

BOWE2H Konferenz: Offshore Wind and Green Hydrogen

Maritime Spatial Planning and Offshore Wind Energy

Ulrich Scheffler, Bundesamt für Seeschifffahrt und Hydrographie



Berlin, 22 May 2023

Introduction into Maritime Spatial Planning

The open sea...



General introduction to maritime spatial planning

- Assessing human activities
- Preventing/resolving conflicts of use
- Develop, order, secure
 - Economic use (Blue Economy)
 - Protection of the marine environment

How do you achieve these goals?

- Holistic approach
- Forward planning
- Transnational coordination



Source:WWF

General introduction to maritime spatial planning

Increasing use of and pressures on marine space

- i.p. increasing number of **offshore wind farms** in EEZ
- **Competition** and **conflicts** between uses and environmental protection
- New **EU framework** on SUP (2001), INSPIRE (2004), MSFD (2008) → MSP (2014)
- New **legislation** / spatial planning law



Source:WWF

German Waters – Responsibilities for MSP



EEZ

BMWSB/BSH:

Federal Government in
the North and Baltic Sea

Territorial Sea

Land Niedersachsen
Land Schleswig-Holstein
Land Mecklenburg-
Vorpommern

MSP sets designations

- for the **EEZ** as planning area and in a **regular mid-term** period
- in form of **textual** and **spatial** designations (also temporarily a/o conditionally)

- Priority areas
- Priority areas with exclusion effect (**new***)

Reservation areas

~~Suitability areas~~
~~(with exclusion effect)~~
(deleted*)

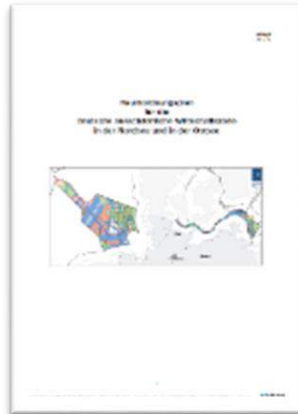
- as **objectives** and **principles** of spatial planning to achieve to develop, order and secure space

*last amendment of Federal Spatial Planning Act

MSP Products



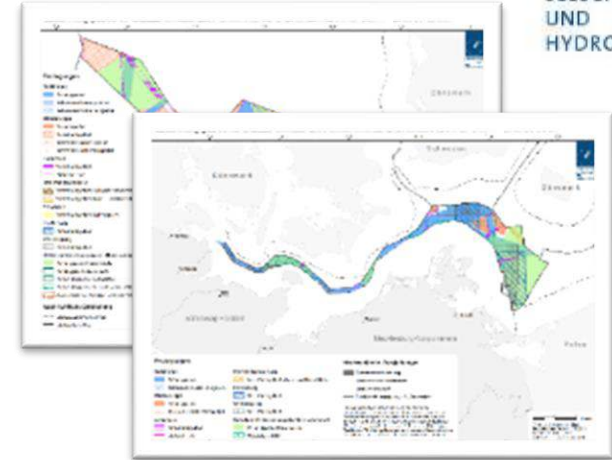
Ordinance



*Maritime Spatial Plan and
summary declaration*



*Environmental
reports*



Maps

- Download on websites of [BMI/BMWSB](https://www.bmi.bund.de) and [BSH](https://www.bsh.de)
- Geo data via WMS and WFS Service on GeoSeaPortal)
- Blog <https://wp.bsh.de/>

