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Brussel, 2024-05-29

FAO: OFTO Build Tender Development Team

OFTO Build: Consultation on initial proposals for an OFTO Build model to deliver non-radial offshore transmission assets.

Submitted via email: [oftobuild@ofgem.gov.uk](mailto:oftobuild@ofgem.gov.uk)

Dear Sir or Madam,

WindGrid welcomes the opportunity to respond and provide feedback to Ofgem's consultation on initial proposals for an OFTO Build model to deliver non-radial offshore transmission assets issued 17th April 2024.

WindGrid is a subsidiary of international electricity transmission utility Elia Group, the fifth largest transmission utility in Europe. WindGrid develops, builds, owns, and operates offshore transmission infrastructure and leverages Elia Group's decades of experience in offshore transmission infrastructure gained through its subsidiaries Elia and 50Hertz, transmission system owners and operators in Belgium and Germany, respectively. Elia Group's experience covers HVAC and HVDC technologies with a total of circa 5GWs of offshore transmission infrastructure in operation, and circa 15GW of offshore transmission projects at various development stages across the North and Baltic Seas.

WindGrid supports the extension of choices available to developers in the delivery of non-radial offshore transmission solutions. Crucially, we consider the development of the OFTO build model to be a critical step towards unlocking coordinated offshore infrastructure.

Our review of the current OFTO regime has found the following:

**The OFTO regime has delivered savings for consumers and demonstrated the benefits of (very late) competition:** The current OFTO regime has delivered savings to GB consumers through innovations on operating and financing costs, driven primarily by the competitive nature of awarding OFTO licenses through auctions. These innovations have allowed for savings to be passed on to the consumer in the form of lower transmission charges. Ofgem estimates the consumer benefit to be c. £650m – 1,200m for the first three Tender Rounds<sup>1</sup>. However, the savings delivered under the current OFTO regime have been lower than they otherwise could have been, due to inefficiencies associated with the developer-led regime, including an inequitable balance of risk between developer and OFTO. As the industry moves towards an increasingly coordinated regime, these inefficiencies become an even greater restriction on the benefits to the consumer.

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<sup>1</sup> <https://www.nationalgrideso.com/document/289196/download> p.39

**The OFTO regime is not fit for purpose going forward:** The OFTO regime was not designed with the intention of meeting the UK Government's target of connecting 50GW of offshore wind by 2030. A more innovative approach to offshore transmission involving non-radially connected assets, meshed networks, and assets such as offshore hybrid assets (OHAs) is likely to be required to deliver this aim. This is likely to involve a greater role for National Energy System Operator (NESO, expected to be launched in Summer 2024) going forward to ensure a more holistic transmission network planning approach is followed and greater benefits from the OFTO regime are realised for consumers. It will also require new and more capable companies entering the GB offshore transmission market to work alongside the NESO.

**The OFTO build model is necessary for achieving a coordinated offshore network:** In our view, the OFTO regime needs to be urgently reformed in order to deliver the offshore transmission network that is required to reach UK's Net Zero targets. Although the generator-build model has been favoured for radial projects up to now, it presents a number of significant challenges for a coordinated offshore transmission network, including the following:

- The increased capital constraints faced by generators from financing a much larger transmission infrastructure asset than a radial connection;
- Practical challenges of appointing a lead developer and subsequent developer from competing projects, including implications for CfD applications;
- Restricting to a smaller pool of offshore generators with the capability, capital and appetite to build coordinated infrastructure;
- Insufficient competition increases cost for the consumer and reduces the possibility for innovative solutions.

