Maritime Spatial Planning in the German EEZ

Bettina Käppeler, BSH

Federal Maritime and Hydrographic Agency

- Two headquarters in Hamburg and Rostock
- About 850 employees
- Budget of about 60 million Euro
Infrastructure

- Five vessels (for hydrographic surveys, wreck search, monitoring and research)
- Marine science library (160,000 vol.)
- Computer centre
- Printing plant
- Chemical laboratory

Federal Public Provider of Maritime Services

Customers:

Shipping and maritime industries

All who need data and information about the sea (business and science, federal and state authorities, departments, political bodies)
Fields of activity

- General services to shipping
- Safety of navigation and maritime security
- Nautical and hydrographic information services
- Marine scientific information and services (warning services, marine environmental and climate monitoring)
- Maritime spatial planning / approval of offshore facilities
- Environmental protection in maritime transport
German Exclusive Economic Zone

EEZ not part of German territory – Federal Government: licensing, planning

North Sea: 28,600 km²  Baltic Sea: 4,500 km²

Territorial Sea / 12nm Zone administered by Federal Coastal States

Multitude of Uses on the Sea: Potential Conflicts between Uses and/or Uses and Marine Environment

Multitude of uses in/on/of the Sea

Traditional uses and activities:
- Shipping
- Fisheries incl. Aquaculture
- Oil and Gas Industry
- Sand and Gravel Extraction
- Pipelines
- Power & Telecommunication Cables
- Military training
- Scientific Research
- Nature Conservation Sites

New developments:
- Large-scale Offshore-Wind Farms (target for German Sea Areas: 25,000 MW by 2030)
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.

© WWF Deutschland; www.baltseaplan.eu

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 generated from renewable energy by 2020

- Coverage of ca. 15 % of the German EEZ
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 analysing 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.”

From the Preamble of the UNCLOS:

• “...Conscious that the problems of ocean space are closely interrelated and need to be considered as a whole…”

• “…Recognizing the desirability of establishing ...a legal order for the seas and oceans which will...promote...the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment…”
### Sovereign rights for the purpose of economic exploitation (resources, energy etc.) - UNCLOS

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Full jurisdiction based on sovereignty of the coastal State</th>
<th>Full jurisdiction based on sovereignty of the coastal State</th>
<th>Sovereign rights for the purpose of economic exploitation (resources, energy etc.) - UNCLOS Jurisdiction:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Artificial islands, installations, structures</td>
<td>Full MSP jurisdiction</td>
<td>MSP jurisdiction limited by the right of innocent passage of foreign ships</td>
<td>- Artificial islands, installations, structures</td>
</tr>
<tr>
<td>- Scientific research</td>
<td></td>
<td></td>
<td>- Scientific research</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Environmental protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>functionally limited MSP jurisdiction</td>
</tr>
</tbody>
</table>

### Full jurisdiction based on sovereignty of the coastal State

- MSP jurisdiction

### Exclusive Economic Zone (max. 200 nm seawards of baseline)

- Functionally limited MSP jurisdiction

### Territorial Sea (12 nm seawards of baseline)

- Full jurisdiction limited by the right of innocent passage of foreign ships

<table>
<thead>
<tr>
<th>Shipping:</th>
</tr>
</thead>
</table>

**Territorial Sea** ➔ sovereignty limited by the right of innocent passage

**EEZ** ➔ freedom of navigation for all States

- Restrictions by coastal State: exercise of sovereign 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
Fisheries:

**Territorial Sea** ➔ sovereignty over conservation and management of living resources – Art. 2, 21 (d) UNCLOS

**EEZ** ➔ sovereign rights for the purpose of exploring, exploiting, conserving and managing living resources – Art. 56 (1) lit. a UNCLOS

- Competences have passed to EU (Common Fisheries Policy)

Laying of pipelines and cables:

**Territorial Sea** ➔ full jurisdiction based upon sovereignty

**EEZ/ Cont. Shelf** ➔ freedom of laying of pipelines and cables for all States – Art. 58 (1), 79 (1) UNCLOS

- Delineation of the course is subject to the consent of the coastal State – Art. 79 (3) UNCLOS
- Laying itself may not be prevented
Exploitation of non-living resources (oil, gas, sand, gravel etc.):

**Territorial Sea** ➔ full jurisdiction based upon sovereignty over non-living marine resources

**EEZ/ Cont. Shelf** ➔ certain sovereign rights of coastal State

– Art. 56 (1) lit. a, 77 (1) UNCLOS

---

The German MSP example for the EEZ

MSP in EEZ must respect the freedoms in the EEZ (limited scope of MSP)

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.

