

Market Dialogue: Process for environmental assessments

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Danish Energy Agency,
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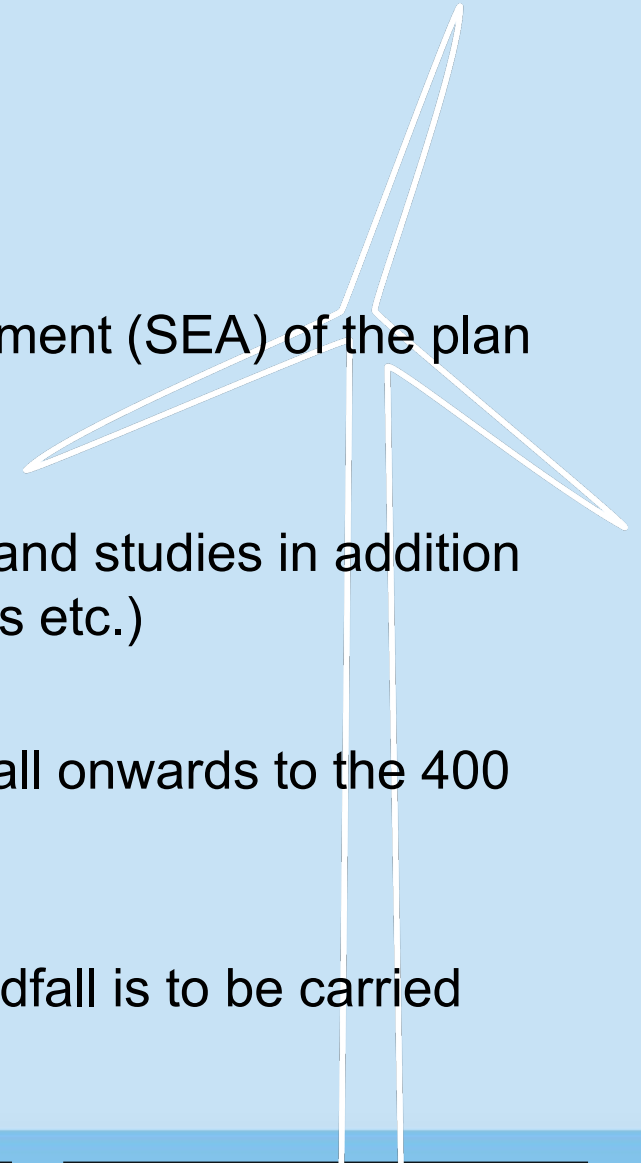
New environmental assessment process

- New approach to environmental assessments for the Thor Offshore Wind Farm
- Result of the Danish Energy Appeal Board decision on Vesterhav Syd offshore wind farm of 20 December 2018 (rejection of the environmental impact assessment process and permit for that project).
- New and more solid approach designed with two key objectives in mind:
 - 1) minimizing process-risk for the developer in terms of claims/appeals over permitting process
 - 2) minimizing environmental/planning risks by undertaking mitigating measures that seek to eliminate key risk-factors prior to submitting final bids.

