



Neil Copeland, Patricia Dunne and Mary Walsh  
Ofgem

BY EMAIL

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Dear Neil, Patricia and Mary

**The Wildlife Trusts response to consultation on Early Opportunities, Pathway to 2030 and Multi-purpose Interconnectors**

1. Introduction

- 1.1. The Wildlife Trusts (TWT) welcome the opportunity to comment on the consultation on Early Opportunities, Pathway to 2030 and Multi-purpose Interconnector consultation.
- 1.2. TWT, with more than 850,000 members are the largest UK voluntary organisation dedicated to conserving the full range of the UK's habitats and species, whether they be in the countryside, in cities or at sea. TWT manages 2,300 reserves covering more than 100,000 hectares of land including coastal reserves; TWT stand up for wildlife, inspire people about the natural world and foster sustainable living.
- 1.3. TWT support the UK's current targets to reduce greenhouse gas emissions and the government's ambitions to tackle climate change and increase the proportion of overall energy generated from alternative sources. However, we do not believe that this should be at the expense of the environment and firmly believe that it needs to be 'right technology, right place'. This includes the location and type of grid infrastructure to accommodate 40GW of offshore wind by 2030 and to meet net zero by 2050.
- 1.4. TWT has engaged in marine planning and offshore wind farm development for over 10 years. TWT works across all offshore wind farm casework and is increasingly becoming involved in grid casework such as National Grid marine cables and interconnectors/multipurpose interconnectors.
- 1.5. TWT is represented on the Offshore Transmission Network Review Expert Advisory Group. We also participate in a number of strategic forums such as the Offshore Wind Evidence and Change (OWEC) Programme. We are also engaging at a Ministerial level on how to achieve the twin government goals of net zero and a recovered marine environment.
- 1.6. TWT support a coordinated approach to energy cables and grid infrastructure to reduce both environmental and consenting risks. We agree that the existing model within which developers work in does not support coordination. Coordination delivered with the environment at the heart of planning will reduce consenting timescales and risk. However, with the amount of infrastructure expected, holistic planning of offshore and onshore of grid infrastructure must be undertaken to ensure trade-offs are not seen.

## **2. Environmental risks associated with energy cables and grid infrastructure**

- 2.1. Energy cables and infrastructure, placed in the wrong location, can cause habitat damage and loss. A number of Marine Protected Areas (MPAs) are in unfavourable condition<sup>1</sup> due to the impact of cabling infrastructure.
- 2.2. The impact of cabling infrastructure was confirmed by the Hornsea Three Offshore Wind Farm decision<sup>2</sup>, which stated that MPAs will experience effects of habitat loss which will impede the recovery of the protected sites. If compensation was not provided, the requirements of the Habitats Regulations would not be met. Subsequent offshore wind farm developments going through the consenting system which are proposing the placement of cabling infrastructure in MPAs are being requested to provide information on measures to compensate for damage. To achieve environmental recovery (a UK government legal requirement), it must now be accepted that cable infrastructure should avoid MPAs. This would avoid the need for compensation, which is notoriously difficult to deliver in the marine environment.
- 2.3. To meet 40GW by 2030 and net zero by 2050, a huge amount of new grid and cabling infrastructure, both onshore and offshore is expected. It is essential to deliver coordination holistically and the environment must be incorporated at the earliest stages of planning to deliver the UK legal requirement of a recovered marine environment.
- 2.4. The consultation document has highlighted that the competitive nature of offshore wind farm development has acted as a barrier to coordination. As a consequence, this has acted as a barrier in the ability to coordinate to reduce environmental impacts. We also consider that competition results in a race to the finish line, which has also resulted in negative environmental impacts.
- 2.5. Community interests include the environment and should be a factor in costs to consumers. Further information is provided in response to question 2 and 3 of the consultation.

## **3. Recommendations**

### **3.1. Environmental criteria**

To reduce both environmental and consenting risk, we recommend an environmental criteria is applied to the early opportunities projects and Pathways to 2030. As identified in paragraph 2.13 of the consultation document, developers will have to demonstrate the benefits of a proposal; an environmental criteria will assist developers in doing this. We suggest the OTNR environmental subgroup should lead

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<sup>1</sup> For example, [Inner Dowsing, Race Bank and North Ridge SAC](#), [The Wash and North Norfolk Coast SAC](#),

<sup>2</sup> [Hornsea Three offshore wind farm decision letter](#)

on the production of the criteria. The Crown Estate Cable Route Protocol<sup>3</sup> could be a basis for the criteria.

