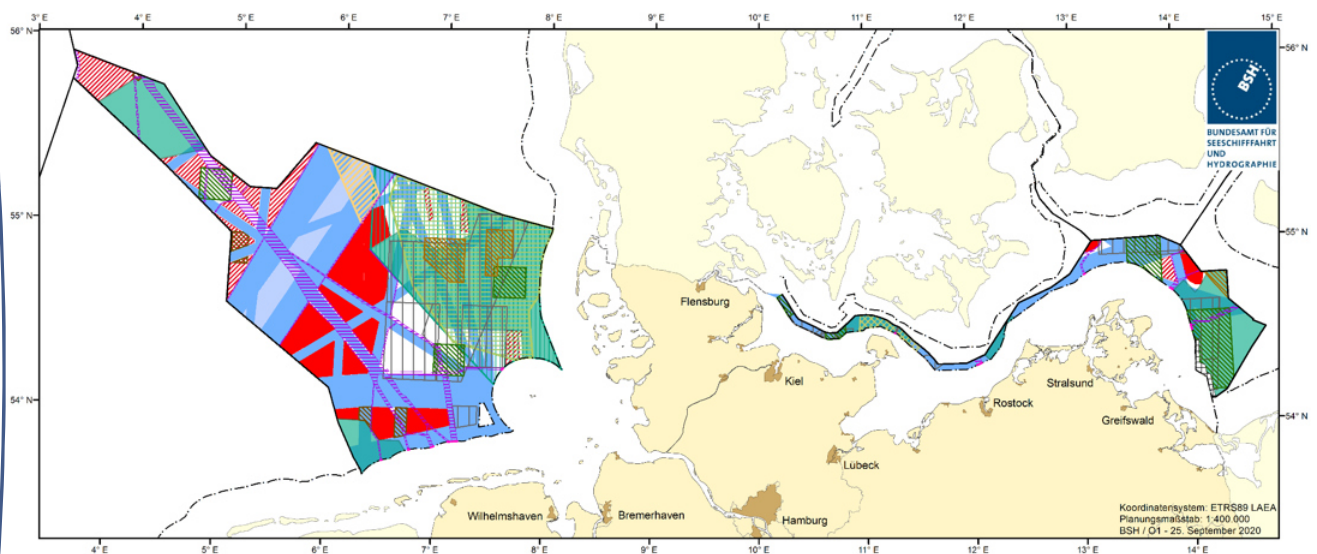




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Draft Maritime Spatial Plan for the German Exclusive Economic Zone in the North and Baltic Sea – unofficial translation –



Federal Ministry of the Interior, Building and Community
Federal Maritime and Hydrographic Agency

Hamburg, 25 September 2020

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List of abbreviations

AIS data	Data from the Automatic Identification System in Shipping
BBergG	Federal Mining Act
BfN	Federal Agency for Nature Conservation
BKompV	Federal Compensation Ordinance
BMI	Federal Ministry of the Interior, Building and Community
BMU	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
BMVg	Federal Ministry of Defence
BMWf	Federal Ministry of Economic Affairs and Energy
BNatSchG	Act on Nature Conservation and Landscape Management (Federal Nature Conservation Act)
BNetzA	Federal Network Agency
BSH	Federal Maritime and Hydrographic Agency
CFP	Common Fisheries Policy
EEG	Renewable Energy Sources Act
EEZ	Exclusive Economic Zone
EEZ North Sea	Spatial planning Ordinance for the German exclusive economic zone in the North Sea
EEZ Baltic Sea	Spatial planning Ordinance for the German Exclusive Economic Zone in the Baltic Sea
EU	European Union
FEP	Site Development Plan
FFH	Flora Fauna Habitat
GW	Gigawatt
GSBTS	German Small-Scale Bottom Trawl Survey
HELCOM	Helsinki Commission
IMO	International Maritime Organisation
IUCN	International Union for Conservation of Nature
KdB	Bundeswehr Concept
km	Kilometre
m	Metre
Maritime Annex	Ordinance on Installations on the seaward side of the German territorial sea (Off-shore Installations Ordinance)
MARNET	Monitoring network of automatic measuring stations in the German Bight and the western Baltic Sea
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973
MSFD	Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)
MSP	Maritime spatial planning
MSP Directive	Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning (Maritime Spatial Planning Directive)
NM	Nautical mile