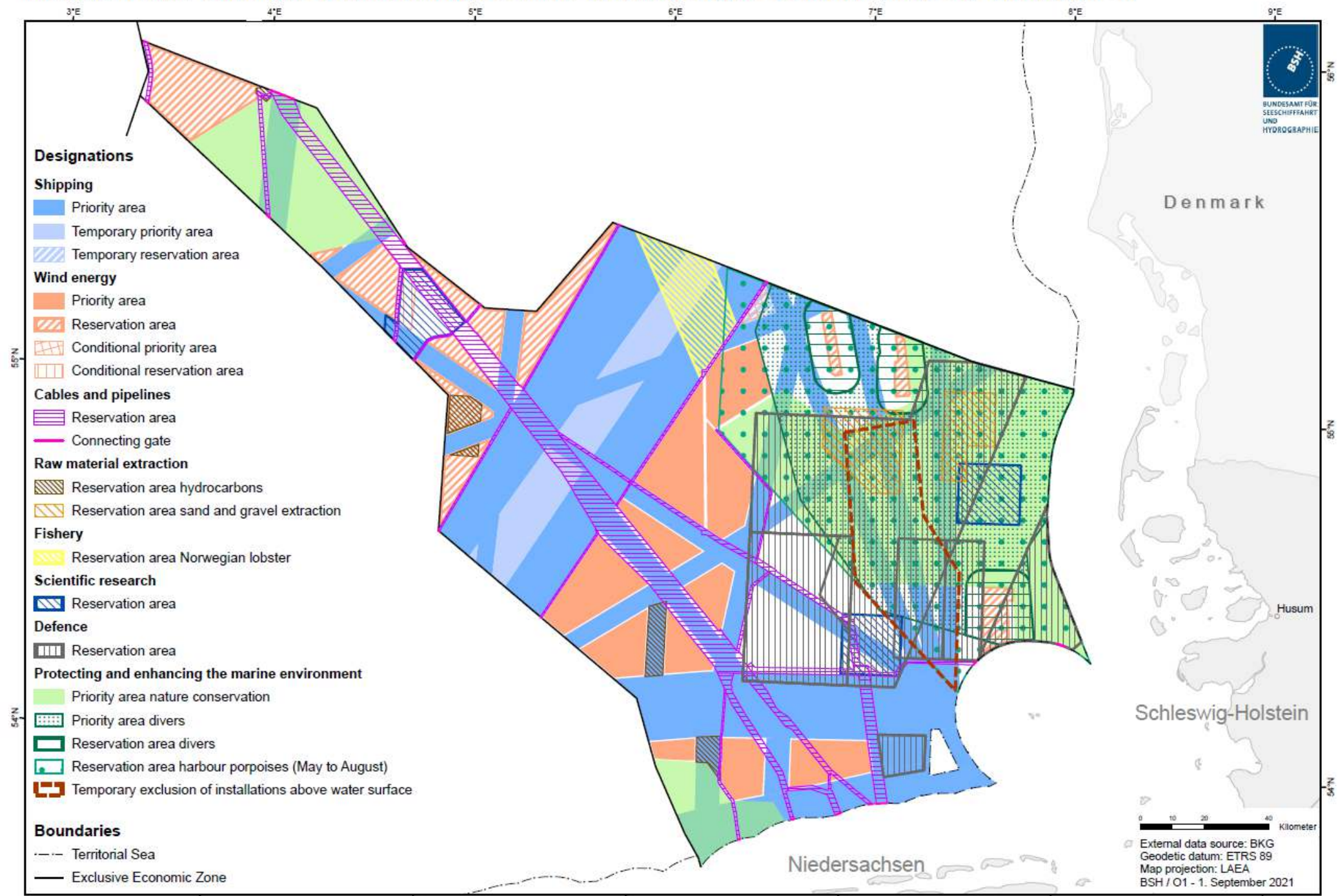


Data on GeoSeaPortal

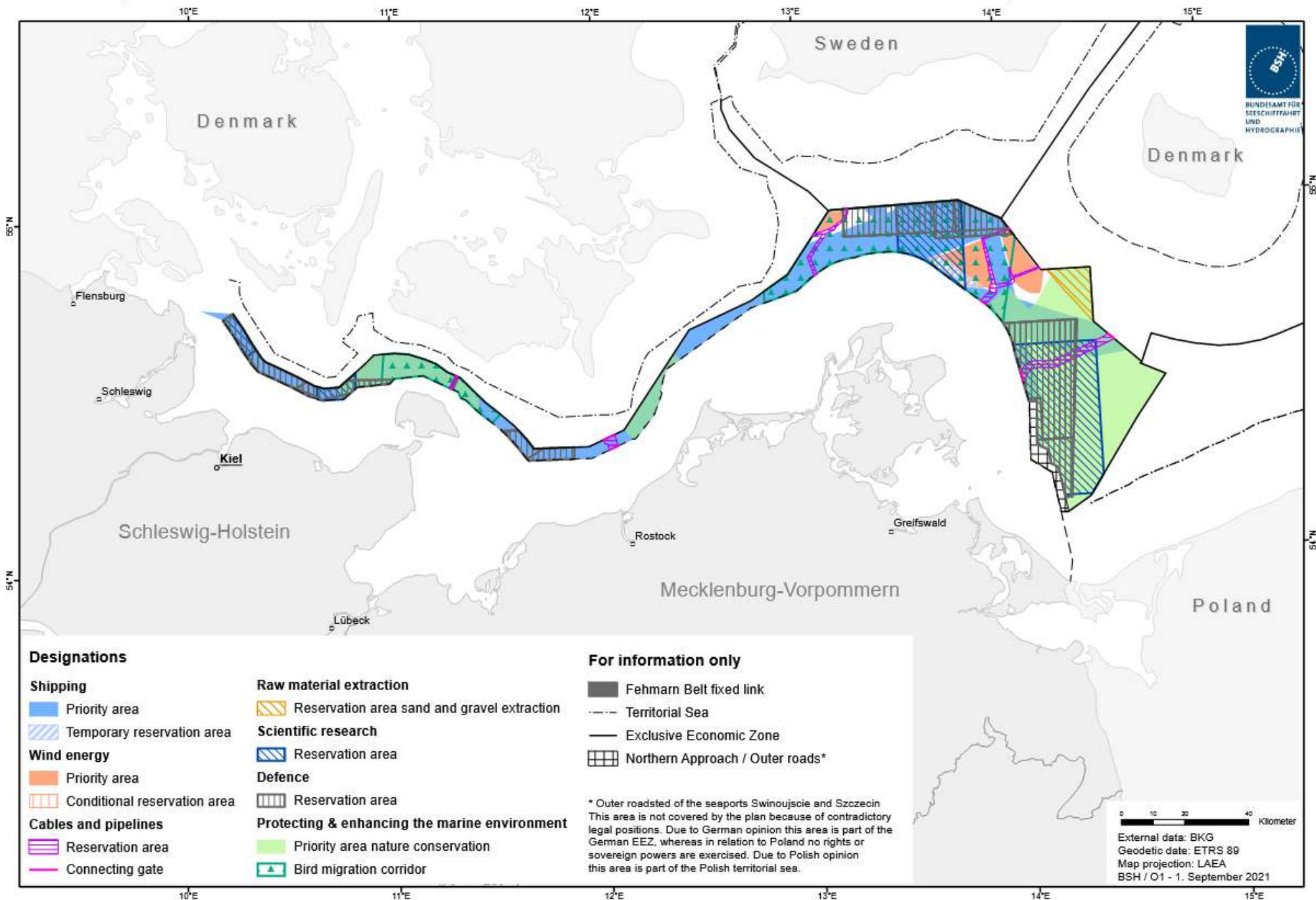


