

Marubeni response to Ofgem's Offshore Transmission Network Review consultation.

September 2021



INTRODUCTION

Marubeni Corporation (“Marubeni”) appreciates the opportunity to engage with Ofgem’s Offshore Transmission Network Review, to provide its input on the development of offshore wind projects, with the objective of ensuring that these projects can be developed and delivered in an efficient, predictable and expedient manner.

Marubeni is a conglomerate listed on the Tokyo Stock Exchange with extensive interests in power generation and renewable energy. Marubeni has acquired considerable offshore wind experience since its investment into UK offshore wind in 2011 as a first Japanese Independent Power Producer (IPP) developer. Marubeni is also one of the shareholders of Seajacks and has a wide range of offshore wind industrial value chain knowledge. As of June 2021, Marubeni has shares and active participation in over 38GW of power generation projects throughout the world.

Marubeni brings sector experience of delivering floating offshore wind, including leading floating offshore wind demonstration projects in Japan with five different floating foundations.

In September 2018, Marubeni announced its commitment to double its renewable energy project share from the current 10% to 20% of total net generating capacity by 2023. Further, in March 2021, Marubeni has set a goal to strive for net-zero greenhouse gas emissions from the group by 2050. To achieve this goal, Marubeni has formulated action plans which include halving its coal generation capacity by 2025.

As part of Crown Estate Scotland’s ScotWind seabed leasing program, Marubeni has partnered with SSE Renewables and Copenhagen Infrastructure Partners to combine their local experience and global expertise to develop fixed and floating offshore wind projects in Scotland. Significant works have already been completed to ensure that the projects can be delivered at speed to respond to the climate emergency.

Given our primary focus is to understand the implications for future ScotWind projects, we have responded to the Pathway to 2030 elements of the consultation only.

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

We believe that it is possible for a holistic design to result in a more coordinated, economic and efficient network. It has the potential to result in an onshore and offshore transmission network that could be more technically and spatially efficient and more resilient. In turn, this should result in economic and environmental efficiencies. However, we would like to highlight several points that require consideration, particularly from a developer / generator's perspective. These are raised to ensure that projects are not exposed to greater risks, costs, or delays.

- a) The level of benefit that increased coordination can bring will clearly differ between different groups of projects. For projects which could be connected via a single radial connection, we feel it will be most efficient to have no increased coordination. Projects which fall into this category should be identified quickly by the ESO in order to speed up the implementation of such projects.
- b) Once an assessment has been undertaken it is important that this can be relied upon by the developer, and that it will not be revisited at a later stage. For example, it would be extremely disruptive for a project to develop based on an agreed transmission configuration, and for this to be reviewed at any time when a new project suddenly emerges in the area at a later date.
- c) It is likely that the level of benefit that coordination would bring to each of the constituent projects will differ i.e. for some it might bring cost and time benefits, but for others it could result in delays. Therefore, we believe that whilst coordination could bring overall system or societal benefits, it is important that the benefits are relatively equitable across the projects that make up the coordinated design.
- d) There is a risk that increased coordination could lead to a less efficient approach if one of the constituent projects stalls or is cancelled. This could lead to abortive works, delays, and additional costs for the other projects if there is a need to reconfigure the holistic design to respond to the changes.
- e) It can be challenging to ensure that projects that are grouped together for a coordinated approach will meet their proposed timeline and not stall or cancel. Whilst the consultation refers to coordination between projects that are reasonable likely to materialise, it can often be difficult to have this certainty in the UK offshore wind market where much of the development is led by the individual developers, unlike in other markets where a more centralised approach is taken, which should allow for easier transmission coordination.
- f) The consultation acknowledges that the current framework for offshore wind development incorporates strong competition between developers, including for seabed leases and CfDs. Given that changes to the CfD regime are outside of the scope of this consultation and that LR4 and ScotWind seabed leasing is nearing completion, we are interested to understand further how these barriers to collaboration, increased anticipatory investment, and coordination could be removed.
- g) Whilst there are project milestones that give increased confidence about a project's maturity (including securing a seabed lease, consent and a route to market e.g. CfD), these span a number of years, and until all of these are secured (which will be late on in a what has traditionally been a lengthy development period, of up to 10 years) a project is not guaranteed to proceed. Even once these milestones have been achieved, there is the risk that legal challenges to an individual project could put the whole coordinated approach at risk. It is necessary for extensive works to be undertaken to consent, design and procure the offshore and onshore transmission network works in parallel with and to secure these project milestones.