For the Territorial Sea the federal state of Mecklenburg Vorpommern has issued MSP for the territorial sea as early as 2005. Other coastal federal states (Schleswig-Holstein, Niedersachsen) have also extended the scope of their regional spatial plans to the sea space.
The German spatial planning for the EEZ

2005ff:
• procedure started in 2005
• questionnaire on uses and interests
• scoping meeting concerning SEA report
⇒ BSH drafted maritime spatial plan incl. strategic environmental report (SEA directive)

2008:
• public participation in summer 2008 (two hearings),
• international consultation

2009
• new round of participation in May 2009 because of changes
• legal ordinance (incl. spatial plan) for EEZ of North Sea set into force on 26th September 2009
• legal ordinance (incl. spatial plan) for the EEZ of the Baltic Sea set into force on 19th December 2009

General types of regulations:
• planning target (legally binding for sectorial planning on project level, e.g. wind farms)
• planning principle (guideline that needs to be particularly considered in the decision process)

Spatial designations - Area types:
• priority area (Vorranggebiet): area reserved for a defined use, other conflicting uses are excluded
• reservation area (Vorbehaltsgebiet): area with a special weight for a defined use in the balancing of interests
• suitable area (Eignungsgebiet): defined use is allowed inside and excluded outside designated areas

with regard to
⇒ economic and scientific use
⇒ ensuring safety and efficiency of maritime traffic
⇒ protection of the marine environment.
Analysis of ship traffic

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

red: westbound traffic

green: eastbound traffic
• **Shipping lanes** as basic structure of the draft plan (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)

---

**Pipelines**

• reservation area (500m) along existing pipelines
Maritime Spatial Plan EEZ North Sea

- Priority areas for wind energy (red)
- no turbines in Natura 2000 areas
- gates (EEZ – 12nm Zone) for electricity cables

Maritime Spatial Plan EEZ Baltic Sea
Strategic Environmental Assessment

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 impact on the marine environment by plan designations

The German spatial planning for the EEZ

Analysis for Strategic Environmental Assessment

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

Auszug der Arbeiten: Forschungs- und Technologiezentrum Westküste der Christian-Albrechts-Universität zu Kiel und BSH
Spatial Development Programme M-V

- covers land and territorial sea (presently under revision)

Spatial Development Programme (LEP) Schleswig-Holstein

- covers land and territorial sea
The German spatial planning for the EEZ

Some Effects:
• Regulation / “Steering” of spatial allocation of applications for offshore wind energy projects ➔ Applications for wind farms follow the regulations of the spatial plan 2012: Evaluation of MSPs for EEZ with regard to offshore wind energy development ➔ still ongoing

Windenergy projects: North Sea

OWP Licences:
• 29 licences (ca. 2000 WEA, equals roughly 9,500 MW)
• Almost 100 applications!
• 26 licences in North Sea (1690 WT)
• 3 licences in Baltic Sea (240 WT)
• alpha ventus (Testfeld; 12 WT) producing electricity;
• OWF BARD under construction

Challenges:
• feeding in high voltage grid and transport to consumers
• Offshore - Supergrid
• Infrastructure onshore (harbours, suppliers, new industries, training etc.)
The German spatial planning for the EEZ

Offshore Windfarms: Activities 2012 (planned, on-going)

Currently (2012):

North Sea EEZ:
- 5 projects under construction (3 started in 2012)
- 1 project start of construction phase planned for 2012

North Sea Terr. Sea:
- 1 project under construction (started in 2012)

13.11.2012 Wadden Sea Forum 21st Meeting - Leck

Windenergy projects: Baltic Sea

13.11.2012 Wadden Sea Forum 21st Meeting - Leck
Offshore Grid Plan (ONP) North Sea (EEZ)
- Draft October 2012 - (public consultation ongoing)

More than 100 Windfarm applications:
- Need to secure and plan space and routes for grid connections

ONP: Regulations with regard to spatial and technical specifications, procedures etc. for grid connections of offshore wind farms (2030) – incl. Interconnectors
- to become part of MSP!
Transboundary cooperation in MSP:
- very important because of transnational uses / activities and marine conservation issues
- For Baltic Sea: BaltSeaPlan Vision 2030 with identification of main transnational objectives and planning issues incl. MSP implications

• Healthy marine environment
• Sustainable fisheries
• Coherent pan-Baltic energy policy
• Safe, clean and efficient maritime transport

13.11.2012 Wadden Sea Forum 21st Meeting - Leck

Thank you!
bettina.kaeppeler @bsh.de
Legal Basis

Legal basis for approval procedures in the German EEZ:

**Marine Facilities Ordinance (Seeanlagenverordnung)**

**Art. 3:** Applicant has legal claim on a permit, unless

- threat to the marine environment
- threat to safety of shipping traffic
- not in compliance with aims of spatial planning
- overriding public interest

BSH-Standards

**Standard Investigation of the Impacts of Offshore Wind Turbines on the Marine Environment (StUK)**

- 3rd edition of February 2007
- Requirements for the Environmental Impact Study and Monitoring during construction and operation

**Standard Ground Investigations for Offshore Wind Farms**

- since 1 August 2003
- Requirements for the foundation of offshore wind turbines
- Geotechnical assessments
BSH-Standards

Standard Design of Offshore Wind Turbines

- Since June 2007
- Requirements for the construction and certification of constructional components of an offshore windfarm

Application Documents

- Environmental Impact Study
- Technical Risk Analysis about the probability of a ship/wind turbine-collision
- Design Basis (according to Standard „Design of OWT“)
- Preliminary Draft of Installation Structure (according to Standard „Design of OWT“)
- Prognosis on the hull-retaining configuration of the substructure of the foundations
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.

© WWF Deutschland; www.baltseaplan.eu