**Early OFTO competition is required to realise the full benefit of the OFTO regime:** While a late competition OFTO build model represents a positive step towards addressing the above challenges, introducing competition in offshore transmission at an earlier stage of the development lifecycle would unlock benefits associated with design innovation, cost reduction and/or improved system security. Early competition enables OFTOs to innovate and exploit their core competencies during the detailed network design (DND), engineering, procurement, construction and operation phases of the project. Against the backdrop of the establishment of the NESO, the Centralised Strategic Network Plan, and the Strategic Spatial Energy Plan (in collaboration with DESNZ), WindGrid envisages an OFTO build delivery model where the scope of the OFTO will be introduced at the DND stage and mature the project through the key stages of development, including planning consent. Likely benefits of an early OFTO build model include:

- Opportunities to innovate across multiple activities in the development lifecycle;
- Increased cost efficiency across the asset lifecycle (DEVEX, CAPEX, OPEX and cost of capital);
- Clear scope definition and reduced number of interfaces reduces (bid) price risk;
- Experienced market players attracted, drawing on a wider pool of skillsets and capabilities, and attracting required private capital; and
- Opportunities to introduce an appropriate level of accountability for the transmission developer, regarding performance of the transmission asset over an extended period and connection of future assets.

**Ofgem should consider upcoming opportunities to pilot an early OFTO build delivery model:** WindGrid would recommend the use of a pilot programme from which learnings can be taken to inform a future OFTO build enduring regime. We are moving away from a market involving radial assets, where multiple assets (scaled by size) are being tendered in a similar way over and over. Given the implementation of the NESO, CSNP, Celtic Sea HND, the upcoming R5 seabed lease auction, and FLOW target deployment dates (mid-2030s), an OFTO build model will become increasingly necessary. With these changes fast approaching, there are a limited number of opportunities to implement an early OFTO build model. This is a challenge to the vision of achieving a fully coordinated, holistically planned offshore transmission network – if an OFTO build system is not piloted ahead of this increasing demand for coordinated infrastructure, it will become

increasingly hard to apply the lessons learned. Under this pilot, some of the risks could be ringfenced away from developers. WindGrid considers ScotWind and the Celtic Sea leasing round projects to be compelling candidates for piloting an OFTO build delivery model, noting that the Celtic Sea projects are slightly further in the future, which may allow for OFTOs to engage at an earlier stage in the project development cycle. WindGrid would favour an OFTO build model that appoints the licensee much earlier in the project cycle and believe this will drive better value for money and will better address why an OFTO build is needed for non-radial assets.

We expand further on these points in our response below. We would welcome the opportunity to discuss these points with Ofgem further.

Yours sincerely,



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## Questions

### A) Procurement under a late competition OFTO Build

1. Which party should be responsible for procurement in the late competition OFTO build model and why?

WindGrid disagrees that the procurement should be generator led for two primary reasons:

- i. Non-radial (coordinated) transmission is more complex than radial and creates a number of issues for generators,
- ii. Specialised transmission developers can leverage supply chain and deliver even more efficient outcomes.

The development towards an OFTO Build model to deliver non-radial solutions would introduce additional risks and uncertainties for the generators. With this trend from radial to non-radial and more complex topologies, there is a need to develop specialised capabilities around HVDC design and delivery, in addition to coordination with multiple generators. WindGrid has had discussions with generators and understands that, as non-radial assets are much larger than radial, the option of removing this asset from a generator's balance sheet is appealing. It may also be difficult for two competing generators to work together due to the information sharing required, particularly around financing considerations and intellectual property. WindGrid is sceptical that generator-led procurement will solve those coordination challenges. It seems more likely to have unintended consequences – such as a need for a single generator to line up various assets consenting timelines, anticipate and finance future connecting assets.

With the current proposition for the OFTO build model, the OFTO would need to have construction capabilities regardless of which party is responsible for procurement. We believe the party which executes the project should naturally have the highest incentive to negotiate most competitive EPC-contracts, thereby ensuring the most efficient delivery of the non-radial offshore transmission assets. In addition, inter-package interface risks can be most efficiently managed by the OFTO delivery team. Therefore, we are convinced that OFTO procurement is the more suitable solution for the OFTO build model.

