



ETSO response to the public consultation on "EU Action to promote Offshore Wind Energy"

15 September 2008

ETSO welcomes the possibility to contribute to the Action Plan on offshore wind energy to be prepared by the European Commission.

ETSO acknowledges that the development of energy based on renewable energy sources is necessary in order for Europe to combat climate change but also to ensure security of supply. In order for Europe to reach the ambitious targets on renewables the development of the offshore wind resources in Europe plays an important part.

As transmission system operators TSOs are responsible for the transmission of electricity and as such TSOs want to work together with the European Commission in order to cope with the barriers for developing offshore wind energy.

ETSO is prepared to take action in cooperation and coordination with all relevant stakeholders in approaching the technological, planning and administrative challenges to be addressed in regard to offshore wind mill parks.

ETSO suggests that the European Commission takes the following subjects into consideration when writing the Action Plan:

Reducing costs

The costs of building offshore wind mill parks will probably be the biggest barrier for the development of offshore wind energy. A European Action Plan on offshore wind energy should therefore consider all available ways to reduce these costs.

This could be by improving authorisation procedures, creating a dedicated offshore wind energy grid plan, R&D concerning technical questions, creating adequate incentive schemes for investors and by allowing fair recovery of costs.

By assigning the offshore grid operator tasks to the TSOs, the most efficient offshore grid including the international offshore grid connections and the connections to the onshore transport grid, can be realised.

To understand the full scope of costs related to offshore wind power and to mitigate and manage the risks associated herewith there has to be full transparency of all costs including e.g. connection costs, grid development costs and maintenance costs.

In the following the suggested ways of reducing costs are discussed in further detail.

Improving authorisation procedures: Grid development and offshore wind mill farms

The development of offshore wind power will increase the need for grid reinforcements of the existing onshore grid.

For TSOs to be able to meet this demand (as proposed in the draft RES directive) it is important that the authorities speed up the authorisation process for the necessary grid development. Today these procedures are much more time consuming than the authorisation process for wind parks.

It is therefore also important that the grid authorisation process is coordinated with the authorisation process for offshore wind mill parks. When the authorities examine the authorisation of

offshore wind mill farms they should at the same time examine the needed grid development and start the process of authorising this development as well.

The connection between the offshore grid and the onshore grid also needs careful consideration and has proven to be challenging in respect to the authorisation procedures.

A possible way to improve on the authorisation processes could be to implement a procedure where applications for e.g. grid reinforcements are prepared by the TSO and assessed by the authorities at government level. This could then result in a preliminary approval subject to environmental impact assessments etc. Discussions with regional and local administrations should then be easier and quicker before a final approval is given by the government.

Long Term offshore grid planning - on a European level

Dedicated regional offshore wind energy grid plans could serve as a coordinated approach for building the necessary infrastructure on a regional and European level and would help to minimise the total costs of offshore projects, e.g. coordinated planning on the North Sea and the Baltic Sea. Without this coordination it will be difficult to obtain the full potential of offshore wind energy in Europe.

An offshore grid plan should take grid possibilities into account but also include an assessment and mitigation of the impact on security of supply on different levels - both locally, nationally and regionally.

The offshore wind energy grid plan could be written as a result of a consultation with all relevant stakeholders, meaning that they get involved in the early stages of planning. Stakeholders would include TSOs, authorities, specialists on e.g. marine archaeology and biology, representatives from offshore projects etc.

Offshore wind mill parks are in most cases located far away from the consumers, which necessitates electricity flow over very long distances. A coordinated European grid plan could be critical in removing this barrier. Constraints in the grid of neighbouring countries and/or constraints on interconnectors will affect the effectiveness of possible offshore wind mill parks and could result in uneconomic projects.

A barrier to such a coordinated European approach could be lack of harmonisation concerning the authorisation procedures and financing. A harmonised approach across Europe would be the preferred solution but bilateral agreements between countries or a regional approach would be a good starting point.

The multinational legal structure needs to be sufficiently developed to cope with the potentially different national interests. Therefore the relevant EU legislation and the national laws need to be aligned.

An offshore wind energy grid plan could also serve as important information for future investors in offshore wind energy projects, giving investors specific information on the possibilities of transporting their electricity.

Technology

When offshore wind mill farms are connected to the grid different technologies may be used ranging from well known technologies to more advanced technologies. R&D on the electrical infrastructure is required to evaluate the different options (taking into account cost, efficiency, maturity, impact on the power system etc.).

Large offshore wind mill parks should also be able to participate in the regulation power market. ETSO therefore believes that it is important to keep promoting and developing technology that improves the wind mills abilities to e.g. downward regulate.

In general ETSO believes that ongoing R&D in order to improve offshore technology is important. By constantly improving e.g. the design of the wind mills, the effectiveness of production, ways to carry out maintenance at sea, cables, wind prognoses etc. not only the costs of building and operating offshore wind mill parks will be reduced but the contribution of the offshore parks to security of supply and stability in the power system will improve.

Even though these results may not be ready within a short timeframe they should still be carried out. The EU Framework programme should also focus on these subjects.

Intelligent power systems and security of supply

ETSO believes that flexibility in the power systems is needed to integrate more wind energy into the system.

One way of obtaining flexibility in the system could be by promoting solutions that would allow offshore wind mill parks to provide reserves to the system and thereby help to balance the system instead of only causing an increased need for reserves. This would allow the wind power to help solving some of the challenges it creates.

Another way could be to promote the use of wind energy in other areas such as in the transport sector e.g. by delivering electricity to electric car parks.

The use of smart meters could also contribute to the flexibility. In situations with a lot of available wind power the market price will be low. Due to smart meters the consumers will be able to react to this price information and thereby a dynamic interaction between consumption and production is obtained.

As a result of these different solutions more wind energy can be integrated into the system.

Even though more flexibility is obtained it is still important to have solutions to cope with sudden outages and longer outage time due to maintenance of offshore wind mill parks as these situations could lead to TSOs more frequently than today needing to activate reserve capacity to balance the system.

However, a strong European grid (which could be the result of an offshore wind energy grid plan) will help the TSOs by creating more flexibility and more possibilities for activating reserves from more remote locations.

Support schemes

The future perspectives of regional offshore energy grid plans where the parks may be developed jointly and the electricity from the wind parks to a larger extent will be shared among countries also calls for the development of a more harmonised and market based support framework allowing member states to trade RES-E

ETSO finds that transparency is important and therefore any support must be made public (both direct and indirect support).

ETSO would like also to state that it is important that the chosen scheme creates as little distortions as possible in the electricity market and would like the European Commission to consider a harmonised approach when working further with this subject.

Recovery of costs

In order to guarantee a long-term solution, the recovery of costs must be fair to all parties. TSOs must be able to fully recover their costs within the tariff structure including sunk costs.

Conclusion

In conclusion ETSO believes that although barriers do exist to further develop offshore wind energy in Europe most of these barriers can be removed or reduced. A European Action Plan would be an important first step in this direction and ETSO is at the Commission's disposal for further discussions.