

Submitted to Draft Updated Sectoral Marine Plan for Offshore Wind Energy
Submitted on 2025-08-19 09:05:03

Map of Regions, Option Areas and Key Considerations within the updated Sectoral Marine Plan for Offshore Wind Energy

Questions

1 Do you agree that up to 1 Gigawatt (GW) of Test and Demonstration projects should be included within the scope of the updated Plan? Please provide any comments you have on their inclusion or proposed parameters.

Not Answered

Please give your views here.:

Not Applicable

2 Do you have any comments on how the benefits of offshore wind development could be maximised? If referring to development within a certain region, please specify.

Please give your views here.:

The benefits of offshore wind development can be maximised through smart use of seabed and subsurface geological data as well as by improving data sharing.

Improving and encouraging sharing of geological data from completed offshore windfarm (OWF) site investigations (for example via The Crown Estate's Marine Data Exchange), would enable incorporation of up-to-date data into new regional seabed geology maps and models. This can create benefit for a wide range of users by reducing uncertainties and costs for future developments and enabling development of improved knowledge base to inform future marine planning.

Seabed geology information (e.g. Seabed Geology Mapping, <https://geoscientist.online/sections/features/land-below-sea-a-new-generation-of-seabed-geology-mapping/>) is a key component in the identification and review of lease areas. A recent economic impact assessment highlighted that £0.7bn-£3.9bn of economic value in the offshore wind industry can be attributed to availability of seabed geology data, knowledge and services of the BGS – see “NERC Economic Assessment”.

A recent BGS stakeholder consultation for The Crown Estate, involving 60 organisations with interest in seabed geology data, highlighted the need for better data sharing (see report at <https://nora.nerc.ac.uk/id/eprint/538827/>) and recognised the value of BGS spatial and information products in Offshore Wind development planning.

3 Do you have any comments on how social impacts could be mitigated?

Please give your views here.:

Not Applicable

4 Do you have any comments on how economic impacts could be mitigated?

Please give your views here.:

Not Applicable

5 Do you have any comments on how environmental impacts could be mitigated?

Please give your views here.:

Smarter use of seabed and subsurface geological data and improved geological data sharing (as outlined in our response to Q2) would also support the mitigation of environmental impacts.

Seabed Geology is a key variable constraining the nature and distribution of benthic habitats, at local, regional, and national scales. UK marine environment agencies regularly use BGS geological data and map products to inform their marine ecosystem analysis and mapping (e.g. EU Seabed Habitats, <https://hub.jncc.gov.uk/assets/202874e5-0446-4ba7-8323-24462077561e>).

The Sectoral Marine Plan identifies cable burial as a mitigation measure for environmental impacts. Cable route planning and burial requires knowledge about the material (sediments) within 6 m of the seabed. BGS has recently completed a project modelling predicted sediment at the seabed across the UK continental shelf. These projects will be openly released soon (likely Q3, 2025) and can be used to help initial cable route and burial assessments. Cable burial measures need to be cost effective (deeper burial is more costly but reduces risk of interaction with anchors or fishing equipment). BGS is a collaborator on an Engineering and Physical Sciences Research Council (EPSRC)-funded research project with Dundee and Durham Universities (<https://wmcoombs.github.io/Cable-Burial/>) investigating cable burial depths. The project is developing an industry standard anchor penetration model

alongside knowledge of different seabed sediment sequences to answer the key cable burial question: how deep is deep enough?

BGS is also Task lead for the Geological Service for Europe project (GSEU) for optimised offshore windfarm siting. A recent report (www.geologicalservice.eu/upload/content/1691/gseu_d5-3_pan-european-catalogue-of-key-parameters-for-offshore-windfarm-siting_v1.pdf) serves as a geoscientific foundation for mitigating environmental impacts by outlining more sustainable offshore windfarm siting and design by understanding the geological constraints at or near the subsurface. The aim is to empower developers, planners, and regulators to make evidence-based decisions that naturally lead to reduced environmental impacts - including understanding the presence of geohazards at or near the subsurface for multiple foundation types (cables, monopiles, suction buckets, gravity-based foundations).