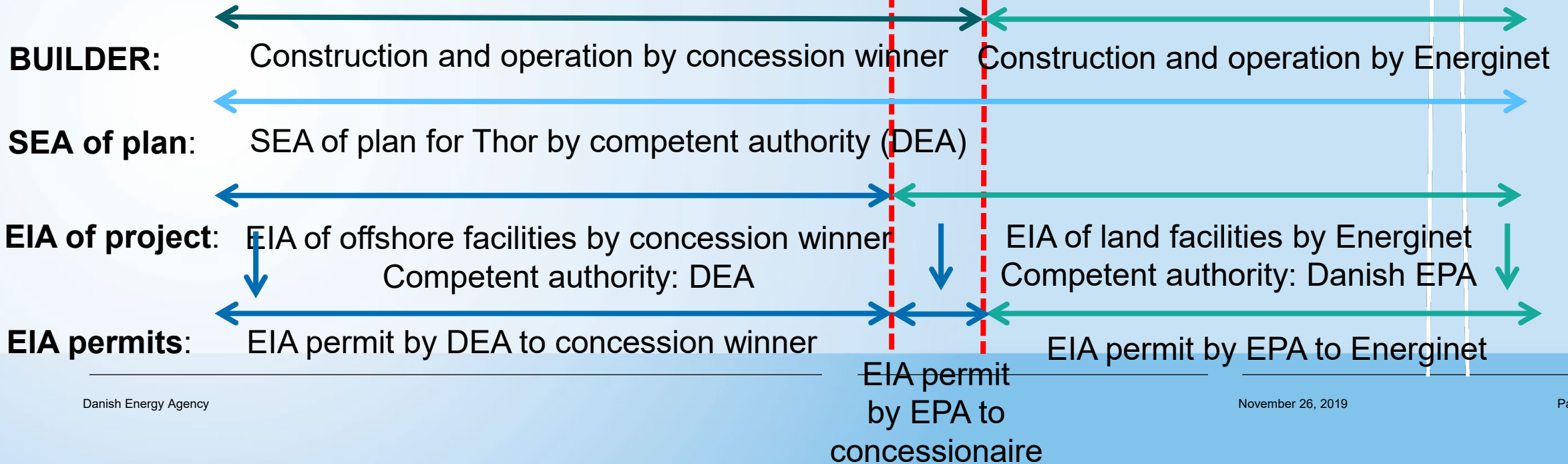
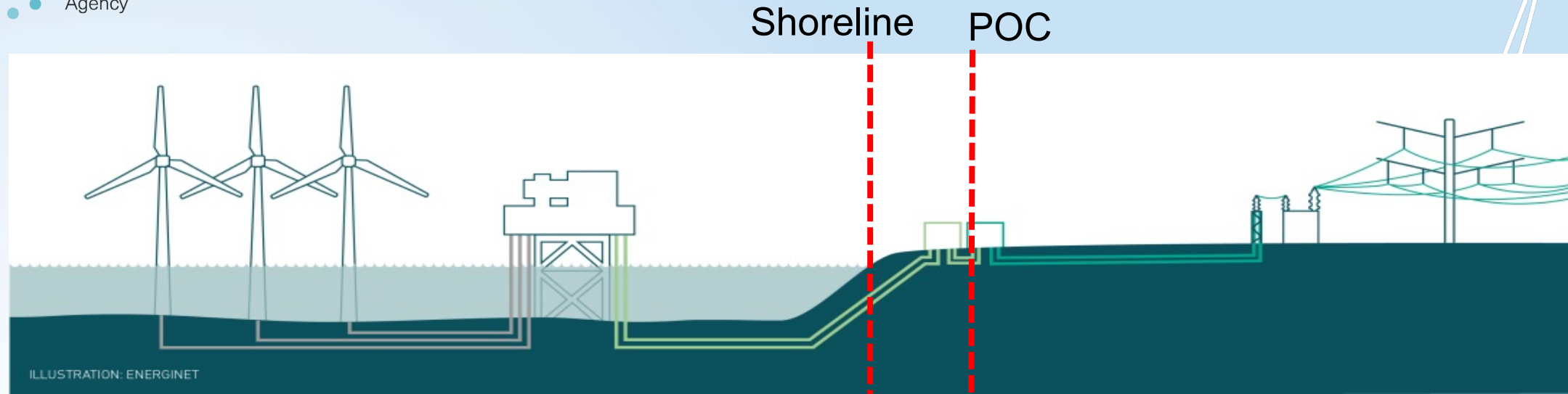
The new process for EA

Elements:

1. Prior to final bids – Completion of a Strategic Environmental Assessment (SEA) of the plan for Thor
2. Prior to final bids – Completion of additional environmental surveys and studies in addition to the SEA (providing critical data for risk-mitigation, e.g. bird surveys etc.)
3. Prior to final bids – An EIA of the specific project onshore from landfall onwards to the 400 kV transmission grid in Idomlund.
4. After final bids – An EIA of the specific project offshore and up to landfall is to be carried out by the concession winner



The EA process in a nutshell



Short on an SEA

Purpose:

