
Consultation on the Electricity Transmission Network Planning Review

Response from The Crown Estate

December 2021

The Crown Estate is a unique business with a distinct heritage and a portfolio unlike any other; created by an Act of Parliament to manage a diverse range of assets that includes the seabed around England, Wales and Northern Ireland. In this capacity we work closely with industry and stakeholders to enable the sustainable development of the seabed, including by providing seabed rights for offshore renewable energy, as well as marine aggregates and minerals, cables and pipelines, and carbon capture and storage.

In support of this strategic approach we are evolving our role, building on strong past performance to accelerate deployment and create lasting economic, environmental and social value. From a core capability of leasing and asset management, to our activity in informing decision making through data and evidence, and working to lower the barriers to investment in the sectors we interact with, The Crown Estate acts as a catalytic agent for growth in the marine environment. As such, we play an important role in the sustainable development of the seabed – including the UK's world-leading offshore wind sector, marine aggregates, cables and pipelines. The independent commercial thinking that we are able to bring to solving the issues we face is, we believe, a real force for good.

We welcome publication of this consultation on the initial findings of the Electricity Transmission Network Planning Review (ETNPR). As we have already made clear to BEIS in response to their consultation on the Offshore Transmission Network Review (OTNR) Enduring Regime (a copy of our response is attached), there is clear and real need for a more coordinated and strategic approach to network planning. It is vital that we consider not just the short-term challenges thrown up by the current approach, but also how we build a better system in the future. A more coordinated and strategic approach to network planning, both on and offshore, will be critical to connecting the significant volume of offshore wind assets (likely 100GW by 2050) required if the UK is to meet its net zero obligations.

Responses to issues raised in the consultation

We recognise that at the heart of this consultation is the concept of introducing a more strategic approach to the planning, development and design of transmission infrastructure. We offer the following comments on the overarching policy direction:

- **Spatial coordination:** The need for greater spatial coordination in the marine environment cannot be overstated. From our analysis we know that a significant proportion of the total offshore wind key resource area is either already utilised or overlaps with other existing seabed uses or environmental designations, so more efficient use of the seabed is required to meet rapidly growing demand in a congested space. It will be important therefore that the both proposed transitional and enduring arrangements for delivering on the ETNPR place necessary and appropriate emphasis on the constraints of the seabed and related areas (for example beach landing points) when considering holistic onshore and offshore network planning. We already actively participate in this area, alongside other organisations, and recognise that developing a deeper understanding of the environmental context for future development will require

significantly more information and data. In this regard, we published the key findings from a study we undertook earlier this year with National Grid Electricity System Operator (ESO), National Grid Electricity Transmission and the Marine Management Organisation (MMO); the East Coast Grid Spatial Study¹, funded through our Offshore Wind Evidence and Change (OWEC) programme², found:

- The criticality of taking into account marine and terrestrial constraints when considering the transmission infrastructure required to connect offshore wind – particularly when considering at a strategic regional level (as opposed to a single project view).
- Suitable landfall points are at a premium in the study area given both existing and planned cable infrastructure and in combination with spatial constraints (such designated areas). A more coordinated approach would reduce the number of landfalls required for the same capacity of offshore wind generation.
- The proximity of the existing onshore transmission system is a key spatial consideration (with only limited infrastructure near the coast) and there may be a case for extending this and/or developing coastal nodes as part of the approach to coordination (i.e. it is not all about the offshore infrastructure).

The Crown Estate has committed to investing further in expanding our data and evidence capability to de-risk consenting and accelerate development, building on the spatial analysis we already do as part of our leasing rounds and also through OWEC. This enhanced capability will enable us to utilise spatial and evidentiary inputs to improve our own strategic decision-making and inform trade-offs between seabed uses, and can also be used to support the decisions made by others – including in respect of coordinated grid. We would be happy to share our thinking in this area to support successful delivery of the ETNPR.

- **Central planning functions:** The Crown Estate has an independent role in granting seabed rights for offshore wind, among other activities. We note in section 4.35 of the consultation that there is a suggestion that one of the central planning functions could be to inform decisions on the siting and capacity of users of the system, including offshore wind and hydrogen. From our involvement in the OTNR and through dialogue with other Project Partners including the ESO, we consider that there is an opportunity for an iterative approach to be developed in the future, with information on the electricity system supporting the definition of the location for future offshore wind. The outputs from the current Holistic Network Design (HND) activity that the ESO is undertaking for the Celtic Seas region should help understand the potential for this, by providing insight and experience about how the HND can appropriately tackle capacity, locational and temporal uncertainty (given at the time of the HND, the location of the offshore generation in the Celtic Seas is not known). Given our role, we look forward to working with Ofgem and other stakeholders in helping to shape how this interaction could work moving forward.

Linked to this, BEIS recently published the outputs of geospatial analysis we had undertaken for the OTNR which combined the location of existing and planned offshore wind generation sites in UK waters with a perspective on when these projects could connect. This '2030 Generation Map'³ provides a visual representation of what a future deployment trajectory for offshore wind could look like, and there is a case that this type of forward-looking visual tool will become increasingly important when engaging with stakeholders through the current energy transition, particularly where there is the potential for significant local impacts. We are considering the potential for an

¹ <https://www.thecrownestate.co.uk/media/3801/east-coast-grid-spatial-study-summary-report.pdf>

² <https://www.thecrownestate.co.uk/en-gb/what-we-do/on-the-seabed/offshore-wind-evidence-and-change-programme/>

³ <https://www.gov.uk/government/publications/offshore-transmission-network-review-generation-map>

updated version of this tool for later time horizons (e.g. 2050) and would welcome constructive dialogue with Ofgem on this as we move forward.

- **Enabling strategic investments:** The introduction of the HND under the 'Pathway to 2030' workstream of the OTNR is an important step forward in considering a more strategic approach to delivering grid connections for offshore wind. We note the proposal in section 4.39 of the consultation that the primary purpose of the transitional arrangements would be to ensure that the ESO identifies key strategic investments on the onshore transmission network that can integrate the 40GW of offshore wind generation that is expected to connect by 2030 – and that these will be identified in accordance with the HND. There have been well documented recent challenges for offshore wind and associated grid infrastructure on the east coast of England and an approach which seeks to mitigate such challenges more strategically in the future – and at an earlier stage – would be welcome.
- **Interactions with other workstreams:** The consultation asks about other workstreams that interact with the review. Given the scale of the reform proposed, it will be important that policy proposals are developed cognisant of – and in alignment with – other major market reforms that that are being progressed in parallel or are likely to be required to deliver the UK's Net Zero obligations. This includes, but is not limited to, the Offshore Transmission Network Review, the current review of National Policy Statements; Defra's Marine Spatial Prioritisation Programme; and the future of the EMR framework (including the Contract for Difference scheme). The interaction with the OTNR will be particularly important given the particular importance of the timely delivery of offshore wind in meeting decarbonisation targets.
- **Timeframe:** We note that the proposed timeframes for changes are accelerated, with a policy statement due in February 2022. Whilst we applaud the pace of change proposed in the context of ensuring policy frameworks are appropriate to support delivery of the nation's Net Zero obligation's, it will be important that any changes do not cause a slowdown in current development activity and put at risk the sustainable development of UK offshore wind in line with the 40GW by 2030 target. As such, we consider it will be important that appropriate regulatory and policy protections and flexibilities are explored to ensure unnecessary delay risk is minimised.

We trust that you will find our comments on the consultation constructive. Given the inter-related nature of many of the issues covered in this consultation and those within the OTNR, we have appended for background our recent response to the OTNR Enduring Regime consultation. We would be happy to provide additional information on any of the points raised above or in our OTNR response and be very pleased to discuss these matters with you further.

All of this response may be put into the public domain and there is no part of it that should be treated as confidential.

Yours faithfully,

A handwritten signature in blue ink, appearing to be "Richard Clay", written over a light blue horizontal line.

Richard Clay,
Senior Manager, Energy Policy & Regulation

Response copied to BEIS OTNR Team

Appendix: TCE response to OTNR Enduring Regime consultation, November 2021

Consultation on the Offshore Transmission Network Review: Enduring Regime and Multi-Purpose Interconnectors

Response from The Crown Estate

November 2021

The Crown Estate is a unique business with a distinct heritage and a portfolio unlike any other; created by an Act of Parliament to manage a diverse portfolio that includes the seabed around England, Wales and Northern Ireland. In this capacity we work closely with industry and stakeholders to enable the sustainable development of the seabed, including by providing seabed rights for offshore renewable energy, as well as marine aggregates and minerals, cables and pipelines, and carbon capture and storage.

We welcome the enduring regime element of the Offshore Transmission Network Review (OTNR). We agree with the assessment that there is clear and real need for a more coordinated and strategic approach to connecting offshore wind. This is particularly the case as we look to deploy greater levels of capacity in the years ahead, whilst at the same time managing the needs of other seabed users and our precious natural environment. It is vital that we consider not just the short-term challenges thrown up by the current approach, but also how we build a better system in the future, hence the importance of the enduring regime part of the review.

In support of this strategic approach, we are evolving our role, building on strong past performance to accelerate deployment and create lasting economic, environmental and social value. From a core capability of leasing and asset management, to our activity in informing decision making through data and evidence, and working to lower the barriers to investment in the sectors we interact with, The Crown Estate acts as a catalytic agent for growth in the marine environment. As such, we play an important role in the sustainable development of the seabed – including the UK's world-leading offshore wind sector, marine aggregates, cables and pipelines. The independent commercial thinking that we are able to bring to solving the issues we face is, we believe, a real force for good.

Turning to the detail in the consultation, we have the following overview comments. We provide more detailed responses to the questions posed in Appendix 1:

- We welcome the explicit recognition of the importance of spatial context in the development of our collective action to deliver new offshore wind capacity. The marine environment is vital for the UK's prosperity and supports a wide range of nationally important sectors including fishing, tourism and shipping, leisure, energy and digital infrastructure. The potential options within the consultation will clearly impact the end-to-end development process for offshore wind, but it is clear that the spatial context needs to remain a key input into onshore and offshore grid development. We agree that this should be the case within the final enduring regime and that the broader environment should also be explicitly considered as part of grid planning for the connection of future offshore wind.

- While we agree with the broad nature of the recommendations for the enduring regime, in particular the potential creation of a strategic plan to guide development, getting the detail right will be critical. Given the scale of the reform proposed, it will be vital that in determining this detail, policy proposals are developed cognisant of – and in alignment with – other major market reforms that are being progressed in parallel or are likely to be required to deliver the Net Zero target. We need to collectively avoid the risk that the OTNR is seen in isolation from wider governance reforms, such as those being considered within the current review of National Policy Statements; Defra's Marine Spatial Prioritisation Programme; consideration of the role of the Future System Operator; the future of the EMR framework (including the Contract for Difference scheme); and Ofgem's Electricity Transmission Network Planning Review. We note that this latter consultation is considering the role of holistic energy system planning, including hydrogen and CCUS, and we believe this will become an increasingly important dynamic and an area where the OTNR could helpfully seek to align.
- To ensure a spatial dimension is considered effectively within the enduring regime, it will be important to learn lessons from the Holistic Network Design (HND) activity that is currently being progressed as part of the 'Pathways to 2030' workstream. We continue to work with the ESO in this area, including considering how the HND outputs for the Celtic Sea region could be used to inform decisions on the location of areas of seabed offered for lease moving forward.
- Similarly, the timeframe for any major changes to the current approach to offshore wind delivery needs to be considered carefully so as not to impact the need for urgency through the 2020s. Given the historic lead times for the development of both offshore wind and transmission infrastructure in the UK, it will be important for the review to determine the options and feasibility of reform over different time horizons. We recommend that BEIS identifies those enduring regime reforms which are necessary and deliverable to meet the Government's 2035 commitment to decarbonise the electricity system, and those which could be implemented afterwards. We welcome that the consultation considers options such as combining the seabed lease and economic support through the CfD regime, and look forward to assessing this further as detail emerges.

As a Project Partner to the OTNR, we are keen to support Government as it considers its approach to this vital review. We are happy therefore to continue acting as a sounding board where appropriate and outline how our activities can evolve to support the aims of the broader changes Government is considering to offshore wind delivery.

All of this response may be put into the public domain and there is no part of it that should be treated as confidential.

Yours faithfully,

Richard Clay,

Senior Manager, Energy Policy & Regulation

Appendix 1: Responses to questions posed in the consultation

Q1: We think that a more strategic approach to the planning and development of offshore wind is needed to achieve the Review's objectives. Do you agree? Please explain your answer.

It is clear offshore wind will play a major role in delivering against the UK's Net Zero emissions targets, and the delivery of the Government's 40GW target by 2030 will be a significant step toward decarbonising our power system. At present there is over 10GW of operational capacity in UK waters, with a total UK pipeline of in excess of 60GW (inclusive of the potential for 10GW from Crown Estate Scotland's Scotwind process). This pipeline includes the six 'preferred projects' that were successful in the Round 4 tender process, which concluded in February 2021⁴ (the award of rights for these projects being subject to the Round 4 Habitats Regulations Assessment, which is currently underway). Building on this, earlier this month we published further detail on our plans for floating wind leasing in the Celtic Sea, with an ambition to unlock 4GW of new capacity in the region by 2035⁵. Our approach to leasing in this region will be designed to help address the strategic challenges facing renewable energy projects in the UK's increasingly complex marine environment. This will include developing our spatial and commercial design for leasing in a way which supports coordinated grid solutions, delivers economic and social value for communities onshore and integrates the plan-level Habitats Regulation Assessment process ahead of market tender.

It is also clear however that the way electricity is transferred from offshore wind to end users needs to change from one that delivers solely radial connections. The current regulatory regime has provided a stable basis for investment over the last decade and has delivered against its original policy objectives, which were principally focussed on reducing costs. However, there are well documented recent challenges for offshore wind and associated grid infrastructure on the east coast of England. With an expectation that 100GW or more may be needed by 2050⁶, more significant challenges may arise in other areas in the future unless we consider reforms to better manage the wider social, environmental and economic impacts of major infrastructure developments. The consultation is therefore a timely opportunity to re-focus the approach to enabling and incentivising coordinated solutions over the longer term, which work for all stakeholders. Nevertheless, it will be important that the opportunity to develop radial connections remains part of the regulatory framework to cater for circumstances where this is the most economic and viable option.

Based on the information set out in the consultation, The Crown Estate broadly agrees that a more strategic approach would support the delivery of the Review's objectives. The current developer-led approach to the connection of offshore wind is reactive and based on the needs of an individual offshore wind project and is managed on a 'first-come, first-served basis'. Whilst this has been adequate to date, in the context of delivering the volume of offshore wind capacity expected to be required to deliver Net Zero, a more holistic approach will be required, taking into consideration both onshore and offshore grid requirements. Furthermore, planning out the grid system on a more holistic and proactive basis should provide developers and investors greater certainty and support the connection of future offshore wind in a more timely way.

Enabling such a holistic, or coordinated, approach should also support optimised use of the seabed space, which is finite. From our analysis we know that a significant proportion of the total offshore wind key resource area is already utilised or overlaps with other existing seabed

⁴ <https://www.thecrownestate.co.uk/en-gb/media-and-insights/news/2021-offshore-wind-leasing-round-4-signals-major-vote-of-confidence-in-the-uk-s-green-economy/>

⁵ <https://www.thecrownestate.co.uk/en-gb/media-and-insights/news/the-crown-estate-develops-proposals-for-floating-wind-in-celtic-sea-outlining-4gw-opportunity/>

⁶ <https://www.theccc.org.uk/publication/sixth-carbon-budget/>

uses or environmental designations. This pressure on seabed space, combined with technical and commercial challenges that limit co-location of activities, means that more efficient use of the seabed is needed to meet rapidly growing demand in a congested space. Subject to appropriate governance and decision-making being established and agreed, we can see that the introduction of a strategic plan should help inform future seabed leasing, for example in terms of timing of deployment need and any regional considerations.

We note that the strategic plan as outlined is very high level and that work is ongoing with key parties, including The Crown Estate, to develop. We look forward to continuing our work with BEIS and other stakeholders on this over the coming months.

Q2: If you agree, do you have any views about the scope of the strategic plan? For example, should it cover generation or be limited to transmission?

The Crown Estate recognises that offshore transmission cannot be viewed in isolation – it must be considered holistically alongside offshore generation given that this, in the vast majority of cases, will be the driver for transmission system infrastructure and investment in the first place. As we look ahead to the deployment of significantly more offshore wind over the coming decades, and with it the associated grid infrastructure, it will be increasingly important to consider on a more holistic basis the environmental context for this development. The East Coast Grid Spatial Study⁷ which we commissioned jointly with the ESO, National Grid Electricity Transmission and the Marine Management Organisation had several key findings which are relevant in this regard:

- The criticality of taking into account marine and terrestrial constraints when considering the transmission infrastructure required to connect offshore wind – particularly when considering at a strategic regional level (as opposed to a single project view).
- Suitable landfall points are at a premium in the study area given both existing and planned cable infrastructure and in combination with spatial constraints (such as designated areas). A more coordinated approach would reduce the number of landfalls required for the same capacity of offshore wind generation.
- The proximity of the existing onshore transmission system is a key spatial consideration (with only limited infrastructure near the coast) and there may be a case for extending this and/or developing coastal nodes as part of the approach to coordination (i.e. it is not all about the offshore infrastructure).

We note and welcome the references to ‘mapping of sea floor constraints’ and ‘spatial planning’ in the proposed outline of the strategic plan. We already actively participate in this area, alongside other organisations, and recognise that developing this deeper understanding of the environmental context will require significantly more information and data. As part of our new strategy, we have committed to investing in expanding our data and evidence capability to de-risk consenting and accelerate development, building on the spatial analysis we already do as part of our leasing rounds and also our Offshore Wind Evidence and Change (OWEC) programme⁸. This enhanced capability will enable us to utilise spatial and evidentiary inputs to improve our own strategic decision-making and inform trade-offs between seabed uses, and can also be used to support the decisions made by others – including

⁷ <https://www.thecrownestate.co.uk/media/3801/east-coast-grid-spatial-study-summary-report.pdf>

⁸ <https://www.thecrownestate.co.uk/en-gb/what-we-do/on-the-seabed/offshore-wind-evidence-and-change-programme/>

in respect of coordinated grid. We would be happy to share our thinking in this area to support successful delivery of the OTNR.

Q3: What governance arrangements would be appropriate for a strategic plan? For example, who should be the lead organisation, and what roles and responsibilities would other partner organisations have?

The governance arrangements, including decision-making, for the proposed strategic plan need to be defined and agreed alongside the determination of its scope. This is significant because the proposed components of a strategic plan encompass both existing roles and responsibilities of multiple organisations as well as potentially new areas. This clarity will be particularly important in order to maintain investor confidence in the UK's offshore wind market. For this reason, we consider that BEIS should lead and ultimately own the strategic plan, but for the plan and associated governance arrangements to be structured in such a way that works in conjunction with other organisations' – including The Crown Estate – remit and decision-making responsibilities; forming a holistic governance regime.

It is not possible to comment at this stage on detailed roles and responsibilities of organisations given the scope of the plan is under development. We look forward to working with BEIS, other Project Partners and wider stakeholders on the governance arrangements alongside development of scope and content.

Q5: What time-period should be covered by a strategic plan and how frequently do you think it should be updated?

We recognise that the introduction of a strategic plan will be a significant departure from business as usual activity. Given this, it would be appropriate that the strategic plan is sufficiently flexible at the outset, with an ability to evolve over time to reflect experience and changes in circumstance. After the 2030 offshore wind target, the next major deployment milestone for the industry will be the delivery of new capacity required to meet the 6th Carbon Budget. Whilst this covers 2033-2037, the Government's recent commitment to decarbonise the electricity system by 2035⁹ is a significant waymarker at the mid-point of this Carbon Budget period. It would seem appropriate therefore that the strategic plan initially covers the period to 2035. Thereafter, it would be appropriate that the strategic plan provides a framework for delivering the offshore wind that is necessary to support the UK's 2050 Net Zero targets.

Q6: We think that there is a need for a Holistic Network Design that plans offshore transmission for the long-term as an integrated part of a transmission network. Do you agree? Please explain your answer

We note that the ESO and the Transmission Owners in GB are currently undertaking Holistic Network Design (HND) activity as part of the 'Pathway to 2030' workstream, and that it is proposed that this approach could be extended on an enduring basis. We agree that there is likely to be an ongoing need for an over-arching HND whereby an entity such as the ESO or Future System Operator undertakes a holistic design for offshore and onshore works much earlier based on the expected need for the infrastructure, and in accordance with a strategic plan.

As per our comments in the cover, it will be important to learn lessons the current HND activity. We consider that there is an opportunity for an iterative approach in the enduring regime, with information on the electricity system supporting the definition of the location for future offshore

⁹ <https://www.gov.uk/government/news/plans-unveiled-to-decarbonise-uk-power-system-by-2035>

wind. The outputs from the HND's consideration of the Celtic Seas region should help in this regard, by providing information and experience about how the HND can appropriately tackle capacity, locational and temporal uncertainty (given at the time of the HND, the location of the offshore generation in the Celtic Seas is not known). We continue to work with the ESO in this area, including considering how the HND outputs for the region could be used to inform decisions on the location of areas of seabed offered for lease moving forward. We note that interactions with potential connections from Ireland will also be important in this regard.

We agree with the assertion in the consultation document that the current developer-led approach to the design and delivery of offshore transmission is unlikely to deliver more complex offshore network configurations. The combination of the CfD regime and the OFTO cost assessment process heavily incentivise offshore wind developers to focus on cost minimisation and do not incentivise investment on an anticipatory basis to go beyond what is required for individual projects. As such, if the expected benefits from a coordinated design approach are to be realised, then it seems clear that the model needs to adapt to include a clear regulatory mechanism for supporting anticipatory investment.

The consultation notes that one of the risks of network planning and development activity in advance, including anticipatory investment, is around stranded assets and inefficient costs being passed onto consumers. We also note that the consultation sets out that one of the key mitigations to this is that, given the volume of offshore wind necessary to meet our Net Zero targets, if there are sub-optimal network investments then this 'overbuilt' capacity could be made available to future seabed leasing rounds. We agree in principle with this latter point, and consider that continuing to build in feedback loops (such as developing an understanding of system needs to inform future seabed leasing) will be important in addressing this risk. We have recently entered into a Statement of Intent with the ESO¹⁰ to consider opportunities for closer alignment, and intend to explore how system needs can be used to further inform seabed leasing in this regard.

Q7: If you agree, do you think a Holistic Network Design should also include onshore transmission?

If introduced, it will be essential that the HND should include both onshore and offshore transmission, given the evolution of the onshore grid will be critical to support offshore wind. The energy system is undergoing fundamental reform as the UK seeks to decarbonise the economy and society. Part of this includes the rapid shift in how and where electricity is generated – which is away from large onshore fossil-fuelled power stations and toward renewables and other low carbon technologies, which are often at the extremities of the existing transmission system. The Committee on Climate Change estimates that over 100GW of offshore wind capacity will be needed by 2050. The connection of this significant volume of offshore wind over the three coming decades will necessitate significantly more infrastructure being built onshore and offshore to be able to transport the electricity to centres of demand. Planning and delivering this infrastructure in a more holistic way irrespective of whether it is on land or subsea should be a central pillar in the approach to ensure it is as economic and efficient as possible overall.

We note the recent publication by Ofgem of its Electricity Transmission Network Planning Review (ETNPR). The objectives of this review include: *'Facilitating strategic planning of the energy system such that electricity transmission networks and the energy system more generally, are planned alongside each other to maximise efficient utilisation of electricity networks'*, and *'Ensuring that the onshore and offshore electricity transmission networks are planned holistically'*. These objectives

¹⁰ <https://www.thecrownestate.co.uk/en-gb/media-and-insights/news/the-crown-estate-crown-estate-scotland-and-national-grid-eso-announce-partnership-to-improve-coordination-of-offshore-wind-transmission-infrastructure-1/>

make clear the strength of policy direction toward holistic electricity – and energy – system planning. Whilst the OTNR to some extent will be a subset of this overall approach (given its focus on the policy and regulatory framework for connecting offshore wind) we would ask that there is close alignment and clarity between the resulting policy instruments to deliver the objectives of both the ETNPR and the OTNR.

Q8: Who do you think is best placed to undertake a Holistic Network design? Please explain your answer.

Q9: Which delivery model would provide the appropriate balance of incentives and cost savings given the Review Assessment Criteria (Annex 4)? Please explain your answer

Q10: At what stage should the detailed design and construction of transmission be conducted? Please be clear about which approach your comments relate to.

We note that the options on delivery models presented in the consultation are high level and so The Crown Estate does not consider it is well placed to offer detailed comments on questions 8-10 at this stage.

Two overarching points we would like to make however are as follows:

- It is very important to retain investor confidence in both the UK's offshore wind market as well as for transmission infrastructure. Costs for offshore wind have been driven down over the last decade by a number of factors, not least in terms of financing. This cost reduction has been central to the success of the sector and its deployment levels. It will be important therefore that investors in offshore wind are clear on the delivery model for future transmission infrastructure to maintain their confidence to invest in the UK market, and we would encourage this review engages more actively with the investment markets to inform decisions on delivery models.
- Clarity on the intended delivery model is needed in a timely manner such that The Crown Estate can plan future seabed leasing rounds in light of prevailing and anticipated policy.

Q11: Do you have any views on the relative merits of these high-level approaches?

- **1. Incremental change**
- **2a. Holistic network design and delivery**
- **2b. Holistic network design with combined seabed lease and financial support**

We note that the consultation outlines a potential approach whereby there is a single process to allocate seabed rights and economic support (i.e. the CfD) – and potentially also combining planning consents (option 2b). We are aware that this type of model is utilised in some other countries, such as Germany and the Netherlands, and note that in these electricity markets there is much greater centralisation, as opposed to being market-driven like in GB. It is our current understanding that the type of reform envisaged under option 2b would require significant changes to the relevant regulatory and commercial architecture for CfDs. We welcome that Government is considering such reforms and we are keen to work with BEIS and other relevant stakeholders to explore further what this could mean in a GB context.

The next major milestone for offshore wind after delivery of the 40GW by 2030 target will be to secure the new capacity required to meet the Government's commitment to decarbonise the electricity system by 2035. Given this, we would recommend that BEIS uses time over the coming months to

work with key stakeholders to identify and prioritise those wider reforms which will be necessary and deliverable to meet the 2035 commitment, and those which could be implemented at a later point, and as part of the broader deployment framework for offshore wind.