

Input regarding the consultation of the Guide for land allocation, licensing process and applications for offshore wind power, and proposals for amendments to the Offshore Energy Act and the Offshore Energy Act regulations

On behalf of Elia Group¹ we would like to thank the Norwegian Ministry of Petroleum and Energy for the opportunity to provide input as part of the proposals for amendments to the Offshore Energy Act and the Offshore Energy Act regulations.

In the context of the European Green Deal and Norway's long-term climate strategy, the European Union aims to be the first continent to be climate neutral by 2050, while Norway aims to reach the goal of climate neutrality already in 2030 and to have reduced its emissions by 90-95% by 2050. Offshore wind energy is to be a key element in achieving these goals (as stated in the European Green Deal², IEA Global Energy Review 2021³, IPCC reports⁴, etc.) – for Norway exemplified by the descriptions in recent white papers on climate and energy issues by the Norwegian government.

Elia Group is active in electricity transmission. With its two TSOs - Elia in Belgium and 50Hertz in Germany - the Group is one of the top 5 leading transmission system operators in Europe. In addition, we participate in the Nemo Link joint venture that operates the interconnector between Belgium and the United Kingdom. Elia and 50Hertz also provide consulting services through their joint subsidiary Elia Grid International. All of this knowledge and experience combined makes Elia Group a front-runner in the development and operation of offshore grids and an excellent partner to contribute to achieving the objectives of the European Green Deal and Norway's long term climate strategy by (inter)connecting the massive renewable energy generation capacities in the North and Baltic Sea.

In the future, the expansion of offshore wind energy will be driven forward even more strongly on a cross-border and European level. With this development offshore transmission assets will gain more importance on both the national and international level. Instead of connecting offshore wind farms through radial connections, coordinated and hybrid solutions in the form of meshed grids or multi-purpose interconnectors, will generate multiple functional and efficiency advantages for Norway, as well as for the European internal energy market.

As a stable legal and regulatory framework is crucial for the development of offshore wind, we fully support that the Norwegian ministry has invited proposals to amend the Offshore Energy Act and the Offshore Energy Act regulations. Following the lessons learned in the development and implementation of regulatory frameworks regarding offshore wind in various other countries, all stakeholders will benefit from an optimization of the regulatory framework in Norway.

As a general point, we have noted that the hearing document and the proposed amendments to the regulatory framework first and foremost address issues pertaining to licensing procedures for production facilities. Therefore, we would like to stress the importance of the Norwegian regulatory authorities taking into due consideration how the grid infrastructure for offshore energy production at the Norwegian continental shelf should be developed and coordinated in the long term to be as beneficial as possible, and that such considerations should be a vital part of the development of the

¹ <https://www.eliagroup.eu/>

² https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

³ <https://www.iea.org/reports/global-energy-review-2021>

⁴ <https://www.ipcc.ch/reports/> and <https://www.ipcc.ch/report/ar6/wg1/#FullReport>

regulatory regime for such energy production, as well as an essential part of the licensing procedures for offshore wind farms.

With regard to the specific amendments proposed in the consultation paper we concur in general. Hereinafter, we have taken the opportunity to address some individual aspects of those amendments and provide additional information that may be relevant.

Comments on individual proposals

1. **Demonstrate satisfactory technical expertise** (new provision in Section 2.3 of the Offshore Energy Act)

With regard to a new provision in Section 2.3 of the Offshore Energy Act, we would welcome a further clarification of the concept of “satisfactory technical expertise” to ensure a proficient allocation of areas and successful project realisation.

Indeed, we believe that offshore wind turbines (generation assets) and offshore connection assets (transmission assets) are two distinct and independent categories fraught with their own challenges. Based on our experience we can state that expertise in developing, building and operating offshore generation assets does not automatically lead to expertise in developing, building and operating offshore transmission assets.

We propose to elaborate further the concept of “Technical expertise”. Indeed both generation and transmission assets require rather different fields of expertise. Therefore a proven successful track record for offshore transmission assets development should be demonstrated as part of the prequalification by the applicant, should such transmission scope be part of the project development. Such pre-qualification criteria could include as a minimum the provision of one reference of successfully developing, building and operating one offshore substation and one export cable; with capacity in adequacy with an advertised project over the last five years. Such requirements are also being applied in other mature offshore wind markets like the United Kingdom and Denmark to ensure a high-quality project.

Given our experience in connecting offshore wind farms and our long-lasting and trustful relationship with key European stakeholders, we are confident to bring a significant added value to the energy transition as a whole by (inter)connecting projects on both a national and international level. We can accomplish this on the one hand by providing infrastructure at low costs and on the other hand by providing high quality assets guaranteed by our TSO experience.

2. **Definition of area allocation** (new letter d in Section 2 of the Offshore Energy Act Regulation)

We support the clarification and the proposed definition of “area allocation” acc. To a new letter d in Section 2 of the Offshore Energy Act Regulation.