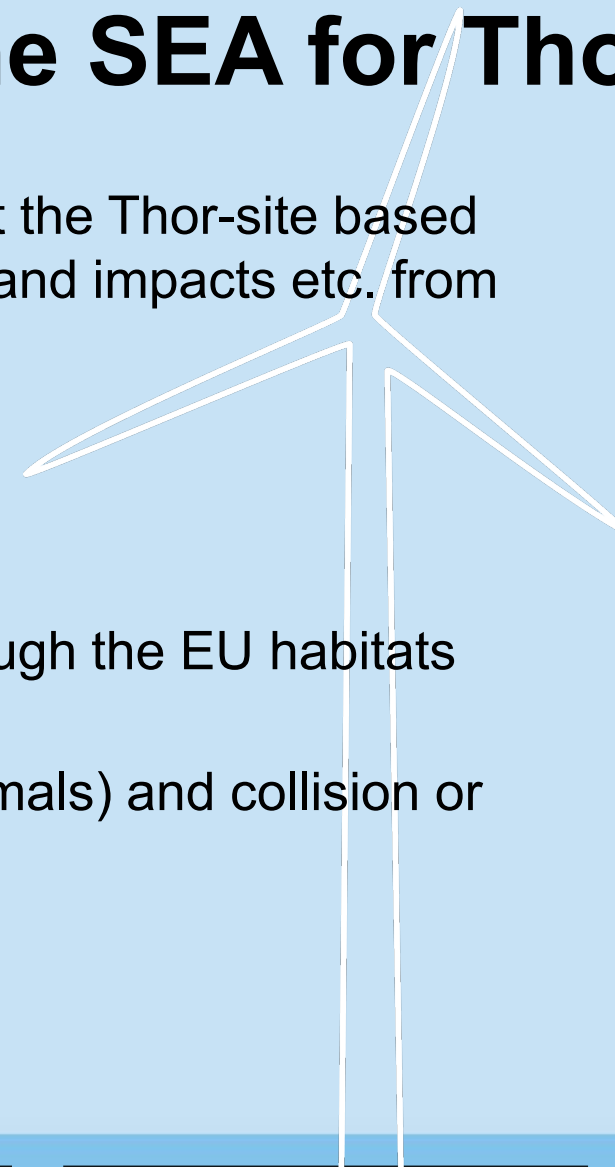
- The SEA will – by looking at the “plans” for Thor - seek to qualify if a later project can be expected to meet protection requirements
- The Strategic Environmental Assessment (SEA) will not address impacts on a project specific level
- The SEA will assess potential impacts from a prospective wind farm at the Thor-site based on latest information and data about species distribution, vulnerability and impacts etc.
- The SEA will provide documentation for public consultation of the plan
- The SEA will provide background for a decision on possible adjustments to implementation of the plan with respect to environmental protection and other relevant sustainability issues

Areas of particular focus in the SEA for Thor

- In terms of assessing potential impacts from a prospective windfarm at the Thor-site based on latest information and data about species distribution, vulnerability and impacts etc. from other offshore windfarms we will particularly focus on:

