However, there exist additional issues with the following referenced draft Plan Options, which we would seek to be addressed in the final Plan:

- OWN1 – this plan option lies adjacent to and overlaps the proposed North West Orkney Marine Protected Area, which is proposed for the conservation of sandeel. Indeed, the importance of this site for sandeel is supported by JNCC's advice that states "no other possible MPAs for which sandeels are being considered are thought to be of equal ecological value". The Plan must therefore fully consider the potential environmental impacts of offshore wind in this location on this species and the potential indirect impacts on seabirds, marine mammals and other sandeel predators. Should the OWN1 site remain as a Plan Option then the plan must stipulate the requirement for any future development in this area to adequately assess the potential direct impacts to sandeel and the indirect impacts to other species.

- OWSW1 – key issues to be included for consideration in the assessment include :
  - the presence of nationally important populations of gannets,
  - Harbour and grey seals
  - seabird foraging areas which likely overlap the proposed Plan Option.
  - Mull of Galloway (RSPB reserve) is the largest breeding seabird colony in the region, supporting guillemots, black guillemots, fulmars, kittiwakes and shags, cormorants and gull species and is in close proximity to the Plan Option.
  - Manx shearwaters are found inshore in this region throughout the summer and other species make passage through the Mull in spring and autumn, including wader species.
  - Internationally important pink-footed and barnacle geese and whooper swans overwinter and pass through Wigtown Bay LNR (Cree Estuary SSSI) to and from the Cumbrian coast. Some whooper swans have been tracked by WWT offshore in the proposed Plan Option. Wigtown Bay is also nationally important for pintail and curlew.

- OWSW2 - monitoring of the original and operational offshore wind farm (Robin Rigg) has been inadequate to establish an empirical database of the movements of birds (whooper swans and pink-footed geese are particularly vulnerable) and porpoises through and around the site (especially in migration periods, and particularly at night and during storm conditions). No remote sensing surveys have been undertaken and therefore significant uncertainties remain over how birds and porpoises react to the wind farm and any subsequent collision risks or disturbance issues respectively. These issues remain outstanding in the face of additional potential development in this area/ extension to the Robin Rigg site. Furthermore, there are nationally important numbers of red-throated divers and common scoter within the general area of Robin Rigg and the inner Solway area is of vital importance as an overwintering and passage areas for hundreds of thousands of migrant waterfowl.

  The proposed Plan Option is significantly larger than Robin Rigg and could bring the site closer to the coast (which increases the potential for interactions with the Upper Solway SPA/Ramsar site and other designations). Therefore it remains of critical importance that the above noted issues are addressed within the plan by stipulating the requirements of developers to address and assess these impacts at the project level.

- OWW2 – this plan option is very close to an area that is a basking shark hotspot of potential global significance that is within the Skye to Mull MPA search location for basking shark. It is therefore important that the status of this plan option and any possible interactions with basking shark are very carefully considered.

9. The Draft Plan for Wave Energy proposes 8 Draft Plan options . What are your views on the Wave Draft Plan options? Are they in the correct place? Are there reasonable alternatives that should be considered?

- WN2 – this plan option lies adjacent to and overlaps the proposed North West Orkney Marine Protected Area, which is proposed for the conservation of sandeel. Indeed, the importance of this site for sandeel is supported by JNCC's advice that states "no other possible MPAs for which sandeels are being considered are thought to be of equal ecological value". The Plan must therefore fully consider the potential environmental impacts of offshore wave in this location on this species and the potential indirect impacts on seabirds, cetaceans and other sandeel predators. Should the site remain as a Plan Option then the plan must stipulate the requirement for any future development in this area to adequately assess the potential direct impacts to sandeel and the indirect impacts to other species.

- WW3 – this plan options overlaps an area that is a basking shark hotspot of potential global significance that overlaps the Skye to Mull MPA search location for basking shark. It is therefore important that the status of this plan option and any possible interactions with basking shark are very carefully considered.

10. The Draft Plan for Tidal Energy proposes 10 Draft Plan options. What are your views on the Tidal Draft Plan options? Are they in the correct place? Are there reasonable alternatives that should be considered?

    Please indicate which proposed Draft Plan option(s) you are commenting on using the relevant indicator (i.e. TN1).

- TSW1 – The response provided to OWSW1 in question 8 above, applies to this Plan Option. Furthermore, there are two sites which RSPB Scotland brought forward to the MPA consultation as third party proposals, including Scare Rocks MPA and Mull of Galloway MPA, both of which would be marine extensions to existing SSSI designations. It is requested that the Plan fully considers the potential direct and indirect impacts on features for which the proposed extensions were put forward for designation and for the MPA search features which are known to exist in these areas. Should overlaps remain then the Plan must stipulate the requirement for any future development in this area to adequately assess the potential impacts.
- TN1-4 - We are concerned about TN1-4 because of the declining harbour seal population around Orkney.
- TN 4 is very close to the Wyre and Rousay Sound pMPA for excellent examples of tideswept kelp and seaweed communities on sediment and maerl beds. We would hope that tidal developments in TN4 did not impact upon the tidal regime that helps make the seabed of Wyre and Rousay Sound so special.