Documentation of consultation

Maritime Spatial Plan for the German exclusive economic zone in the North Sea and the Baltic Sea - Map North Sea

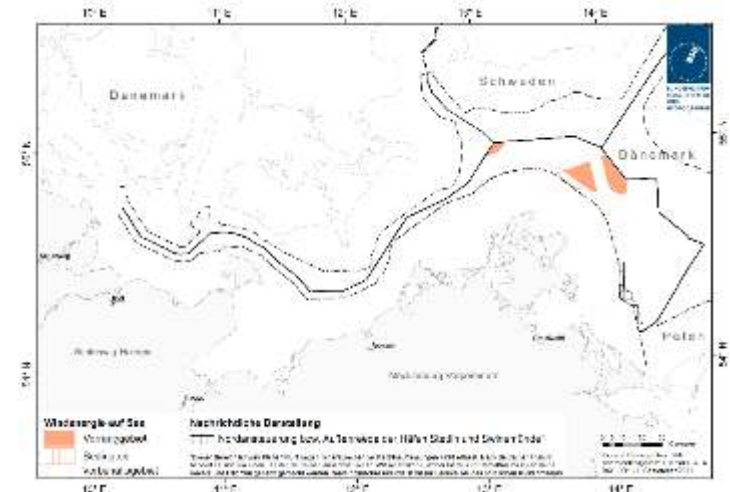
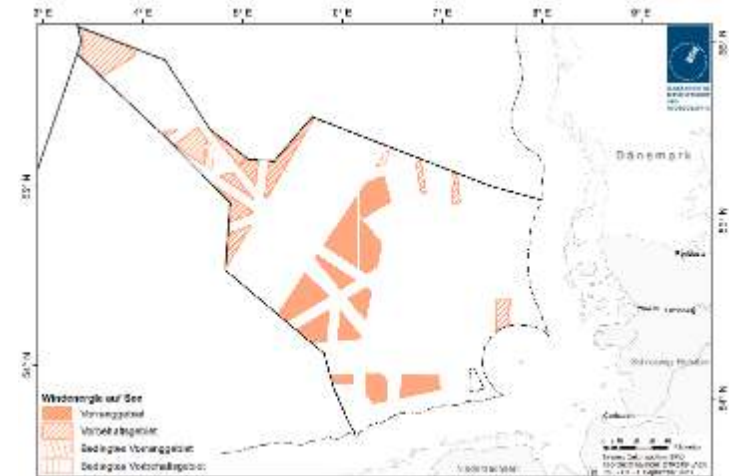