6 Do you think the monitoring of environmental impacts of the draft Plan should be overseen by existing expert groups, or should a new expert advisory group be established for this purpose?

Not Answered

Please give your views here.:

Not Applicable

7 Do you have any comments on the proposed changes to the SMP-OWE governance structure?

Please give your views here.:

Not Applicable

8 Do you have any suggestions for how evidence should be shared and/or fed into strategic research programmes?

Please give your views here.:

Not Applicable

9 Do you agree with the approach proposed to remove the iterative plan review process and replace it with the stated evidence and future planning proposals?

Not Answered

Please give your views here.:

Not Applicable

10 If you have any further comments or points that you think should be taken into account in the plan, please provide those below.

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Not Applicable

11 A policy review has identified that no aspects of the draft plan will impact on children's rights, as outlined briefly in Annex C. Do you agree with these findings? If you have identified any impacts on children's rights and/or wellbeing, please explain.

Not Answered

If you have identified any impacts on children's rights and/or wellbeing, please explain.:

Not Applicable

12 Do you have any comments on the partial Business and Regulatory Impact Assessment?

Please give your views here.:

Not Applicable

13 Do you have any comments on the partial Island Communities Impact Assessment?

Please give your views here.:

Not Applicable

14 Do you have any comments on the Strategic Environmental Assessment Environmental Report?

Please give your views here.:

Not Applicable

15 Do you have any comments on the Habitats Regulations Appraisal Appropriate Assessment Information Report?

Please give your views here.:

Not Applicable

16 Do you have any comments on the Social and Economic Impact Assessment?

Please give your views here.:

Not Applicable

17 Do you have any comments on the Nature Conservation Marine Protected Area Assessment?

Please give your views here.:

Not Applicable

18 Do you have any comments on the Sustainability Appraisal report?

Please give your views here.:

Not Applicable

19 Do you have any comments on the Regional Locational Guidance?

Please give your views here.:

Not Applicable

About you

What is your name?

Name:

Andrew Finlayson, Dayton Dove and Nicola Dakin, BGS Marine Geoscience

Are you responding as an individual or an organisation?

Organisation

What is your organisation?

Organisation:

British Geological Survey

Further information about your organisation's response

Please add any additional context:

The British Geological Survey (BGS) is the UK's national geological survey, which provides objective and authoritative geoscientific data, information, and knowledge to inform UK Government and other stakeholders on the opportunities and challenges of the subsurface environment.

In the marine sector, BGS scientists work in a range of areas, including offshore wind, coastal processes and hazard mitigation, energy storage and carbon capture and storage (CCS), and radioactive waste disposal. Specific to Offshore Wind, the BGS Marine Geoscience team maps and analyses seabed and sub-surface geology to improve turbine siting, optimise foundation design (reducing costs), and identify potential development constraints (mitigating hazard). The resulting data and spatial products also support other applications like marine ecosystems assessment, marine mineral and aggregate extraction, and wider offshore infrastructure and regulatory management.

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

Publish response with name

Do you consent to Scottish Government contacting you again in relation to this consultation exercise?

Yes

What is your email address?

Email:

BGSPolicy@bgs.ac.uk

I confirm that I have read the privacy policy and consent to the data I provide being used as set out in the policy.

I consent

Where did you hear about this consultation?

Scottish Government website

If other, please say where::

Evaluation

Please help us improve our consultations by answering the questions below. (Responses to the evaluation will not be published.)

Matrix 1 - How satisfied were you with this consultation?:

Neither satisfied nor dissatisfied

Please enter comments here.:

Matrix 1 - How would you rate your satisfaction with using this platform (Citizen Space) to respond to this consultation?:

Neither satisfied nor dissatisfied

Please enter comments here.: