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**16 November 2021**

**Citizens Advice response to BEIS consultation: Offshore Transmission Network Review: proposals for an enduring regime and multi-purpose interconnectors**

Dear BEIS,

As the statutory consumer energy consumer advocate, Citizens Advice has represented the consumer on the Offshore Transmission Network Review Expert Advisory Group and in the Electricity Transmission Network Planning Review. Citizens Advice also provides regular input into the energy network price control process. Given this position and experience, we welcome the opportunity to respond to this consultation.

We support the objectives of this consultation to move towards a network and generation development process that reflects the offshore wind industry's growing maturity and the scale of development required to meet the government's generation targets that support Net Zero.

Our interest in this review is in ensuring that cost-efficient offshore wind projects, that are also environmentally and socially considerate, are progressed to support the delivery of Net Zero through the decarbonisation of energy generation. This requires mitigating the potential risks of coordinated delivery of offshore wind. This includes inefficient, inconsistent or otherwise problematic tendering processes, poor clarity or confidence in system development or from attaining sub-optimal network design or non-delivery of projects.

We think an enduring solution should increase the efficiency and the transparency of planning development processes to benefit engagement with local communities. This in turn supports the deliverability of cost-efficient network developments for energy consumers.

To achieve these outcomes we favour:

- A broadly encompassing strategic plan and Holistic Network Design (HND)
- The optimal clarity of long term network design and price signals to developers
- A coordination model similar to (2B) that combines the leasing, planning and subsidies into a single tender process.

- Reform of the planning process to support better local community engagement in the development of tendering.
- The current regional monopoly TNOs use their position and expertise to support the early development of network design and planning, then act as the default developer of offshore transmission outlined in the HND.

We also think that there is also significant value for early competition that can challenge the HND and offer an alternative network development design. This stops the HND from becoming a barrier to innovation and enabling different business models that utilise the benefits of coordinated network planning.

Please do get in contact if you would like to discuss the response further.

Kind regards,

Ed Rees

Senior Researcher  
Citizens Advice

**1. 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.**

We agree that reform is required to improve the design and delivery efficiency of offshore wind development to meet the government's ambitious targets. A strategic approach should support a more coordinated whole system network value assessment that will create greater clarity of future system needs and so reduce the risk for investors and for consumers.

The ESO's cost-benefit assessment highlights the potential £6bn consumer savings of an effectively delivered coordinated approach to offshore wind generation<sup>1</sup>. There should also be additional environmental and social benefits that can be achieved through reforming the planning process to better enable coordinated and efficient development.

We think these benefits require a strategic plan and HND that sets out clear expectations of developers. We think this approach should create tenders for offshore wind developments that require a bidder to meet consumer, community and environmental outcomes. However, there also needs to be competitive pressures on developers to innovate network design and deliver the overall best consumer and societal value. We think this can be best achieved by early competition and HND

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<sup>1</sup> [Citizens Advice response to ESO consultation: "Offshore Coordination consultation"](#)

combined with seabed lease and financial support in 2B with planning permission agreed in principle before tender.

To support the delivery of a strategic plan there should also be reform to the planning process that enables better, more direct and empowered community engagement with large scale infrastructure projects. There is a pressing need to ensure that community engagement in planning processes uses their time most effectively to choose the best outcomes that are available within a clear strategic plan.

We think a process of a negotiated settlement, with an independent advocate representing local interest, should be empowered to work with communities to negotiate within a range of permissible outcomes outlined within the planning process that will support net-zero developments. We propose that this process starts when transmission operators (TO) start the process of developing early detail on the proposed network design. This process should then progress with the developer to agree on the HND or alternative design that is chosen through a competitive process to complete the detailed network design.

**2. 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?**

We support a broadly encompassing strategic plan that provides the maximum possible clarity over planned developments and their long term requirements and the clearest price signals to developers. This supports an efficient cost to consumers and will require a tendering process that has clearly articulated consumer, environmental and community outcomes from offshore energy system developments.

The strategic plan should include generation as well as transmission to encourage consideration of holistic energy system value that can be achieved via an offshore wind development and co-located energy system assets such as energy storage. It is critical to keep investment costs low and reduce the risk for consumers of poorly developed network design.

To protect consumers from poor network design outcomes leading to underutilising, overpaying for or stranding of assets, the strategic plan should also be influenced from the bottom-up by proposals from developers via an early and comprehensive competitive tender (a 2B type approach) which can propose alternatives or modifications to the HND.

For example, if a tender is offered for the development of a set capacity or for transmission via a specific route, if the dependencies of this requirement are given a numerical cost, a developer's proposal could provide alternatives that reflect the overall best value to consumers. For example, if changing a network transmission route or the scale of the development could support a lower overall system cost then the scope of the strategic plan should not be a limiting factor on system efficiency.

We think HND should provide the best estimate of the anticipated energy system development required before a competitive tender for offshore licensing is conducted.

In the consultation, two terms are used: 'Holistic Network Design' and 'detailed network design'. However, there are options between these two steps that can support both the value of HND being a practical utility for supporting developer planning and ensuring the efficiency and efficacy of the detailed network design.

For a strategic plan to support the efficient development of offshore wind there is clearly value in the early assessment of system needs. We think this means that the preferred enduring model should be chosen that conducts area surveys, preliminary consumer engagement and planning processes that will enable a clear view of the development proposition that is tendered. We consider the overall interdependencies and risks will be reduced by the combined financing proposal for developers outlined in 2B.

This builds on the model in Germany that conducts shared surveys before tendering to avoid duplicated efforts and clarity of the offers provided at the point of tender. It would seem a sensible practical step for incumbent geographically specific transmission operators to conduct this work. We believe that at this stage competition should be introduced to offer an opportunity to innovate network design and support a reduction in consumer risk of inefficient network design. In this approach, the timeline for bidders to finalise their proposals needs careful consideration.

There may be a possible window in the bidding process to conduct additional surveys and data collection by a successful bidding developer that will support alternative forms of network design that will make up the 'detailed network design'. For consumers, the more comprehensive commitment at the point of tendering reduces the liability of failure to deliver within proposed parameters. Providing this window should further support the reduction of this risk. It could be a bidder selected option that is included in tenders. So, for example, if a developer accepts the HND and doesn't need additional surveys or time to provide an alternative design the tendering process can avoid this window.

There may also be alternative proposals that require an additional delay to altering planning permissions or tendering. The delay that this causes and the risk this creates for consumers the overall value of potential delay should be factored into consideration of the development of the proposal during the tender process and its impact on the relative value for the energy system and consumers.

### **3. 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?**

We think that the FSO and BEIS should be jointly responsible. BEIS role will be key where policy is required, particularly where the National Policy Statement and the strategic

plan should seek to define which planning permission options are required for Net Zero delivery and will directly impact local communities. This is similar to the role BEIS proposes is required to assure heat network zoning and heat network development.

We favour a coordination model (2B) that reflects a similar structure to the German model as we see significant value from the time and cost efficiency and for enabling innovation of combining leasing, planning and subsidies. This will be a tendering process that requires decision making supported by the Crown Estate, Crown Estate Scotland, and national and devolved consenting bodies. We also think a degree of early local consumer engagement may help support a more effective voice for local communities in HND.

A strategic plan will benefit most from a clear developer and government decision point that can deliver required outcomes set out in the HND or by an agreed efficient alternative change to the network plan. Combining the procurement of development options should be an opportunity for competition, technology and innovation to improve the overall value proposition to consumers.

If we are to move to an offshore energy system with innovative use of shared network assets, multipurpose interconnectors and intelligent offshore grid solutions then the relative value of these approaches in particular instances should be clearly presented. This should be done via a competitive process that evaluates the overall consumer benefits and investor returns against the best available default option in the HND provided by FSO with support from TNOs.

We think there needs to be an assessment of individual projects, as to whether the potential higher rate of return attached to the innovative transmission and network design solutions outweigh the cheaper cost of lower-risk approach. We do not think an offshore regime should assume a perceived value of coordination approach that will trade off against an impact on a rate of return. This is implicit in any model choice that defines an agreed transmission plan separately from a plan for generation and does not include early competition. Instead, early competition enables innovative network design proposals to offer additional value for consumers and the scope for additional returns for investors by taking on a higher risk commitment to developing offshore transmission solutions that will complement offshore generation. This requires that a tender can be for an alternative proposal to meet the strategic plan in a way that offers overall value to the system and energy consumer system outcomes.

We think it will be beneficial for consumers that TNOs are incentivised to actively support the FSO's development of the strategic plan and the HND by involvement in the planning and development of offshore transmission. This incentive would be that they should be involved in creating the holistic network design and initial detail, and where is this accepted as efficient, be the developer. (See the early competition proposal outlined in answer 2).

We would expect more coordinated system designs to become business as usual in transmission network operator designs over time. Where generation developers view the holistic design as efficient within a competitive process, then it seems sensible to utilise the national monopoly transmission operators to deliver this option and receive efficient cost. This is consistent with the onshore regime where transmission projects are grouped into a regional network entity to support lower costs. As is the case in the proposed model of early competition in onshore tenders, there should be an indicator of value relative to a proposed default network transmission network design.

#### **4. How should stakeholders be consulted during the development of a strategic plan?**

The strategic plan should be updated via surveys conducted by TNO's in the development of the HND or when competitive bidders secure offshore development contracts that impact the strategic design.

The regular input of the government and TO's into the strategic plan should enable a stable but iterative development process that is fixed in an area during a period of offshore development tendering. At this point it would seem sensible for stakeholders to have the opportunity to respond to the strategic plan and network design to support consideration of bids and the preferred solution and future changes to the Strategic Plan and HND.

#### **5. What time-period should be covered by a strategic plan and how frequently do you think it should be updated?**

The strategic plan is useful to the longest time period that it can reliably be provided. To include detail from key targets up to 2050 would ensure consistency with long term projections for energy system requirements. Without this long term view, there is a significant risk of asset development being inefficient and short term. However, the time period covered should be noted with the degree of confidence that can be achieved.

#### **6. We think that there is a need for a HND that plans offshore transmission for the long-term as an integrated part of a transmission network, Do you agree? Please explain your answer**

The major tension in this consultation seems to be between the current UK decentralised model of offshore wind development which is fast-moving and a more centralised and more comprehensively planned model as shown in Germany. To capture the value of both approaches we think there needs to be a centralised design and survey resources. These support an efficient and clear developer bidding opportunity to provide competitive bids consistent with HND or to provide an alternative proposal that meets the intent of the strategic plan in achieving overall system, consumer and societal value.

If the offshore wind development and the transmission network development are aligned based on an outcome-based requirement of delivery defined by the strategic plan, there is then the scope for a developer to consider an alternative to the holistic network plan. This process will allow any inconsistencies with previous HND investments that were made to be established at the inception of change to a new proposal that if accepted, creates an improved HND model based on the impact of the agreed development.

For this process to work best, it will require a combined assessment of the overall value proposition of offshore wind development, transmission solution and network impact, as well as environmental and social factors, which need to be set out in a strategic plan. Then development contracts are awarded based on assessments of bidders' offers. This also reduces the risks of transmission capacity and developers not aligning through a failure to secure funding or otherwise deliver required assets. Where transmission lines are shared the risk of development non-delivery should be lowest in this approach, given the confidence of returns and predictability of network requirements. Given the clear network need and demand in certain areas, it may also be appropriate to attach a non-development or late penalty fee to counter some of the lost value for consumers.

The benefits of a strategic plan accrue from the potential to better optimise transmission capacity to the generation developed via incentivising the use of shared network infrastructure. As in mobile networks, network sharing arrangements enable overall reduced costs and infrastructure construction on consumers. The major challenges in mobile of shared network arrangements relate to impacts on competition. However, as wind generation and its transmission and other network impacts will be a natural monopoly for the provision of available wind capacity in an area this does not apply. Where transmission capacity is shared a basic option would be to require non-discriminatory terms should be applied.

As in mobile networks in the UK, the option is for network companies to reach agreements on sharing and defining their own commercial arrangements and infrastructure providers to facilitate sharing. The freedom to enable innovation in network design and the financing models around shared designs can best be encouraged by minimising the prescriptiveness of a strategic plan with an implementation approach that allows alternative propositions to the HND. This places the onus, in our view constructively, on commercial parties cooperating to meet the needs of a tender. We would envisage that alternative plans would need to be able to meet the requirements of the strategic plan either via the HND or a variation. This would provide a balance between a fixed plan and one that will necessarily evolve in a way that avoids risk to existing network and generation asset utilisation.

The consultation seems to suggest that shared asset use would create additional risks to non-delivery which are complicated by involving consortia. This would seemingly be addressed by requiring transparent agreements on the terms of shared asset use. Where alternatives to the HND are successful it would place an obligation on the developer to



agree on terms with other successful developers if their design impacts their development.

To enable this form of offshore wind tendering requires a bundled implementation approach where leasing, planning permissions, CFD and predictable network charging signals enable a development proposition that enables developers and networks to package a commitment that will enable infrastructure sharing arrangements.

As in mobile networks, there may be different cost models that are applied to network requirements that cannot be supported by market value. This model will effectively support decisions about where this is the case and the level of additional government support to subsidise necessary developments in certain underserved geographic areas.

### **7. If you agree, do you think a Holistic Network Design should also include onshore transmission?**

A clear strategic plan for onshore and offshore will mutually benefit from a comprehensive overview of network characteristics that will determine the value and cost of energy system outcomes for consumers. The HND should support this outcome by providing a clear indicator of energy system requirements.

There is also likely to be a number of benefits to a consistent approach between the role of network processes onshore and offshore. For example, for developers, communities and stakeholders in assigning the relative merits of generation proposals.

### **8. Who do you think is best placed to undertake a HND? Please explain your answer.**

We think that the FSO is best positioned to conduct the holistic network design given its posited role as 'Centralised Strategic Network Planner' for efficient electricity transmission network planning. It should provide a single, independent, expert body.

TO's should provide surveys, data and early stakeholder engagement to support efficient and robust development and tendering process. As discussed in Q10, there should also be scope for developers to provide elements of survey and network proposal to alter the HND where they offer an alternative that offers overall system and consumer value.

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

We have outlined in the answers above a delivery model that follows model 1 into the HND stage, but then continues with either option 1 or 6 depending on an early competition process. The model we propose would include as much of the pre-construction process before the competition and any consenting activity after the competition is a recognised risk for the system and consumers in delivery.



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

In the consultation, two terms are used: 'Holistic Network Design' and 'detailed network design'. However, there are options between these two steps that can support both processes. Specifically to ensure the HND is a practical utility for supporting developer planning and confidence and ensuring the efficacy of a detailed network design in meeting energy system needs efficiently.

For a strategic plan to support the efficient development of offshore wind there is clearly value in early assessments of energy system needs and feasibility of development. We think this means in most models there is significant value in conducting the surveys, preliminary consumer engagement and planning processes that will enable a clear view of the development proposition. The overall interdependencies and risks will be reduced by the combined financing proposal for developers outlined in 2B.

This builds on the model in Germany that conducts shared surveys before tendering to avoid duplicated efforts and clarity of the offers provided at the point of tender. It would seem a sensible practical step for incumbent geographically specific Transmission operators to conduct this work. However, if competition is introduced at this stage to offer an opportunity to innovate network design and support a reduction in consumer risk of inefficient network design, then the timeline for bidders to finalise their proposals needs careful consideration.

There may be a possible window in the bidding process to conduct additional surveys and data collection that will support alternative forms of network design that will make up the 'detailed network design'. For consumers, the more comprehensive commitment at the point of tendering reduces the liability of failure to deliver within proposed parameters. Providing this window should facilitate this approach. It could also be an option that is included in tenders. So, for example, if a developer accepts the HND and doesn't need additional surveys or time to provide an alternative design the tendering process can avoid this window.

There may also be alternative proposals that require an additional delay to altering planning permissions or tendering. The delay that this causes and the risk this creates for consumers' overall value should be factored into consideration of the development of the proposal during the tender process and its impact on its relative value for the energy system.

**11. Do you have any views on the relative merits of these high-level approaches? 1. Incremental change 2a. HND and delivery 2b. HND with combined seabed lease and financial support**

We favour 2b for the reasons outlined in previous questions. Primarily to simplify the tender to developers and support the clear assessment of the value and liabilities that

developments provide to the energy system, local communities and the environment. Competition in meeting the best estimate of system needs as captured in the HND should then ensure detailed network design is best placed to meet consumer needs at the lowest possible risk and cost.

**12. Does the current legal and regulatory framework, and Ofgem's options to regulate within that framework as described in the Ofgem consultation, provide an adequate enduring solution for the regulation of MPIs? If not, please indicate why not and what changes you think might be needed.**

No response

**13. Do you have any views on the merit or necessity of defining a separate MPI asset class in UK legislation, or other legislative change? What might be the disadvantages of this approach?**

No response

**14. What changes might be needed to the current UK regulatory framework to address regulatory developments in other jurisdictions?**

No response