Maritime Spatial Plan for the German exclusive economic zone in the North Sea and the Baltic Sea - Map Baltic Sea

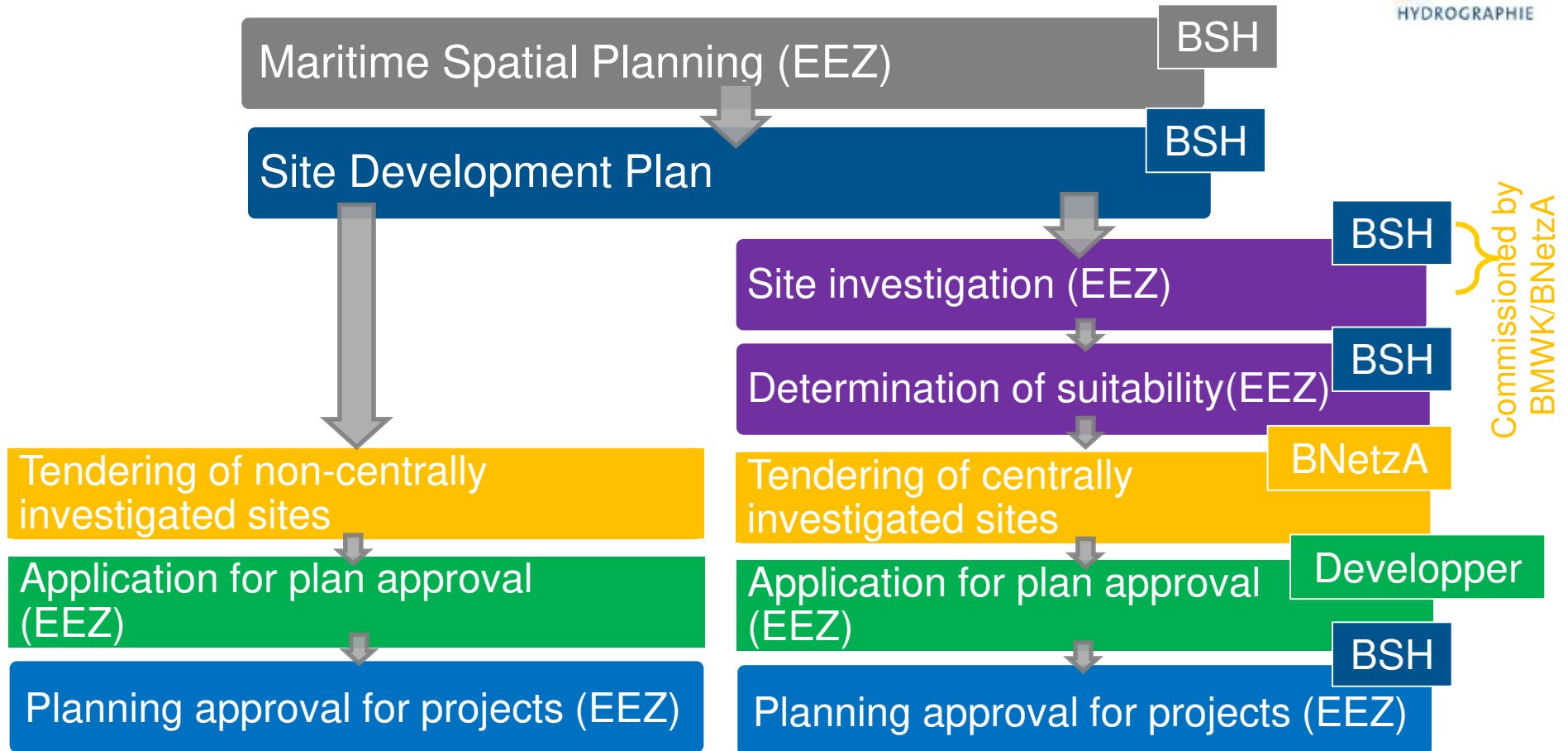


Designations for offshore wind energy

- Priority areas to achieve the national wind offshore targets 2030 (according FEP 2020)
- Reservations areas to secure space for further offshore wind targets
- Conditional designations pending an assessment by the ministry responsible for shipping



Planning Instruments for Offshore Wind Energy

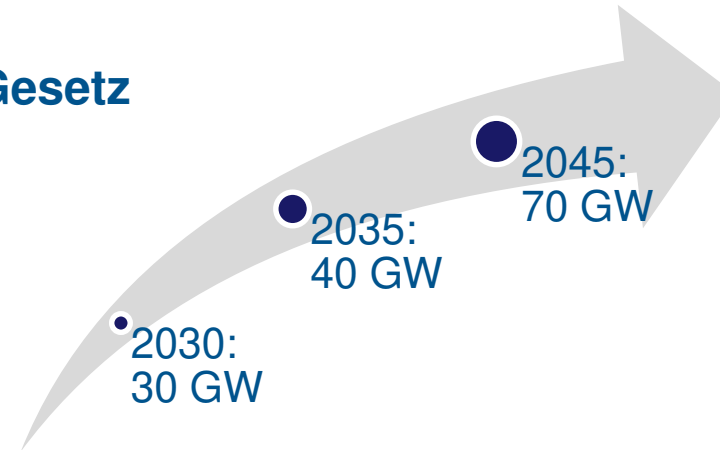


Site development plan – Legal framework

Targets in the Windenergie-auf-See Gesetz

Status in 2023:

- 8 GW installed capacity



Renewable-Energy-Act

- Target: 80 % of electricity production 2030 through renewable energies
- 2022: ca. 48 %

