Maritime Spatial Planning and Offshore Windenergy
Maritime Talks
ITLOS, 24th March 2012
Dr. Nico Nolte, BSH
Multitude of uses on the sea; potential conflicts between uses and/or uses and marine environment

Traditional uses and activities: 
- Shipping, fisheries
- Oil and gas industry
- Sand and gravel extraction
- Pipelines, power & telecommunication cables
- Military training, scientific research, nature conservation sites

New developments: 
- Large scale Offshore-Windparks
  (25.000 MW by 2030)
Shipping and military training areas
Platforms, pipelines, cables, sand extraction, mariculture
Spatial claims by Offshore Windparks

- Target in D: 25,000 MW Offshore Windenergy by 2030 in the EEZ and the territorial sea
- Based on turbines with 3 bis 5 MW: 5,000 up to 8,000 turbines necessary
- Renewable Energy Act: 35% of the electricity supply must be from renewable energy by 2020
- Coverage of ca. 15% of the German EEZ
Windenergy projects: more than 100

28 licences (2027 WEA, equals roughly 9,000 MW)
- 25 in North sea (1787 WEA)
- 3 in the Baltic sea (240 WEA)
- alpha ventus (Testfeld; 12 WEA) producing electricity;
76 applications for 5752 WEA
- BARD under construction
- feeding in high voltage grid;
- transport to consumers
- Offshore - Supergrid
- Infrastructure onshore (harbours, suppliers, new industries)
Nordsee: Offshore Windparks
Permits Granted for Offshore Wind Farms - Baltic Sea

External Data Sources:
- Ministerium für ländliche Räume (S-H)
- Ministerium für Bau und Arbeit (M-V)
- Kalmar County (Sweden)

Map Projection:
- Mercator (54°N), WGS84

BSH / M5 - 04.03.2010
Natura 2000 areas & preferred areas for wind energy (marine facilities ordinance)
Because of increasing use demands and potential conflicts between different uses and/or with marine nature conservation (ecosystem sea) there is a need for integrated, comprehensive sustainable management of human activities

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Background

Maritime Spatial Planning can be a supporting tool
- forward looking
- long-term planning gives security to stakeholders and investors
- cross-sectoral, not fragmented; balancing of interests
- co-ordination of uses
- anticipating and solving spatial conflicts before they occur
- Guiding principle in Germany is a sustainable spatial development, which brings the social and economic demands regarding space in line with its ecological functions and leads to a permanent, large scale balanced order (§ 1 ROG).
- UNESCO IOC definition: “MSP is a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that are usually specified through a political process.”
German Exclusive Economic Zone

EEZ not part of German territory

Baltic Sea: 4,500 km²

North Sea: 28,600 km²
Diagram of Our Maritime Zones

- **Continental Shelf**: Sovereign rights for exploring and exploiting non-living resources of sea-bed and subsoil, plus sedentary species.

- **Exclusive Economic Zone**: Sovereign rights for exploring, exploiting, conserving and managing living and non-living resources of the water, sea-bed and subsoil.

- **The High Seas**: (Claimable)

- **Territorial Sea**: 12nm, 24nm

- **Contiguous zone**: 200nm

- **Deep Seabed**: 350nm (or 100nm from the 2,500m isobath)

- **Sea Level**: 200nm
<table>
<thead>
<tr>
<th>Internal Waters (landwards of baseline)</th>
<th>Territorial Sea (12 nm seawards of baseline)</th>
<th>Exclusive Economic Zone (max. 200 nm seawards of baseline)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full jurisdiction based on sovereignty of the coastal State</td>
<td>Full jurisdiction based on sovereignty of the coastal State</td>
<td>Sovereign rights for the purpose of exploring and exploiting, conserving and managing (resources, energy etc.)</td>
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<tr>
<td>□ complete MSP jurisdiction</td>
<td>□ MSP jurisdiction limited by the right of innocent passage of foreign ships</td>
<td>Jurisdiction:</td>
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<td>- Artificial islands, installations, structures</td>
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<td>- Scientific research</td>
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<td>□ functionally limited MSP jurisdiction; MSP as voluntary self-restraint</td>
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<td>Environmental protection</td>
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</tbody>
</table>
Shipping

Territorial Sea: sovereignty limited by the right of innocent passage

EEZ:
- freedom of navigation for all States
- Restrictions by coastal State: exercise of exclusive rights and jurisdiction (e.g. establishment of artificial islands, installations, structures and safety zones, Art. 60 UNCLOS)
- No unilateral definition of sea lanes for international navigation (competence of IMO)
- Art. 60 para 7 UNCLOS: Artificial islands, installations and structures and the safety zones around them may not be established where interference may be caused to the use of recognized sea lanes essential to international navigation
The Federal Ministry of Transport, Building and Urban Development sets up in the German EEZ - within the framework of UNCLOS - targets (legally binding) and principles (guidelines that need to be particularly considered in the decision process) of spatial planning with regard to

– economic and scientific use
– ensuring safety and efficiency of maritime traffic
– protection of the marine environment.

MSP in EEZ must respect the freedoms in the EEZ (limited scope of MSP): freedom of navigation, overflight, laying of cables and pipelines

The German Spatial Planning Act (Raumordnungsgesetz – ROG), which has been made applicable to the EEZ in 2004, provides the legal base for spatial planning in this sea area.

(Mecklenburg Vorpommern has issued MSP for the territorial sea in 2005)
The German spatial planning for the EEZ

procedure started in 2005, questionnaire on uses and interests
2005: scoping meeting concerning SEA report
BSH drafted maritime spatial plan incl. strategic environmental report
(SEA directive)
  – public participation in summer 2008 (two hearings), international consultation
  – new round in May 2009 because of changes

– legal ordinance (incl. spatial plan) set into force on 26th September 2009 for EEZ of North Sea
– legal ordinance (incl. spatial plan) set into force on 19th December 2009 for the EEZ of the Baltic Sea
analysis of ship traffic

Analysis based on AIS-information by Water- and Shipping Administration

red: westbound traffic

green: eastbound traffic
Schifffahrt in der Nordsee

Legende
- Routevorschläge WSD
- Verkehrsbehinderungsgebiet
• Shipping lanes as basic structure of the draft (Art. 60 VII UNCLOS)
• priority areas: must be kept free from obstacles
• reservation areas: shipping has special weight in balancing process
• no traffic regulation!!!!!! (protection of existing traffic)
Reservation area (500m) around existing pipelines
For the first time a large scale SEA has been carried out in a sea area distant from the coast.

Main content of the report:
- description and evaluation of state of the marine environment
- description and assessment of any substantial impacts on the marine environment that are likely to be caused by the implementation of the plan

Result of SEA: no substantial impacts on the marine environment by the designations of the plan.
Analysis for Strategic Environmental Assessment

Common guillemot (uria aalge): example for a large scale analysis by connecting information from private and public sources

Auswertung: Forschungs- und Technologiezentrum Westküste der Christian-Albrechts-Universität zu Kiel und BSH
Spatial Plan for the EEZ in the North sea

designations:
Priority areas for wind energy (red)
Priority areas for shipping (blue)
Importance of environment: no turbines in Natura 2000 areas!
gates for electricity cables to the coast
set into force on 26th September 2009
Spatial Plan for German EEZ

Priority areas for shipping (blue)
Priority areas for wind energy (red)
no turbines in Natura 2000 areas
gates for electricity cables
spatial plan set into legal force on 19th December 2009
Nordsee: Offshore Windparks
International Cooperation

Transboundary cooperation very important because of transnational uses and marine conservation issues.
Thank you!
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