3. **Coordinated grid connections in the interest of society** (new Chapter 2A in the Offshore Energy Act Regulation regarding qualification requirements and competition)

In principle we see no objection to the division of an opened area in multiple smaller areas (as stated in the new section 2a: Division). However, we would like to point out that such a division should not limit the broader view of the optimal grid development from a societal point of view, by anticipating future projects and thus by taking into account the potential grid connection design as a whole (e.g.

in terms of the minimum/maximum sub-area capacity in MW). Otherwise, connecting each sub-area individually to the onshore grid (or consumer) could result in a sub-optimized offshore wind farm design (in terms of cost and environmental impact). This is particularly relevant for large-scale wind farms (rated power > 800 MW) or wind farms located far from an onshore point of connection (> 100 km) using HVDC technologies. Therefore, the criteria for the allocation of an area (acc. To a new 2b: Announcement and allocation) should ideally encourage applicants to design and build (or rely on) a coordinated grid connection (e.g. connection of two or more sub-areas with one export cable) or also multi-purpose interconnectors, such as hybrid interconnectors connecting offshore wind farms to two bidding zones. Experience gained, for instance on the UK offshore market, indicates that a lack of clear incentives to encourage applicants to build coordinated grid connections or multi-purpose interconnectors will generally result in each licence owner providing for independent radial grid connections. Our experience in Belgium and Germany, and confirmed by the experiences from our European partners, shows that coordinated grid connections result in more cost efficient and environmentally friendly grid solutions compared to multiple individual radial connections (e.g. project modular offshore grid⁵ (MOG1) (Belgium) and Ostwind1⁶ (Germany). In addition, multi-purpose interconnectors or hybrids have proved to maximize social economic welfare and to pay in on the European climate targets through maximization of grid connection usage. Elia Group can demonstrate the latter through Europe's first hybrid interconnector "Combined Grid Solution – Kriegers Flak"⁷, developed between Germany and Denmark.

4. Qualification requirements and prequalification (new section 2c)

Elia Group generally supports the proposal for a new section 2c. At the same time we refer to our comments regarding the proposed section 2.3 of the Offshore Energy Act (cf. item 1.); here with respect to pre-qualification criteria concerning to technical expertise on offshore transmission assets.

With regard to the reference to the Offshore Energy Act paragraph 3-5 and the requirement that a licence shall be granted to a Norwegian entity unless international agreements suggest otherwise, Elia Group would like to propose that the regulation foresees some flexibility to take into consideration certain circumstances where it may be beneficial to also grant the grid licence to an entity established under the laws of other European countries (depending on offshore grid topology).

5. Right to an allocated area (new section 2d)

With regard to the right to submit an application for a licence pursuant to Section 7 for a production facility inside the allocated area (new section 2d) we would like to see a further clarification. To our understanding, a production facility does not necessarily include the offshore transmission connection to an onshore grid. First, we would like to refer to our comments on a new chapter 2A in the Offshore Energy Act Regulation (cf. Item 3.). Moreover, we would like to further specify that a new section 2d should explicitly foresee and promote the development of combined grid solutions or multi-purpose interconnectors by allowing in particular the application and subsequent granting of a licence for the development, building and operation of the offshore connection asset to an owner different from the owner of the production facility. Such an approach entails several benefits:

⁵ <https://tyndp.entsoe.eu/tyndp2018/projects/projects/75>

⁶ <https://www.50hertz.com/en/Grid/Griddevelopment/Concludedprojects/Ostwind1>

⁷ <https://www.50hertz.com/en/Grid/Griddevelopment/Offshoreprojects/CombinedGridSolution>

- Providing a framework to encourage grid connection coordination and optimisation across multiple production licences/generation facilities, allowing an optimal development of the grid in the scarce offshore waters;
- Allowing an independent and experienced offshore transmission owner to develop, build, own and operate (or transfer) transmission assets for two or more production licences, thus reducing costs and environmental impact;
- Separating transmission assets from generation assets may result in further optimization of financing cost for transmission assets, given standard risk allocations and access to specific funding mechanism from the importing country;
- Separation of licences for grid and production facilities arranges for unbundling of production and grid operations in the long term;
- Allowing more efficient resource allocation, resulting in more competition and better prices, higher quality, lower complexity, for the development of the generation facilities (only a limited number of players have proven to be successful in combining grid and generation facilities)

Should you have any further questions or need further clarification as set out herein, please do not hesitate to contact us at any time. We are always available to provide our support, not only in the context of this consultation, but also more generally, for instance in a further exchange of experiences with a particular focus on offshore networks either through bilateral discussions or through our participation in the Norwegian offshore wind collaboration forum.



For further information please contact

Head of Regulatory Affairs

Dr. Lorenz Müller | T +49 3051 50209 3 | Lorenz.Müller@50hertz.com

Business Development

Christophe Durieux | T +32 4735 6186 4 | Christophe.Durieux@elia.be