### 3.2. Early Engagement

The indicative timescales shown in figure 3 of the consultation document shows minded to proposals in December 21/January 22 with decision date of February-April 22. We appreciate that due to commercial sensitivity, little information is available on the early opportunities proposals. However, we highly recommend engagement as soon as possible with experts such as Natural England and TWT on the potential routes and infrastructure to avoid the consenting risks the early opportunities programme is trying to avoid. TWT is more than happy to participate in confidential conversations which result in proposals that benefit both developers and the environment.

Early engagement principles also apply to Pathways to 2030.

### 3.3. Connection and Infrastructure Options Note (CION) Process

Currently the CION process only takes a high-level appraisal of the environmental issues. This is resulting in grid connections and subsequent placement cable routes in protected sites which present environmental and consenting risk.

To reduce the consenting risk, the following changes are required:

- Early engagement with Statutory Nature Conservation Advisors (SNCBs) such as Natural England, and with stakeholders with environmental expertise such as The Wildlife Trusts and RSPB.
- New environmental guidance for developers to follow with regards to cable route planning and grid connection to reduce environmental and consenting risk.
- Incorporation of environmental criteria into the any future process.

TWT looks forward to discussing our consultation response with Ofgem in more detail at the meeting arranged for the end of September and looks forward to ongoing engagement on the future coordination of offshore grid.

Yours sincerely



Lissa Batey  
Head of Marine Conservation  
The Wildlife Trusts

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<sup>3</sup> The Crown Estate (2019) Plan-level Habitats Regulations Assessment For The 2017 Offshore Wind Farm Extensions, Cable Route Protocol. Available on the [Marine Data Exchange](#)

## Appendix A: The Wildlife Trusts response to consultation questions

### Early Opportunities questions

**Question 1: Are there any concepts we have not identified developers (as defined in this chapter) may wish to progress?**

#### Any other options?

Most scenarios presented result in reduced onshore and nearshore environmental impacts. However, there appears to be little offshore environmental benefit and in fact, in some scenarios offshore environmental impacts are increased. We have summarised our comments on the proposals in Table 1. Sufficient information is not yet available to determine the environmental impact of the presented options. Therefore, TWT cannot identify the least environmentally damaging option. TWT recommends an environmental analysis of all options, which TWT would be happy to participate in.

In moving forward with options, the planning of a future proposal must be done holistically, considering what both the onshore and offshore environmental impacts may be. In doing this, onshore alternatives may be identified which reduce offshore impacts and vice versa.

From an environmental perspective, although TWT support coordination, it should only be taken forward when there is an environmental benefit in doing so. Coordination should not be taken forward when it is shown to have an increased environmental impact. Where increased environmental impacts are identified, alternative should be explored to reduce impacts. This may involve new engineering solutions.

Option	Environmental impact		
	Unknown	Positive	Negative
Shared offshore transmission (Fig.4)	What is the size/amount of offshore infrastructure? This is important to determine environmental seabed impacts.	Reduced landing points – less environmental impacts onshore and potentially intertidal/nearshore. Potential to reduce impacts on nearshore Marine Protected Areas.	Potential for increased offshore seabed impacts.
Quasi bootstrap (Fig.5)			Increased offshore infrastructure and therefore increased seabed impacts. This option appears to have no environmental benefit.

MPI – interconnector led (Fig.6)	<p>What is the size/amount of offshore infrastructure? This needs to be determined both in terms of a) amount of extra cabling infrastructure required to connect to the MPI and b) amount of MPI infrastructure.</p> <p>In addition, how much offshore wind infrastructure can one MPI support. Our understanding is that an MPI can support a maximum of 3.6GW. This may be a limitation of an MPI, contributing for the need for increased infrastructure and therefore increased environmental impact.</p>	Potential for less infrastructure, which will have onshore/nearshore benefits.	Expect more offshore infrastructure and therefore seabed impacts.
MPI – OFTO led (Fig.7)	As previous		
TO owned bootstrap (Fig.8)	Onshore, where would the transmission system be placed? It is not clear from the diagram and seems to be depicted as foreshore. If this is the case, it could be environmentally damaging.		<p>Increased offshore infrastructure and therefore seabed impacts.</p> <p>Increased onshore impacts? E.g. trenching</p>
Connection of electricity storage or a demand user to an offshore transmission system (Fig.9)	What is the size/amount of offshore/onshore storage infrastructure?	TWT is interested in storage options. In particular, this option could increase energy efficiencies and reduce	Impact of storage infrastructure both offshore and onshore, depending on where placed.