Amendment Climate Protection Act

- Climate neutrality by 2045

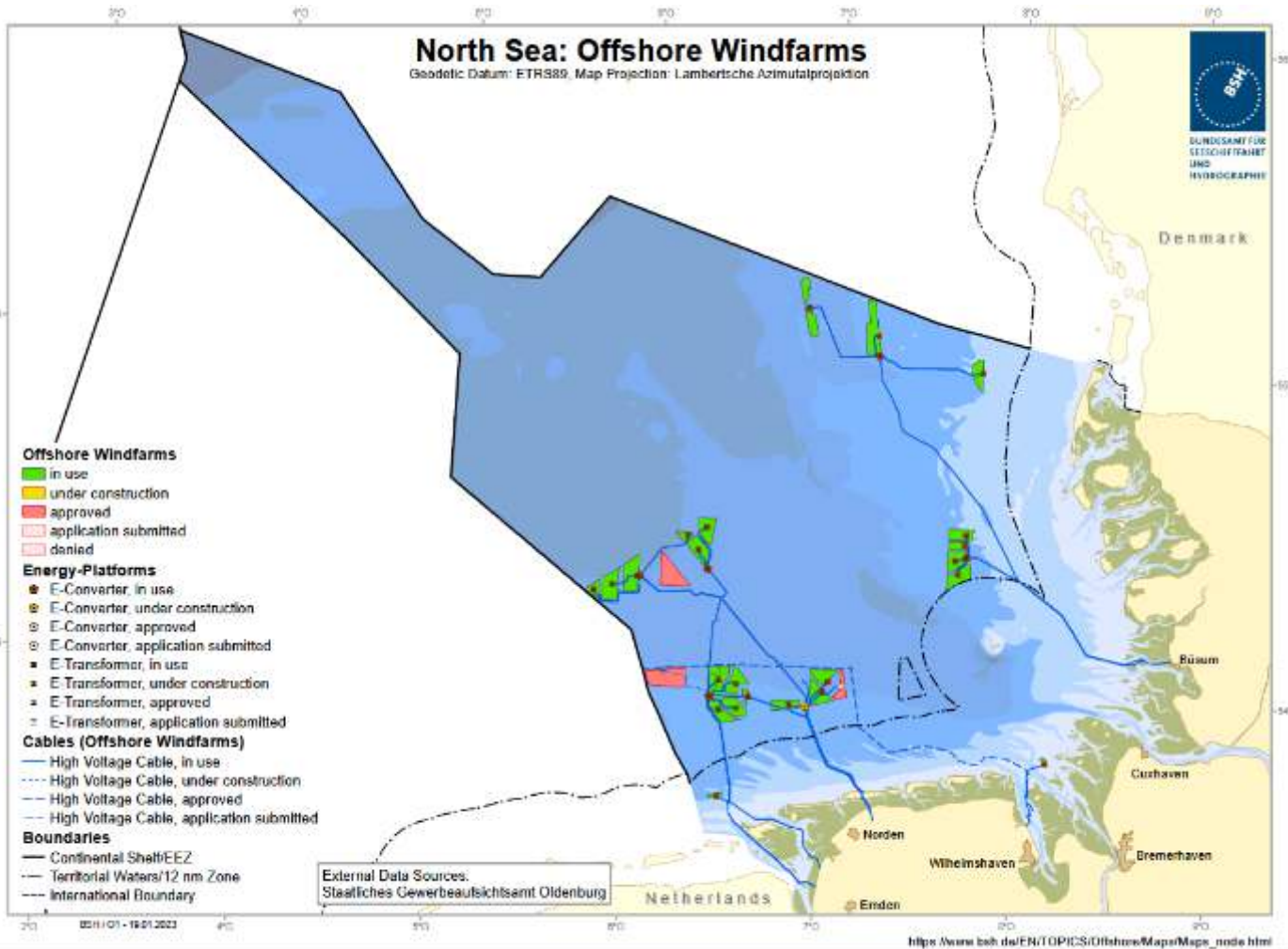
EU Green Deal

- De-carbonisation by 2050

Development of offshore wind energy - Targets

- 2002 2 – 3 GW by 2010, 20 - 25 GW by 2030 (Strategy)
- 2009 20 – 25 GW by 2030 (EEG)
- 2012 25 GW by 2030 (EEG)
- 2014 6.6 GW by 2020, 15 GW by 2030 (EEG)
- 2017 15 GW by 2030 (WindSeeG)
- 2020 20 GW by 2030, 40 GW by 2040 (WindSeeG)
- 2023 30 GW by 2030, 40 GW by 2035, 70 GW by 2045 (WindSeeG)

Status offshore wind development – North Sea



North Sea

22 parks in operation

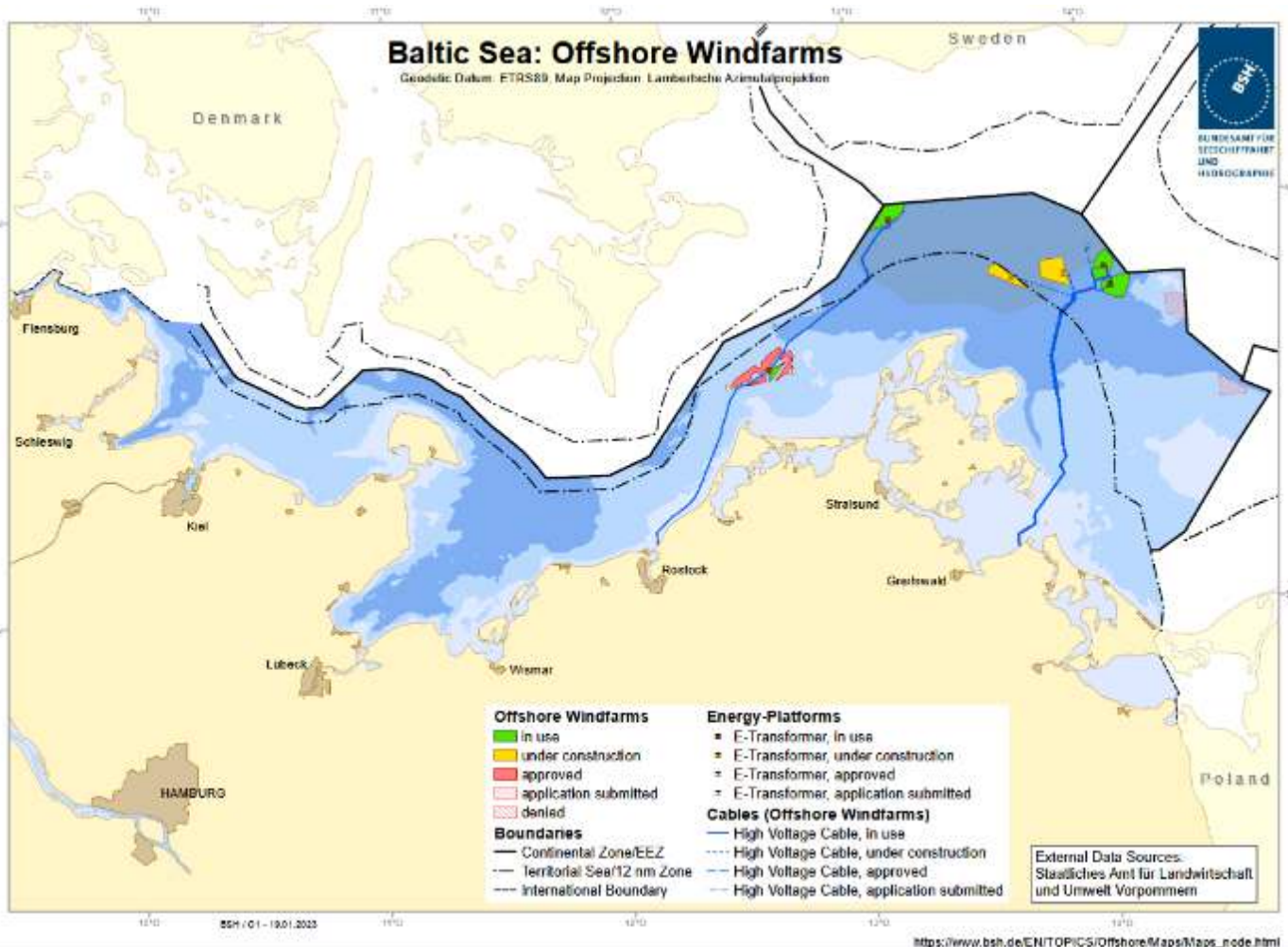
1.258 turbines

6.802 MW

2023: construction
planned for 2 parks
(106 turbines; 1.142
MW)

2 current permitting
processes

Status offshore wind development – Baltic Sea



Baltic Sea

3 parks in operation
210 turbines
1.027 MW
1 park under construction
(66 turbines, 476 MW)
1 current permitting
processes

Total capacity in North Sea
and Baltic Sea (EEZ &
territorial seas)