Consequently, there is a need to attract a different and more capable type of tender winner which can also offer CAPEX delivery capabilities. In the current offshore transmission market, we would like to differentiate between a minimum of two different types of OFTO developers:

- A) Existing OFTOs with a strong focus on financial and operational capabilities but little to no experience in design, procurement and implementation of offshore transmission.
- B) Specialised "TSO-minded" Offshore Transmission Developers, which can offer end-to-end experience from early development, consenting over procurement and construction to operation.

We believe the current proposal for a late OFTO build with generator-led procurement stands in between the risk profile of these two different OFTO-bidder types. We understand that Ofgem's initial view is, that procurement shall be undertaken by the generators given their track record of procurement and delivery of *radial* assets (in contrast to Type A of the existing OFTO). The OFTO-operate model has so far awarded market participants (OFTOs) with strong financial and operational capabilities but less focus on development and CAPEX delivery. Therefore, generators have been traditionally responsible for the DND, procurement and CAPEX delivery for the radial OSW connections. Given the limited capability of the existing pool of OFTOs to undertake this type of work, Ofgem should aim to attract new investment and more strategic investors with Design, Build, Operate and Maintain (DBOM) type expertise.

With the development towards a non-radial offshore transmission model there is also a need to attract new market players like specialised offshore transmission developers with end-to-end experience and strong track record (development and CAPEX delivery capabilities in addition to financial and operational ones). These specialised developers can de-risk the supply chain constraint issues identified by Ofgem due to their long-lasting relationship with the relevant supply chain. Given transmission is their core business, it can be

assumed that competitive procurement capabilities exist due to scaling effects of a huge transmission investment pipeline, e.g. through framework agreements with the relevant OEM. With those aspects in mind, we suggest that Ofgem reconsider its reasoning for the initial view of generator-led procurement in direction of an OFTO-led procurement.

In addition, we believe that while a late competition OFTO build model can resolve the balance sheet issue for generators, there will still be issues with implementing a coordinated design. Introducing competition in offshore transmission at an earlier stage of the development lifecycle would unlock benefits associated with design innovation, cost reduction and improved system security. Early competition enables OFTOs to innovate and exploit their core competencies during the detailed network design (DND), engineering, procurement, construction and operation phases of the project.

Against the backdrop of the soon-to-be-established NESO, the Centralised Strategic Network Plan, and the Strategic Spatial Energy Plan (in collaboration with DESNZ), WindGrid envisages an OFTO build delivery model where the scope of the OFTO will be introduced at the DND stage and mature the project through the key stages of development, including planning consent. Likely benefits of an early OFTO include:

- Opportunities to innovate enabled across multiple activities in the development lifecycle;
- Increased cost efficiency across the asset lifecycle (DEVEX, CAPEX, OPEX and cost of capital);
- Clear scope definition and reduced number of interfaces reduces (bid) price risk;
- Experienced market players attracted, drawing on a wider pool of skillsets and capabilities, and attracting required private capital; and
- Opportunity to introduce an appropriate level of accountability for the transmission developer, regarding performance of the transmission asset over an extended period and connection of future assets.

## **B) Tender Process**

2. At what point should the OFTO tender process commence? Does option 1 or option 2 present the best approach?

WindGrid agrees that the procurement phase should ideally overlap with the consenting phase (Option 2) in order to optimise the overall timeline. We believe that an optimised timeline mitigates the additional risks incurred from uncertainty around the approval of the consent submission. We would also like to re-emphasise that this consenting risk is removed if an early OFTO build model is introduced which, as outlined above, remains our preference.

From a timing perspective, waiting for the approval of consenting (Option 1) to start the OFTO tender would result in an unnecessarily delayed COD. Under the assumption that the OFTO should carry out the procurement, starting the supply chain tender at this point would cause further delays. This does not align with the need for efficient project development.

On Option 2, the UK consenting regime has a strong track record of submitted applications receiving their DCOs. That said, WindGrid is aware that running the OFTO tender process and consenting process in parallel does still incur additional consenting risk e.g., a delay in obtaining consent approval (potentially up to a year) or unforeseen material conditions to the DCO which could impose changes to the design. However, we believe that there are mechanisms that can mitigate these risks, and we outline these in response to Question 3.