		the need for more offshore wind farms.	
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**Table 1: Comments on proposals**

**Question 2: Should anticipatory investment risk be shared with consumers? If it should, what level of risk is it appropriate for consumers to bear?**

**Question 3: For concepts that intended to provide a wider system benefit, eg by mitigating an onshore constraint, how should the need for investment be demonstrated by the developer?**

It is not for TWT to suggest how anticipatory investment risk is shared with consumers. However, it does not appear that the environmental costs, either as a) costs to the developer to deliver environmental measures due to impacts or b) costs to the environment are considered. If environmental criteria and costs were considered, we expect proposals would be selected which have less environmental impacts, costs and risks associated. We suggest environmental costs to consumers be included in any change to the regulatory process. This will also ensure transparency in costs to consumers. At present, many offshore wind farm developments are facing delays, a number of them due to cabling issues associated with environmental risk. We expect this adding substantial costs to projects, which could be avoided with careful upfront planning which is guided by clear environmental remits/criteria.

We'd also like to highlight that £value is not the only cost which consumers are interested in. TWT has a membership of over 850,000 people which reflects how much people value the natural environment. Multiplying this, Wildlife and Countryside Link<sup>4</sup> members have support from over 8 million people in the UK. Healthy marine habitats are also a store of blue carbon. The Office of National Statistics asset value of marine services ranked carbon sequestration as second highest service in value - £57M compared to just under £3M for renewables in 2018<sup>5</sup>.

**Question 4: What options are available to developers in demonstrating a reasonable expectation they intend to connect to the system?**

No comment.

**Question 5: To what extent do you agree with our proposals to remove barriers to the Early Opportunity concepts? Please explain your answer.**

No comment.

**Question 6: Do you believe a Significant Code Review is required to give effect to a potential decision to 'share' AI risk between consumers and developers?**

See comments in response to question 2 and 3.

<sup>4</sup> [Wildlife and Countryside Link membership](#)

<sup>5</sup> [ONS Marine accounts, natural capital UK: 2021](#)

TWT is not familiar with the codes outlined in the consultation. However, better consideration of the environment at every opportunity reduces consenting risk. TWT would welcome a conversation with Ofgem on how this could be achieved through any code reviews.

**Question 7: Do you agree with Ofgem's proposed approach to deliver the objectives of Early Opportunities workstream?**

At present we cannot agree with the proposed approach as the environment is not included as a consideration. TWT wish to work with Ofgem to ensure early opportunity proposals are developed which do not face consenting barriers due to the environmental risks associated with projects. The environment must be incorporated into the planning, assessment and costs of proposals. This will ensure that environmental issues are resolved at an early stage resulting in proposals promoted which designed and delivered with least environmental impacts. Ofgem has the opportunity to set the environmental principles which proposals must follow which will result in successful early opportunity projects.

**Pathway to 2030 questions**

**Question 8: We consider that a holistic design will result in a more coordinated, economic and efficient network. Do you agree? Please give reasons for your answer.**

Yes, TWT agree that a holistic design will result in a more coordinated network which will reduce impacts on the environment, such as:

- Holistic design has the opportunity to consider offshore and onshore interactions, which will ensure there are not environmental trade offs.
- Holistic design has the opportunity to reduce the amount of infrastructure, resulting in less impact on the environment.
- Holistic design allows a more subjective and sustainable approach to planning future requirements ensuring that economic, environmental and social factors are taken into account in the design.

There is little information provided on the environmental considerations of the holistic design process other than the information included in Table 3: Network Design Objectives. For this reason, TWT is not fully confident that the environment will be considered in the design process holistically and at the earliest stage. The environmental objectives included in Table 3 of the consultation document require refinement and it is important to be clear that it is not an option to avoid, minimise **or** mitigate but to follow the mitigation hierarchy of avoid, then minimise and finally mitigate then compensate. It is also important to make clear that compensation is very difficult to deliver in the marine environment, which is why the mitigation hierarchy is so important.

There is an opportunity to build in a set of detailed environmental criteria into the holistic design process. We suggest the environmental sub-group which the ESO is proposing to establish to support the development of the holistic design is best placed to do this. Please note, the environment sub-group has not been referenced in the consultation document.

Holistic design for the offshore wind industry will also make it easier, to coordinate with other marine industries and for forward-thinking marine spatial planning to occur to ensure the effective management of activities and the sustainable use of our oceans.

Please note, the HND will need be subject to an Strategic Environmental Assessment<sup>6</sup>. As part of this a plan level MPA assessment will also be required.

**Question 9: Do you agree with the planned work for a detailed network design offshore?**

We welcome that Ofgem will undertake an impact assessment on all models presented. However, as with the early opportunities proposal, at present we cannot agree with the proposed approach as the environment is not included as a consideration. TWT is happy to advise on this.

**Question 10: Who do you believe is best placed to undertake the detailed design for assets that are in offshore waters?**

TWT does not have a strong view on who is best placed to deliver the detailed design. However, we have provided further comments on the uncertainties, positives and negatives on who may take the role in our response to question 12.

TWT wish to discuss with Ofgem the benefit of one organisation having overall responsibility for the process. Provided this organisation was working within an environmental remit, this approach would result in consistency which could have positive benefits for the environment and reduce consenting risk.

**Question 11: Do you agree that the existing developer led model should be retained and applied where the HND indicates a radial solution should be used? Please explain your answer.**

No. This will lead to a less consistent approach which could result in environmental damage. The DND should be led by the same organisation across all options.

**Question 12: Please provide your views on each of the delivery options we have described in this document. In providing your views, please comment on the issues we have raised. Please also give your views on the implementation issues we have raised.**

TWTs comments included in this section focus on the environmental implications of the models. Option 6 will not result in the best outcome for the environment and therefore should be avoided. To ensure the environment is central in the design, consenting, construction and operation phase to allow environmental recovery and reduce consenting risk, TWT propose the following is required across option 1 to 5:

- Environmental criteria must be developed and applied by the organisation responsible for developing and delivering the detailed design. As the consultation outlines, those responsible for designing and delivering infrastructure projects will be required to do in a timely manner,

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<sup>6</sup> [Environmental Assessment of Plans and Programmes Regulations 2004](#)



and incentives would be required to ensure this. We propose that following environmental criteria could be incentivised which will reduce the risk of project delays.

- The ESO, TO or OFTO, in taking on a design require an additional remit to take the environment into account in their work. Currently this role is weak. By providing this remit means that other factors other than lowest costs to consumer need to be taken into account in design and decision making.

A commentary has been produced on the options outlined in Table 4 of the consultation documents in Table 2 below. The comments are specific to environmental considerations.

Option	Environmental impact		
	Unknown	Positive	Negative
Option 1: TO to build and operate	The TO must have a remit and code to ensure environmental consideration.	Allows a consistent approach.  Allows knowledge and expertise to remain throughout the whole process.	TO remit is currently to only consider lowest cost to consumer. To ensure sustainable development and delivery of onshore and offshore grid, the TO need to have an environmental remit.
Option 2: TO build, OFTO operate	The TO must have a remit and code to ensure environmental consideration.	As above, apart from transfer to OFTO.	Loss of long-term knowledge of project and potentially environmental knowledge and expertise once transferred to OFTO.
Option 3: TO design, OFTO build and operate	The TO must have a remit and code to ensure environmental consideration.	As above, apart from transfer to OFTO.	No environmental benefit from transferring construction to OFTO.
Option 4: Early OFTO competition	The TO/ESO must have a remit and code to ensure environmental consideration.	Opportunity for consistency at design stage for all infrastructure.	ESO no experience of DND.  Our understanding is that OFTOs have no experience of the NSIP consenting process.
Option 5: Very early OFTO competition	OFTO must have a remit and code to	Benefits of removing distinction between	OFTO have no experience of DND or

	ensure environmental consideration	onshore/offshore transmission regime which could work towards a holistic approach in planning, design and delivery to avoid environmental trade-offs.	<p>NSIP consenting process.</p> <p>Potential for different OFTOs undertaking different design/consenting which reduces consistency which could introduce environmental damage.</p> <p>Competition may result in increased environmental impacts.</p>
Option 6: Developer design, build and OFTO operate			<p>Introduces too much competition between developers which will result in a race to the finish line like we are currently seeing in the consenting system.</p> <p>This is the least good option for the environment. There would be no consistency in design, consenting or construction. In addition, knowledge would not be retained.</p> <p>Unless there is a culture change within industry, likely to still see consenting issues.</p>