- h) The Early Opportunities workstream states that: “we consider AI to be expenditure for a known future project (e.g. an offshore wind developer with a seabed lease) and there is a reasonable expectation that it will connect (albeit we will need to consider what criteria we will use to judge ‘reasonable expectation’)”. However, as mentioned above, we believe that a seabed lease in itself is only the first of a number of necessary project milestones. We are therefore concerned that anticipatory investment is likely to be expected, and partly borne by the developer, for projects that are not certain.
- i) From our perspective, it is critical that a project should not have to carry the liabilities associated with abortive works resulting from the changes in another project’s delivery plan. It is vital that providing a developer is acting prudently based on the information available at each stage, then anticipatory investment costs should be recovered and not borne by an individual developer.
- j) The worst case, which must be avoided, would be for a reduced number of projects to have to fund shared transmission assets due to the abandonment of one or more projects.
- k) We are concerned about the time that might be required to conclude the consultation, and to implement including changes as required to secondary and primary legislation. It is suggested (point 3.5) that the additional time required to enact the changes could be recouped through later efficiencies, however our concern is that with new roles being assigned to parties who haven’t previously had full experience of these, there is a reasonable chance for implementation delays in the first projects, particularly as these parties will need to become familiar with new processes and stakeholders with which they haven’t previously worked.
- l) We believe that the level of changes being proposed are far greater than those that came about from the introduction of the OFTO regime, where under the generator-build model developers continued to develop and construct their own assets and later divest those at a time and manner that didn’t affect the overall programme of the project. With this greater level of change could come both increased opportunities, but also risks. We believe that Ofgem recognise these issues and the need to maintain the pace of delivery, however we want to stress the importance of this for achieving essential Net Zero targets and providing certainty to developers and investors.
- m) The Generation Map will illustrate project details including information on planned connection dates. It would be useful to understand whether these are dates that are currently envisaged by the developer, or those that have been offered as part of a connection offer. There may be a difference between these.
- n) Given the competitive nature of offshore wind projects, it will be useful to consider what level of information would need to be shared between developers including project capacities, phasing, timelines, and technology choices to allow for collaboration, but still protect each party’s ability to compete.
- o) With regard to ScotWind input to the Generation Map, it should be recognised that whilst initial awards are expected early 2022, it is not yet known how significant awards via any later Clearing process will be.
- p) We would like to understand the impact that implementation of this Pathway to 2030 will have on TNUoS, and how this will ultimately affect the competitiveness of projects for future CfD auctions.
- q) Finally, we wish to understand whether existing connection dates (based on pre-CION) could be delayed due to this coordinated approach.

9. Do you agree with the planned work for a detailed network design offshore?

We would welcome more information on the level of definition that is expected from the Detailed Network Design (DND) offshore, as we do not believe the planned work is sufficiently detailed within the consultation document. It would be helpful to understand the interface between the DND offshore and the later works.

Also, the level of detail required from the DND will presumably be informed by the commercial arrangement for whoever takes on the post-DND phases. For example, if the subsequent phases are to be awarded through a competitive process, then this is likely to dictate the level of information that should be provided to those bidders. Further, depending upon the more specific details of the solution, there may be parties who are better placed to deliver the pre-construction, construction and operations phases.

Further, it would be useful to understand the durations that are anticipated for each stage of the process (including HND and DND) and how each party will be incentivised to deliver to these. We note from 3.84 of the consultation, that “throughout the remainder of this year the ESO will continue work on the HND. We expect this work to be concluded by the end of January 2022”. However, as noted above, we do not expect that this timescale would allow for integration of the ScotWind results.

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

If the Holistic Network Design (HND) indicates that a radial connection would be the best solution, generators are best placed to develop and construct the assets since they have this experience from previous projects.

If the HND indicates that more coordinated solutions are required, we think that it might be best for the TO to undertake the DND offshore. Whilst the TO might not have experience of undertaking the offshore DND and we appreciate that it would require some different considerations to the onshore DND, we assume there should be some similarity during the development. Also, we believe that it will be critical for the onshore and offshore DND to be undertaken in a holistic manner to ensure an optimised overall design, without additional design and construction interfaces, and having a single party for this onshore and offshore could be one way to achieve this.

However, we do have concerns whether the TOs (and ESO for the HND) will have the required resources to deliver on these new responsibilities.

Also, management of the interface and stakeholder relationships between the Central Design Group, who are expected to consult with local communities and developers to produce the Holistic Network Design, and the parties that will then undertake the Detailed Network Design will be critical.