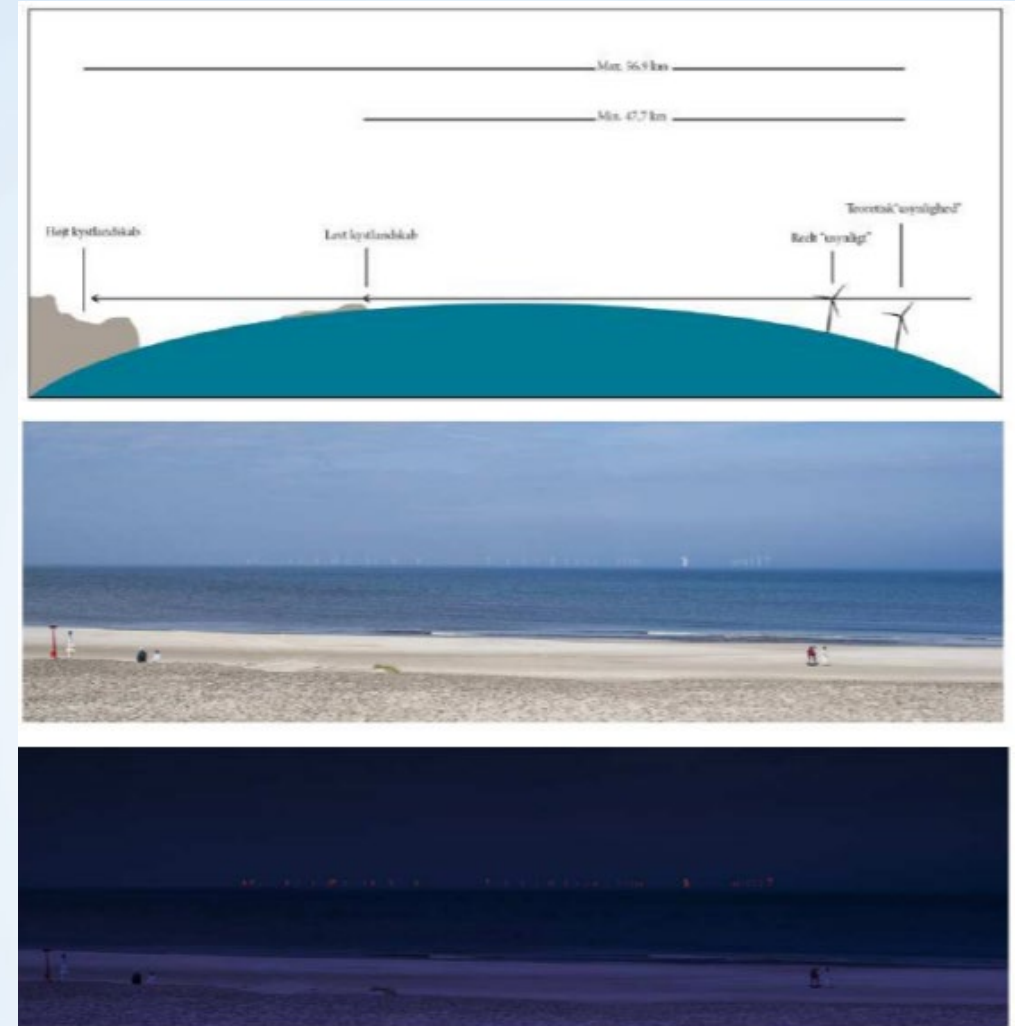
Marine mammals and birds

- Many species of marine mammals and birds are strictly protected through the EU habitats and birds directives
- Impacts on the species from e.g. ramming of monopiles (marine mammals) and collision or displacement (birds) are often important issues in an EIA



Coastal landscape and visual impact

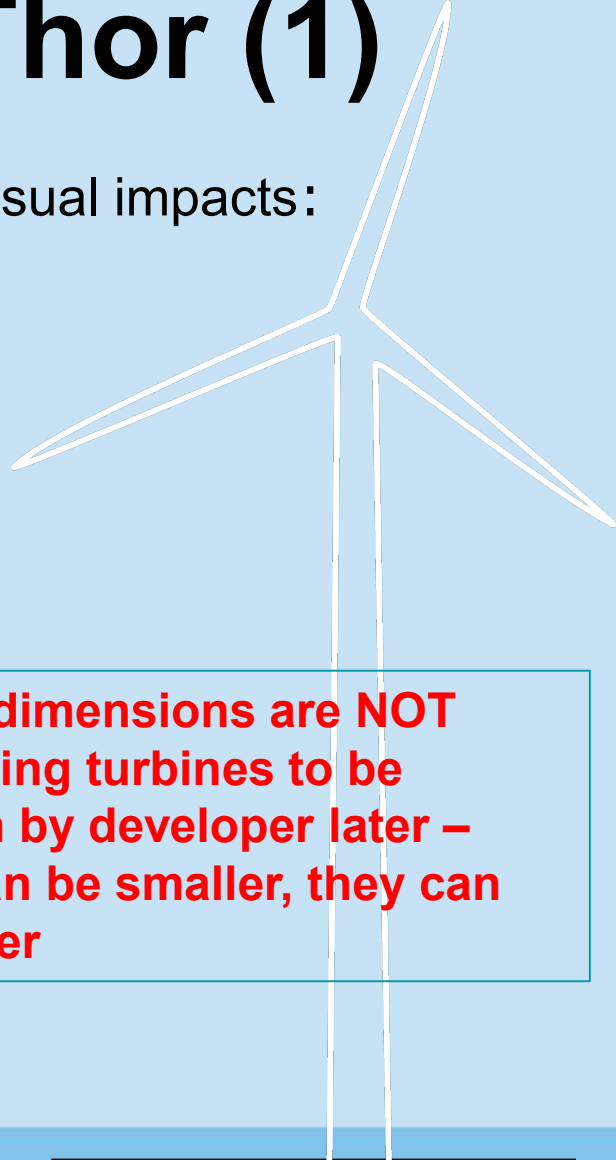
- Assessment of the visibility of the area – the coastal area
- Photo shoots from shore
- Visualisations from different spots from shore
- Defined project basis for assessment or visibility assessment



Project dimensions for Thor (1)

Examples of dimensions of turbines to be used for analyzing possible visual impacts:

	8 MW turbine	15 MW turbine
Wing diameter, m	160	235
Hub height, m	120	140
Tip height, m	210	260



These dimensions are NOT restricting turbines to be chosen by developer later – they can be smaller, they can be larger

Project dimensions for Thor (2)

Possible examples of park layouts to be analyzed and presented at public hearings:

800 MW wind farm				1000 MW wind farm			
8 MW turbine		15 MW turbine		8 MW turbine		15 MW turbine	
100 turbines		54 turbines		125 turbines		67 turbines	
Symmetric layout	Random layout	Symmetric layout	Random layout	Symmetric layout	Random layout	Symmetric layout	Random layout

Rough timetable the SEA

Activity/milestone	When
Drafting scope of SEA Consulting concerned authorities Finalizing scope of SEA	Q4 2019
Voluntary public consultation of scope of SEA (4 weeks) Possible amendments to scope of SEA	Q1 2020
SEA analyses and reporting	Q1 – Q4 2020
SEA report	Q4 2020
Public consultation of the SEA report (8 weeks)	Q1 2021
Issuance of "summary statement" for the SEA	Q2 2021