3. Do you agree with the view that, providing stakeholder engagement is properly conducted ahead of consent submission, generators should have a reasonably clear view, at the time of consent submission, as to whether the consent is likely to be granted in the form requested, and that an OFTO would be comfortable to submit tender bids on this basis?

WindGrid agrees in principle with Ofgem's view. We think that the risk of consent failure is generally low in the UK, although there are risks of delay and material changes to the final consent order which are important to consider. In the case of OFTO procurement, there will be further cost risks in the form of a

higher cost burden for the prospective OFTO than the existing process. This considers the due diligence required to take on the existing project from the generator, early engagement with the OEM market and the reviewing of offers ahead of a TRS bid. A further consideration is that the OFTO tender must align with the validity period of the offers received from the OEMs – any delays will result in knock-on delays in the supply chain.

However, we believe that these risks are manageable for the overall benefit of the project timeline. As these risks would be taken on by the OFTO but benefit the project overall, Ofgem should also consider a risk-sharing mechanism which would distribute these risks more fairly. For instance, should material differences in the consenting process result in unforeseen costs accruing to the OFTO, an ex-post cost assessment could apply to fairly recoup a proportion of these costs from the generator. The offshore generating assets and offshore transmission asset could also consider undertaking separate Development Consent Orders (DCOs) in order to de-risk individual components. There could also be a mechanism where bidders are willing to commit capital to confirm slots with the supply chain, with a condition that these are refunded if the project does not get consented. As explained above, assuming a fair allocation of risk between parties, consenting risk should not prove to be a barrier to the overall efficiency of the project.

### **C) Timely Delivery**

4. As compared with commercial liquidated damages, how effective are options 1 and 2 in incentivising timely delivery and managing the risk of delay? Could these options make OFTO build a meaningful option for the generators?

Ultimately, the OFTO is already incentivised to deliver on time, as it is inherently within their financial interest to do so. That said, it is not unrealistic for there to be a requirement to compensate generators in the case of delays. We believe that option 1 could work, provided the assumption of certain principles:

- The impact on the OFTO would need to be capped. Full compensation would not be realistic or preferable to any party. OFTO lenders would require security and could require prospective parties to price this risk into their bids.
- The incentive should be symmetrical i.e. generators should compensate the OFTO for late delivery of generation assets.
- The delay charges must be flexible enough to consider an array of different potential configurations, particularly to be proportional with the varying project structures for the transmission and generation side.

We would be open to exploring this topic with Ofgem in more detail.

5. How can the OFTO delay charge and consumer underwriting in option 1, as well as the TRS reduction in option 2, be appropriately set and executed?

See above.

#### **D) Cost increases during construction**

6. Which of the four proposals offers the most suitable option for the treatment of cost increases during construction?

WindGrid agrees with a passthrough to the generator or customer as a principle of fair allocation of the construction risk. The extent to which they would bear cost overrun risk depends on whether or not they have undertaken the procurement. If the OFTO is in charge of procurement, then they may be willing to take on more of the overrun risks. Similarly, in an early-competition OFTO build model, an OFTO that can take responsibility for consents should be able to bear the additional risk. WindGrid could consider a solution where Ofgem start at option 1 and progressively move to option 4 through subsequent rounds, given that there are incremental risks which can be subsequently re-allocated. We are open to exploring this topic with Ofgem in more detail.

7. What, in your view, is an appropriate calibration for the pain-gain share mechanism outlined in options 3 and 4?

No view to be expressed.

#### **E) Refinancing Gain Share**

8. Should we expand the refinancing gain share mechanism to cover the conversion of equity to debt or the sale of equity? How could the mechanism work in principle?

No view to be expressed.

#### **F) OFTO build failure during construction**

9. What do you think is the best way to deal with a failure scenario during construction?

No view to be expressed.

10. In the event that the appointed OFTO cannot continue with the project, which party is best placed to take the build to completion? How should the transfer value for a partially completed project be set?

No view to be expressed.