Social impacts of the offshore investment – analysis
Socio-economic receptors
Socio-economic receptors

Baltic Offshore Grid

- offshore cables (HVAC, HVDC),
- offshore substations,
- onshore transformer station,
- onshore cable,
- overhead power lines

Bounding conditions
- envelope concept
- maximum design parameters and technical solutions to identify maximum scale of impacts

Socio-economic elements:
- Fisheries
- Navigation
- Military
- Military aviation
- Civil aviation
- Radar systems and communication
- Landscape
- Tourism
- Maritime industry
- Oil&Gas
- Human health and safety
- quality of life / material goods
- cultural heritage

Project description

Definition of environmental components

Definition of emissions and sources of emissions

Impact identification

Impact analysis

Planning
- survey activities,
- sampling,
- vessels activities,
- anchoring ships

Construction
- vessels activities,
- anchoring ships,
- cable laying and burial (plow and blasting waterjet into the seabed),
- installation of foundations

exploitation
- maintenance service
- electrical power transmission,
- emergency repairs,
- presence of new infrastructure

decommissioning
- Physical removal of elements,
- vessels activities

ONSHORE
- production and construction of components,
- storage/warehousing, transport

OFFSHORE
- horizontal drilling,
- cable laying,
- installation of overhead power line,
- site facilities,
- maintenance service
- presence of new infrastructure

Storage,
Physical removal of elements
Impact classification

- **Impact size**: negligible, little, moderate, high
  - **nature**: positive, negative
  - **type**: direct, indirect, secondary, cumulative
  - **scale**: local, regional, national, international
  - **duration**: temporary, short-term, medium-term, long-term
  - **intensity**: low, medium, high, very high
  - **reversibility**: reversible, irreversible

Project description

- Definition of environmental components
- Definition of emissions and sources of emissions

Impact identification

Impact analysis
Socio-economic elements:

- Fishery
- Navigation
- Military
- Military aviation
- Civil aviation
- Radar systems and communication
- Landscape
- Tourism
- Maritime industry
- Oil & Gas
- Human health and safety
- Quality of life / material goods
- Cultural heritage

- Damage the archaeological valuable objects
- Obstacles for navigation due to underwater objects
- Obstacles for navigation due to objects above sea level
- Contracts for maritime industry
- Extra income, new workplaces, education opportunities,
- Interference caused by electromagnetic field and/or presence of the objects
- Changes in landscape
- Increased collision risk due to ship, helicopter or road traffic
- Restrictions of use due to new objects / area occupancy (offshore or onshore)
- Restrictions for agricultural and forestry
- Deterioration of living conditions due to noise emission (underwater or airborne)
- Waste and sewage production
- Deterioration of living conditions due to emission of pollutants into the atmosphere
- Increased use of environmental resources
- Extended travel routes at sea due to area occupancy
- Damage of existing infrastructure
Exercise 1

**STEP 1**  Split into four groups. Each group will identify and assess key impacts for the following infrastructure:

- Group no. 1 – subsea cables
- Group no. 2 – offshore substation
- Group no. 3 – onshore cables (including landfall)
- Group no. 4 – and overhead lines

**STEP 2**  In groups discuss the most significant impacts in point of view of the group. Pick 2 impacts.

**STEP 3**  Characterize impacts and fill in a table

<table>
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<th>Impact</th>
<th>Receptor</th>
<th>Impact characteristics</th>
<th>Impact scale</th>
<th>Impact frequency</th>
<th>Impact duration</th>
<th>Impact intensity</th>
<th>Impact reversibility</th>
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STEP 1
Split into three groups. Each group will identify and assess key impacts for the following infrastructure:

- Group no. 1 – subsea cables
- Group no. 2 – offshore substation
- Group no. 3 – onshore cables and overhead lines (including landfall)

STEP 2
In groups discuss the most significant impacts in point of view of the group. Pick 2 impacts.

STEP 3
Characterize impacts and fill in a table.
Magdalena Karlikowska
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