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# A Meshed Offshore Grid in the North Sea

## Legal and Regulatory Perspectives

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# Presentation overview

- Introduction PROMOTioN
- Regulatory aspects: legal / economic / financial
- Zoom in: legal aspects
- International Law
- European Law
- Compatibility of country-specific legal systems
- Conclusion



**PROMOTiON**

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NETWORKS



# PROMOTiON

PROgress on Meshed HVDC Offshore Transmission Networks



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# Political Context

## Political Declaration on energy cooperation between the North Seas Countries

- Aim: Create good conditions for offshore wind energy to ensure sustainable, secure and affordable energy supply in the North Seas Countries
- Facilitate the building of energy links and allow more trading of energy and further integration of energy markets
- Reinforcing regional cooperation will help reduce greenhouse gas emissions and enhance security of supply in the region
- Declaration's action plan focuses on four main areas:
  - Maritime spatial planning
  - Development and regulation of offshore grids and other offshore infrastructure
  - Support framework and finance for offshore wind projects
  - Standards, technical rules and regulations in the offshore wind sector
- Signed by energy ministers from BE, DK, FR, DE, IE, LU, NL, NO, SE,



# Political Context

## Regional cooperation in the energy Union – MEP manifesto

- Increase of regional cooperation as a way to realize the full potential of the Northern Seas energy system
- Use and build upon existing cooperation structures (e.g. NSCOGI)
- Large scale deployment of offshore wind farms and completion of a meshed electricity grid
- Proposal of a 7-step action plan, to call for strong political support and endorsement of the North Seas Offshore Grid as a key step to build an effective energy union
- Signed by MEP from BE, DK, FR, DE, IE, LU, NL, SE, GB



# Political Context

## National Wind Associations Statement

- EU's Energy ministers strive for a **renewed regional cooperation** in the North Sea, supported by major wind industry associations in Europe
- **Close collaboration** between government authorities, industry stakeholders and national associations **as a success factor**
- **Coordinated political processes** in combination with **aligned technical requirements** lead to reduced costs and increased framework stability
- Estimate by European Commission: **offshore** wind from the North Seas can **cover up to 12 percent** of the EU's power demand
- Singed my national wind associations from DK, ES, IE, NL, NO, UK, DE



# Objectives

- Identify **technical requirements** and investigate possible **topologies** for **meshed HVAC/DC offshore grids**
- Develop **protection components** and **schemes for offshore grids**
- Establish components **interoperability** and **initiate standardisation**
- Develop recommendations for a coherent EU and **national regulatory framework** for DC offshore grids
- Develop **recommendations for financing mechanism** of offshore grid infrastructure deployment
- **Demonstrate cost-effective** Offshore HVDC equipment
- Develop a **deployment plan** for HVDC grid implementation





# European Partners

34 leading experts in HVDC grids





## APPENDIX

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*The opinions in this presentation are those of the author and do not commit in any way the European Commission*

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# Legal Aspects

- Hierarchy of norms
- International Law: e.g.
  - Treaties / customary law
- European Law: e.g.
  - TEU and TFEU
  - Directives and Regulations
  - Case law
- National Law



# International Law

- > Law of the sea: customary law and UNCLOS
- > Different zones – different legal regimes

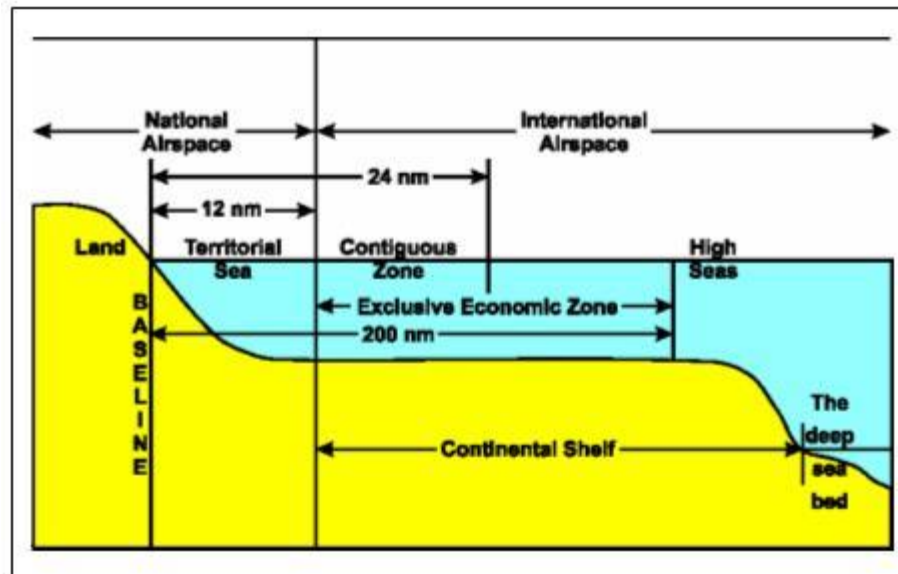


Figure 1 Maritime Zones  
(Schofield, 2003: 18)

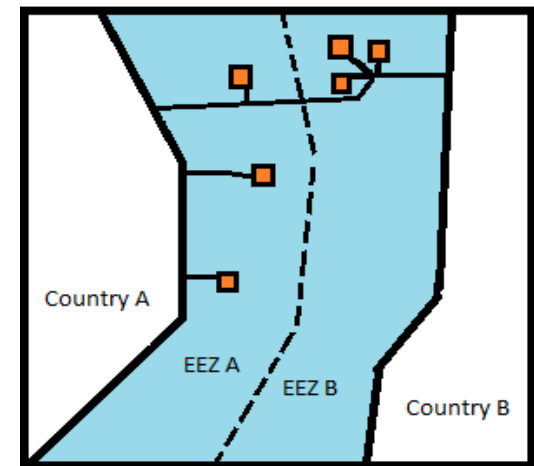
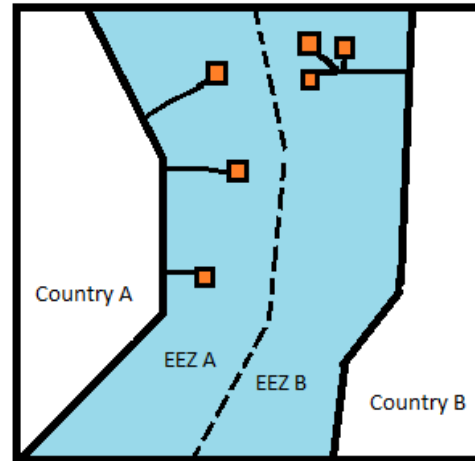
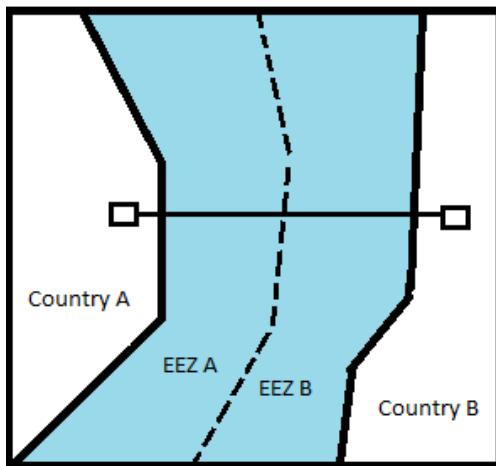


# Different zones / functions

- > Territorial zone
- > Exclusive Economic Zone
- > Continental shelf
  
- > Freedom to navigate
- > Freedom to lay cables



# Different legal scenarios





# European Law (1)

- > Is EU-Law applicable at sea?
  - Treaties: territory
  - Case law:
    - EU-law bound by international law
    - EU-law follows national jurisdiction
    - State has jurisdiction -> EU-law applies
    - State has no jurisdiction -> EU-law doesn't apply
    - Case example: *Aktiebolaget NN (C-111/05)*



# European Law (2)

- > Conferral of competences
  
- > Legal basis in the TFEU:
  - Internal market (114 TFEU)
  - Trans-European Networks (170-171 TFEU)
  - Environmental Issues (191-193 TFEU)
  - Energy (194 TFEU)





# Country-specific legal systems

- > Different legal systems:
  - Civil law / common law
- > National differences:
  - BE/DK/FR/GE/NL/NO/UK
- > Incompatibilities between legal systems
  - Specific topics
  - Case studies



# Possible problems: case 1

- > The connection – where does it take place?
- > Multiple possibilities:

Onshore	–	Offshore	–	OFTO
(Belgium)		(Germany, NL)		(UK)
OWF builds		TSO builds		**

Significant consequences for: risk, liability, financing, grid planning and coordination



# Case 2: Support schemes

- > Variety of possibilities:
  - FiT / FiP / Green Certificates / CfD / combi
  - Technology-specific / technology neutral
  - Coupled with planning and permitting or not
- > Case: OWF is located in country A's EEZ, but connected with a hub in country B (and subsequently to B's onshore grid). Who provides support?



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