11. Do you believe any draft plan options be removed from the Draft Plans for Wind, Wave and Tidal Energy?

    Yes ☒ No ☐

    If Yes, please indicate which proposed Draft Plan options you believe should be removed (using the relevant indicator), and explain why :

With reference to the issues raised for wind, wave and tidal draft Plan Options (TSW1, WN2, WW3, OWSW2, OWSW1, OWN1 & TN1-4), in the above noted responses, the precautionary approach must be taken to assess the potential impacts.

Plan Implementation and Review

12. The Plans, once implemented, will be reviewed to take account of actual development and increasing knowledge of development factors. How often do you believe should this be done and why? Who do you believe should be involved in the Plans Review Steering Group, to oversee the review process?

Scottish Environment LINK supports the two-year cycle for review as we believe this is appropriate in terms of regularity, given the rapid advances made within all the offshore renewable sectors. However, we do not consider the need for a full review to be undertaken every two years. A full review process is resource intensive and requires significant engagement from stakeholders and the benefits are unlikely to outweigh the resource requirements.

Instead, we would recommend an appraisal or maintenance review to be taken in two years time. This should seek to gather all new information, from case studies to advances in scientific understanding or modelling capabilities. This should help focus what elements of the Plan may require amendment in light of these new findings or capabilities in interpreting or informing the process. At this stage consideration can be made as to whether the Plan requires significant amendment and full scale review. There is little justification for a full review if there have not been significant advances in understanding that would effect the outcomes of the Plan. This recommendation is similar to that put forward under the HRA of the draft Plan, in the form of Iterative Plan Review (IPR) process. We believe the IPR process should be extended to consider the wider contextual environmental issues identified through the SEA process. The proposed project advisory group or project steering group would be ideally suited to undertake an appraisal or maintenance review of this kind, with input from stakeholders.

Strategic Environmental Assessment

13. To what extent does the Environmental Report set out an accurate description of the current environmental baseline? Please also provide details of any additional relevant sources.

- The report would benefit from a map showing both the draft Plan Options and the possible MPAs and MPA search locations. This would be consistent with other designations that have been presented alongside draft Plan Options.

- The cetacean relative distribution maps provided in Appendix B: Baseline Information report of the Environmental Report, might be misleading in that they do not provide useful scientific information about the conservation status or legal requirements of cetaceans in Scottish waters. Great care is required in interpretation of data presented in this way, for this purpose. We acknowledge the recognition of this in section 3.5.6 of the report. However this 'caveat' would be most effective if presented alongside the maps.

- Seabird vulnerability maps (SEA, Appendix B. Baseline Information, page 14 para 1.2.32). We do not consider the method of analysis and preparation of the seabird vulnerability maps is robust and in this light the report lacks any acknowledgment of the uncertainty of these maps in presenting true representation of seabird sensitivity. Our key points:

  i) between 1980 and 2004 birds may have changed distribution entirely. Amalgamating years only serves to smooth over this error, not remove it.
  ii) ESAS data was collected at various times of year as well, and this is hugely important when considering seabirds.
  iii) The application of Poisson Krigging is considered inappropriate for analysing data of the type and quality of ESAS data. The smoothing effect or output may actually present significantly wrong estimates.

  Ultimately, we suggest that presentation of the raw ESAS data may be more useful in identifying potential sensitive areas. Looking towards the future, RSPB's work on FAME and modelling seabird distributions will help advance the quality of this baseline. At this stage it is at least necessary to acknowledge and highlight the accuracy of the seabird sensitivity maps presented in the SEA.

- We welcome the correct interpretation of the many concerns and deteriorations around seabed habitat status as presented in section 5, presenting a clear picture of an undesirable ecosystem baseline.

14. Do you agree with the predicted environmental effects of the plans as set out in the Environmental Report?

Overall, we agree with the predicted environmental effects, notwithstanding the omissions we have highlighted in our response. However, we also acknowledge that there remains a high level of uncertainty over the potential for impacts and the environmental sensitivity of the draft Plan Option areas and that the recommendations are for comprehensive environmental assessment to be taken at the project level. This fact, that uncertainty at the strategic level will remain at the project level, should be acknowledged within the final Plan, with commitments made, as set out in the SEA recommendations and mitigation section, to address and relieve the uncertainty and environmental risks associated with proposed offshore renewable development.

15. Do you agree with the recommendations and proposals for mitigation of the environmental effects set out in the Environmental Report?

Please refer to our response to question 3.

16. Are you aware of any additional on-going research or monitoring that may help to fill gaps in the evidence base, particularly relating to the marine environment and its interactions with renewable energy devices? Please give details of additional relevant sources.

No comment.

17. Are you aware of any further environmental information that will help to inform the environmental assessment findings?

No comment

Additional comments

18. Do you any other comments you wish to make of the Plans and / or the related assessments?

No comment.