Table 2: Environmental considerations of Pathway to 2030 models

Finally, we would like to raise that in our view, competition has had a negative impact on the environment and resulted in environmental decline. For example, many offshore wind farm

developers are working to Contract for Difference deadlines which means that planning applications are entered before environmental issues have been resolved. This has resulted in delays to decisions and inadequate compensation which will result in environment decline. To overcome this, environmental criteria must be included and adhered to in the competitive process to incentivise developers to use best practice and innovate to reduce environmental impacts.

**Question 13: Please describe any feasible delivery options that we have not set out in this document.**

No further comments.

**MPI questions**

**Question 14: Do you think we are focusing on the right models at this stage, or are there other models we should be considering? Is it also necessary to consider the evolution of such MPIs from pre-existing assets? Ultimately, should Ofgem accommodate multiple MPI models (eg IC-led and OFTO-led) or just one? What factors influence your answer?**

It is very difficult for TWT to understand the environmental implications of the MPI models due to a lack of information. Further information is essential for environmental stakeholders to advise on which model would have the least impact on the environment and therefore present least consenting risk. The type of information required to assist this includes:

- Size of infrastructure
- Amount of infrastructure to be placed on the seabed which may cause habitat loss
- Installation methods
- Amount and length of infrastructure connecting to MPIs

We appreciate that the use of MPIs will reduce the amount of landing points. However, what has not yet been established is the amount of extra cabling infrastructure required offshore for individual offshore wind farm projects to connect into an MPI. This must be factored into the analysis of any future model, with the aim of keeping the amount of offshore infrastructure to a minimum to reduce environmental impacts.

Finally, TWT would like to raise that we have serious concerns regarding the idea of an offshore hub, as mentioned in paragraph 4.24 of the consultation document. TWT has been engaging with the North Sea Wind Power Hub Consortium and has serious concerns regarding the environmental impacts of the proposals.

**Question 15: Do you agree with this position with regard to ownership structures of MPIs under the current framework?**

No comment

**Question 16: What are the commercial, operational and regulatory factors that would drive a developers preference for either the OFTO-led or IC-led MPI model? and do you envisage a different usage of the component assets of an MPI depending on the MPI model?**

No comment

**Question 17: How would the line to shore (L1) be used in practice and what would you consider to be the primary and secondary activities from a practical perspective? Please provide views for both the IC-led and OFTO-led models, highlighting any differences between L1 usages across the two models.**

No comment

**Question 18: Are there any barriers within the current frameworks, such as definitions within the CUSC, SQSS or other industry codes, that might prevent the line to shore (L1) being classified as either an OFTO or an interconnector while undertaking other secondary activities?**

No comment

**Question 19: What are your views on the feasibility of adopting a regime that requires developers to submit evidence to support their licence application (for assets that form part of an MPI) and commit to regular performance reports? Would this be practicable, proportionate, and effective? Are there other options that work well for industry that we could explore further?**

No comment.

**Question 20: What are your views on the practicality of transposing obligations from one licence into another, which obligations would be the most important to incorporate into a remaining licence?**

No comment.

**Question 21: Do you think the exemption provision with the Act offers any solutions to licencing MPIs within the current framework, even if only a temporary solution until a potential enduring solution is implemented?**

No comment

**Question 22: Are there any aspects of the priority dispatch and curtailment arrangements, the TCA, or the cross-border trading arrangements that are adopted in UK that might influence the choice of MPI models?**

No comment

**BEIS Question 1: What do you consider to be the key challenges to the establishment and operation of MPIs in the UK presented by current and proposed regulatory requirements applicable in EU Member States or other countries which MPI projects may connect with, or by the TCA? (eg regarding the efficient operation of MPIs under both the Home Market and Offshore Bidding Zone approaches). Are there further domestic challenges to these possible market design options**

No comment.