1.539 turbines

8,042 GW

BUNDESAMT FÜR
SEESCHIFFFAHRT
UND
HYDROGRAPHIE



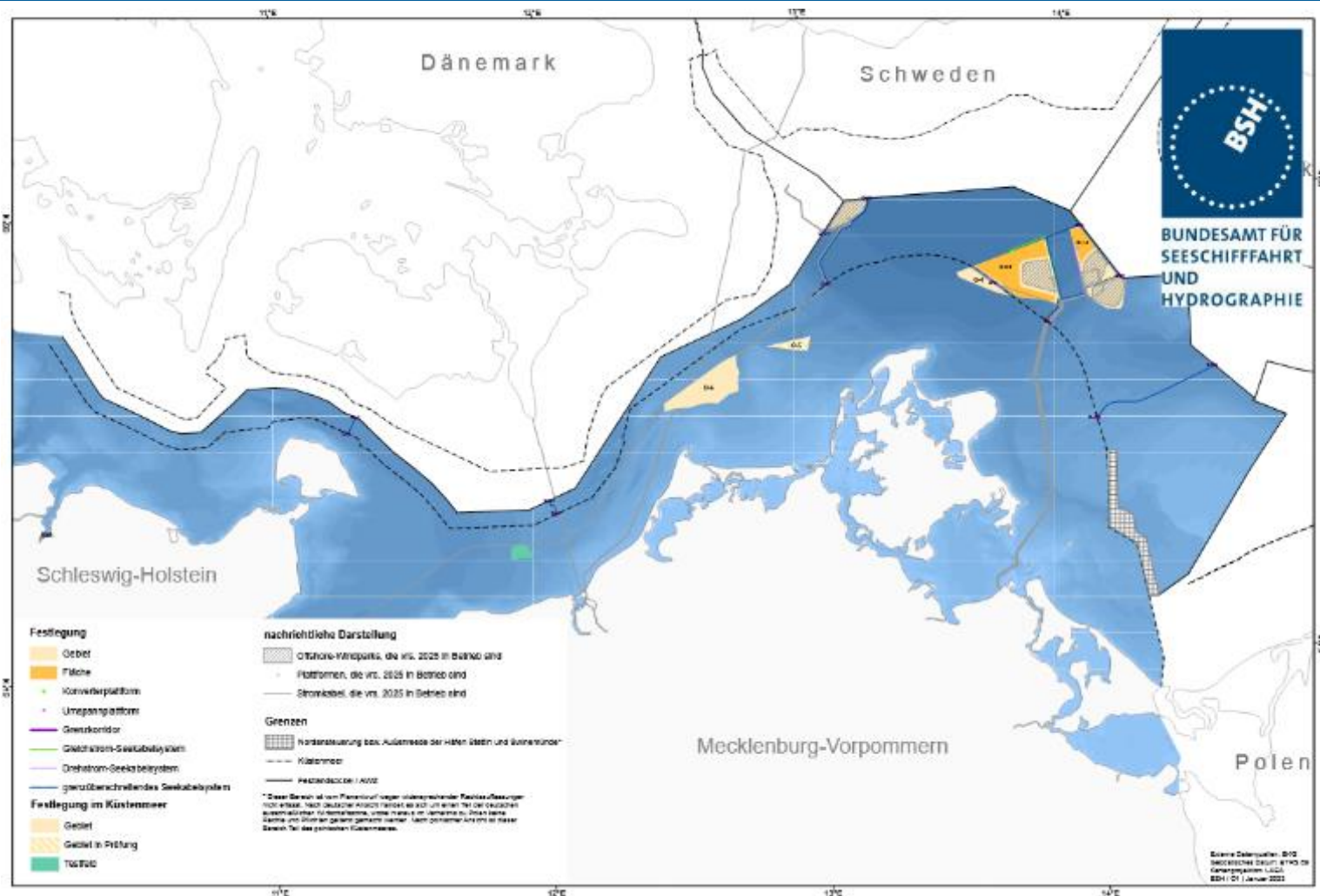
Designations for 23.4 GW

plus area for other forms of energy generation or hydrogen production

Site Development Plan Baltic Sea, published in January 2023

Baltic Sea

Designations for 1.3 GW



Task: Coherent planning of offshore wind expansion

Current Site Development Plan was published on 20 January 2023

- Contains designations to achieve an offshore wind capacity of **24,7 GW**
- Future amendments and revisions of the plan will take into account the energy targets and the further development
- Current parks and plan designations support **36,5 GW** production

- Spatial designations for offshore wind energy in MSP 2021 relate to targets at the time
 - 20 GW 2030; 40 GW 2040 (WindSeeG)
 - Szenariorahmen 2035 (2021) (BNetzA): 28-34 GW 2035; 40 GW 2040
- Coordination with NL and DK regarding shipping routes in the North Sea (SN10) to identify additional spatial potential for offshore wind
 - FEP identifies potential wind energy areas in shipping designation SN10

- Proceedings for obtaining permission to deviate from a planning objective (Zielabweichungsverfahren) in FEP 2023 to designate priority areas shipping as offshore wind energy areas
- Changes in FEP don't change the underlying objectives of the Maritime Spatial Plan 2021
 - ⇒ MSP 2021 provides a stable basis for the spatial development at sea

Thank you for your attention!



BUNDESAMT FÜR
SEESCHIFFFAHRT
UND
HYDROGRAPHIE