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

Yes, we agree. If the HND indicates that a radial solution is the best choice, the existing developer led model should be retained, as these parties are familiar and proficient at undertaking these works and have long established relationships with the stakeholders and supply chain.

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

As explained in part 3.36 of the consultation, we assume these options will be taken only if the HND indicates something other than a radial solution. However, just for the completeness we have provided our views for both cases (radial solution is taken / not taken) as follows.

Options 1 and 2:

In cases where the HND results in complex grid connection situations (coordination required between multiple competing developers) we consider these two options to be relatively realistic (albeit not ideal).

On the positive side, we believe that:

- The TO involvement on both the onshore and offshore transmission systems will result in a more efficient system.
- The TO would be a suitable entity able to act “neutrally” between competing developers and able to fairly share and allocate costs of the overall transmission system between the developers. Although on this we feel a clear cost sharing mechanism would need to be created.
- Our main concerns are as follow:
- The TO may not have experience of designing and delivering offshore transmission assets. However, we expect that TOs credentials of handling similar work for onshore transmission system can be utilised effectively for offshore transmission.
- There could be scenarios where the HND could span across two incumbent TOs. In such cases consideration should be given on which TO would be appointed as lead and coordination is achieved.
- The TO may not be incentivised to deliver the offshore transmission system on time (or earlier than planned). To avoid impacting the financial returns of offshore wind projects, specific legislation, code changes or other incentives will be required to remove the impact of delays.
- From an end-user point of view, the TO may not be incentivised to deliver the offshore transmission system as economically as possible. On that aspect, option 2 would be better than option 1 as several OFTOs have demonstrated experience in operating these assets effectively resulting in cost benefit for the end-users.

Options 3, 4 and 5:

In similar cases where the HND results in complex grid connection situations (coordination required between multiple competing developers), but also for simple radial offshore connections, we feel these three options raise some very serious concerns:

- Our understanding is that no OFTOs have demonstrated experience of early-stage development, pre-construction works (including consenting), and construction of the offshore transmission assets (given that the Late OFTO Build model has not been adopted for any projects to date), and it is now late for private companies to obtain the necessary knowledge, resources and funding considering the 2030 goal. Whilst some

may have some transferrable skills from other business activities, we do not believe there are a sufficient number to run a competitive process.

- In addition, we feel that an early entry of a private OFTO company in the process will not help resolve any conflicting requirements potentially arising between competing project developers. On the contrary, we feel it may exacerbate issues and lead to a stalling situation for all.
- In addition, from the commercial perspective, the project developers will need to secure sufficient commercial protection against late or poor delivery from third parties. Considering the increasing size of offshore wind projects, we feel it very unlikely that a private OFTO entity would have the financial strength to fairly compensate multiple project developers sharing the same faulty or late-delivered transmission system.

Option 6:

As per question 11, in cases where the HND indicate a single radial solution, we feel this option 6 to be very appropriate. However, in cases where the HND results in complex grid connection situations (coordination required between multiple competing developers), we think this option would not be a practical solution at all which could lead to several projects stalling and renewable targets being missed.

Currently we do not see any incentives for us designing and building an offshore transmission network that we would share with other project developers. Equally, we do not see any incentive for another offshore wind developer to design and build an offshore transmission network that we could use for our own projects.

In cases where the development and construction process responsibility would have to be shared between project developers or handled by one developer for the benefit of several developers, the responsibilities and liabilities for delivery would have to be very carefully considered and legislated.

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

Depending upon the outcome of the HND, it is likely that different delivery models might be better suited. For example, if the level of integration between projects is relatively light (e.g., a quasi bootstrap solution) it is conceivable that each wind farm developer could be responsible for implementing “their” connection back to shore and one of the developers (or a third party) could be responsible for the offshore interconnection between the projects. However, where the HND recommends a single shared offshore transmission asset and/or the level of works is much greater than that required to connect a single project perhaps it would be more practical for a single party to deliver all the offshore works.

In addition to this, the required completion dates for each element of the HND could determine the delivery model. If, for example, one project is to connect significantly before another or if offshore reinforcement to the onshore network is not required from the outset, then it could make more sense for the works to be undertaken in a modular fashion such that they can be interconnected but delivered by different parties who are appropriately skilled, resourced and incentivised for each part.

This could potentially be a less disruptive model that could help to alleviate some of the delivery and programme concerns associated with new delivery models, which will be important in delivering the Government’s target of 40GW by 2030.