

## **Environmental Permission - offshore wind power in EU**

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### **Introduction:**

The Environmental Permission process seen in relation to offshore wind power involves time consuming and complex procedures, which unfortunately often are neglected in the early stages of the planning process as economic and engineering issues often seems to be more urgent to the inexperienced developer. As a sad result, many wind farm projects have unnecessarily been delayed due to unforeseen environmental issues.

We have sketched the environmental permission process through its different stages, in order to give a brief overview of the 5 steps in the procedure together with the relevant legislation and the myriads of related international conventions and EU directives.

### **The environmental legislation:**

National environmental legislation is to a large extent based on international conventions. In the European Union, the EU directives set the standards for all environmental issues. National state administrations implement these international guidelines into the national legislation according to existing national praxis, and in general the offshore wind projects are facing similar environmental legislation wherever they are planned in the EU.

The conventions and directives directly influencing the choice of new wind farm sites in the European Union are:

- The global "Convention on Wetlands" (1971), better known as the **Ramsar Convention** provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.
- The global "**Bonn Convention** on Migratory Species" (1979), is working towards the protection of threatened migrating species, incl. birds, fish, whales and bats.
- "**The Agreement on the Conservation of African-Eurasian Migratory Waterbirds**" (AEWA) (1999), following the scope of the Bonn Convention,

is working towards the protection of wetland dependant migrating birds in Africa, Europe, western Asia and the north eastern part of Canada.

- The pan-European "**Bern Convention** for the Conservation of the European Wildlife and Natural Habitats" (1979), is working towards the protecting of a large number of animals and plants and especially their habitats.
- The North European "**OSPAR Convention** for the Protection of the Marine Environment of the North-East Atlantic" (1992) is guiding the international cooperation on the protection of the marine environment of the North-East Atlantic. It combines the **Oslo Convention** (1972) on dumping waste at sea and the **Paris Convention** (1974) on land-based sources of marine pollution.
- The "Convention on the Protection of the Marine Environment of the Baltic Sea Area" (2000), better known as the **Helsinki Convention**, works to protect the marine environment of the Baltic Sea from all sources of pollution through intergovernmental co-operation between the Baltic states and the European Community. **HELCOM** is the governing body for the Helsinki Convention.
- The EU "council directive of 2 April 1979 on the conservation of wild birds (79/409/EEC)", better known as the "**Birds Directive**" is working towards the conservation and protection of wild naturally occurring birds in the EU. This includes assignment of Special Protection Areas, which is a part of the Natura 2000 network.
- The EU "council directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora", better known as the "**Habitats Directive**", works to protect many species of plants and animals (other than birds) as well as habitat types. This includes assignment of Special Areas of Conservation, which is a part of the Natura 2000 network.
- The EU "Directive 2001/42/EC of the European parliament and of the council on the assessment of the effects of certain plans and programmes on the environment", better known as the **Strategic Environmental Assessment (SEA) Directive** ensures that environmental consequences of certain plans and programmes are identified and assessed *during* their preparation and *before their adoption*
- The "Council Directive of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (85/337/EEC)", better known as the **Environmental Impact Assessment (EIA) Directive** commits all member states to adopt all measures necessary to ensure that, before consent is given, projects likely to have significant effects on the environment by virtue inter alia, of their nature, size or location are made subject to an assessment with regard to their effects.

### The process:

The environmental permission process can be divided into 5 phases, of which the developer can influence some.

1. Political decision
2. Strategic Environmental Assessment
3. PQ > Qualification > Tendering > Concession
4. Environmental Impact Assessment
5. Environmental permission

#### Ad 1. Political decision

For large-scale wind farms, the general political decision is taken at an overall governmental level according to national energy strategy, policy and legislation, which again is based on EU directives and resolutions.

This initial decision process is normally out of influence of developers and commercial interests, although examples of the opposite have been seen.

#### Ad 2. Strategic Environmental Assessment (SEA)

Although implemented with the SEA Directive in 2001, the SEA procedure is still under implementation in the EU member states, and as such it is still widely unknown in the general public.

The SEA process, which is mainly the responsibility of the competent national authority (as e.g. the national energy authorities) are carried out at an overall regional level in the early planning stage. The purpose of the SEA process is to screen a large regional area, e.g. a coast line, in order to evaluate whether one or more wind farm sites can be pointed out, and where the best sites are to be found in relation to environmental, recreational, economical and practical issues. The SEA process can be divided into two or three phases: a screening, a scoping and if necessary a data collection phase.

The screening phase is, as described above, carried out in order to evaluate whether wind farm sites can be pointed out in a regional area, and where the optimal circumstances for the construction of wind farms are found. Secondly the scoping phase is carried out in order to evaluate whether sufficient information is available for the final Strategic Environmental Statement or whether additional data on environmental, recreational, economical and practical issues are needed. If necessary, missing information will be collected in a subsequent data collection phase.

Key environmental issues in the SEA process are identification of potential impacts on habitats, protected areas, endangered species and fisheries as well as identification and potential cumulative effects from different offshore activities.

#### Ad 3. PQ > Qualification > Tendering > Concession

If the SEA process has resulted in a positive outcome, the competent national authority will open a tender phase. The outcome from the SEA will be included as environmental guidelines for the bidding developer/contractor. Though controlled by the competent national authority, potential developers have the

possibility to profile their environmental image and sketch their environmental strategy in the tender phase.

#### Ad 4. Environmental Impact Assessment

The winning developer/contractor are obliged to carry out an Environmental Impact Assessment in relation to the specific project and the specific site. The structure of the EIA process is more or less comparable to the structure of the SEA process. The methodology and framework of the scoping process will often be included in the tender proposal, as environmental issues are rated high by the competent national authority in the tender phase.

The screening will uncover the background knowledge of the specific project and site, i.e. what is known from previous scientific investigations in the area, and the subsequent scoping will set up guidelines for further necessary data collection in the area.

Key issues in the EIA procedure are to describe any potential environmental impact from the specific project as well as mitigations measures enabling the developer to avoid negative serious or non-reversible effects from the construction and operation of the wind farm. Potential cumulative effects from the specific project and site compared to other activities in the region have recently become a key issue as well. Although mostly rhetorical, the EIA report also includes description of a zero solution as well as environmental impacts on alternative areas.

Apart from being a key issue in the EIA itself, data gathered during this phase forms base line for a continued monitoring programme.

#### Ad 5. Environmental permission

Based on the EIA report, the competent national authority can give a final permission for the construction of the wind farm. The permission will often be given with requirements to the developer for continued environmental monitoring programmes or restrictions on the time schedule in relation to ecological important periods such as migration or breeding in the area.