OSPAR	OSPAR Convention (Convention for the Protection of the Marine Environment of the North-East Atlantic)
OWF	Offshore wind farm
ROG	Spatial Planning Act
ROP	Spatial development plan
SAR	Search and Rescue
SKN	Nautical chart zero
TYNDP	Ten-Year Network Development Plan
UNCLOS	United Nations Convention on the Law of the Sea
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VMS	Vessel Monitoring System
VTG	Traffic separation zone
WFD	Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (Water Framework Directive)
WindSeeG	Offshore Wind Energy Act
WTG	Wind turbine

1 Vision

Using and preserving the sea in all its diversity.

The sea is a special space that combines many different functions. Healthy marine ecosystems make important contributions to biodiversity and climate protection and provide ecosystem services that benefit people and regions. Responsible use of maritime resources is the basis for a sustainable maritime economy that is future-oriented and contributes to the prosperity of present and future generations. The sea connects people, habitats and markets, and safe shipping creates opportunities for open exchange between countries and cultures. The use of climate-friendly offshore technologies supports energy security and the achievement of national and international climate targets. At the same time, the sea offers space for recreation and leisure.

Maritime spatial planning preserves and develops the uses and core functions of the sea in a sustainable way in a European context. It provides for multiple uses and functions of the sea and meets different demands and interests by carefully balancing environmental, economic and social concerns in line with sustainable development objectives.

The vision is embodied in the following guiding principles:

- Support of coherent international maritime spatial planning and territorial cooperation through cooperation with other countries and at a regional seas level,
- Consideration of land-sea relationships and transport and value chains by closely working with the coastal federal states for coherent planning,
- Securing the foundation for a sustainable maritime economy that promotes blue growth and is in line with sustainable development goals through:
 - o Ensuring orderly spatial development by coordinating current and future spatial demands,
 - o Prioritisation of sea-specific uses and the maxim of sparing and optimised sea use, and the reversibility of fixed installations,
 - o Applying an ecosystem approach, the precautionary principle and an integrated view of the various activities in the sea that consider their impacts, interactions and cumulative effects.
- Maritime spatial planning supports
 - o The safety and efficiency of navigation,
 - o Other economic uses, in particular renewable energy,
 - o Marine scientific research, and
 - o National and NATO defence.
- Maritime spatial planning contributes to protecting and improving the state of the marine environment by
 - o Appropriate spatial designations for the marine environment, and

- Provisions for avoiding or reducing harmful impacts and pollution resulting from the above-mentioned uses.

The following designations apply within the context of the European and international legal framework, in particular taking into account the Common Fisheries Policy and the United Nations Convention on the Law of the Sea¹, the Maritime Spatial Planning Directive² and the Marine Strategy Framework Directive.³

¹ of 10 December 1982, BGBl (Federal Law Gazette) 1994 II p. 1798.

² Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, OJ L 257, p. 135

³ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy (Marine Strategy Framework Directive, OJ 2008 L 164, p. 19.

2 Designations

Spatial planning objectives are marked with (O), spatial planning principles with (P).

2.1 Ensuring the safety and efficiency of navigation (Section 17 subsection 1 sentence 2 number 1 ROG)

Objectives and principles

- | | | |
|-----|--|--------------------------------------|
| (1) | The areas SN1 to SN17 and SO1 to SO4 shown in Figure 1 and Figure 3 in the Appendix are designated as priority areas for shipping. | Priority areas Shipping |
| | When priority areas for shipping overlap with priority areas for the protection and improvement of the marine environment, shipping enjoys priority in accordance with the provisions of UNCLOS under international law. (O) | |
| (2) | The Temporary Shipping Priority Area within SN10, shown in Figure 1 in the Appendix, is designated until 2035, after which it becomes a reservation area. (O) | Temporary priority area Shipping |
| (3) | Pollution of the marine environment by shipping is to be reduced. In addition to observing the regulations of the International Maritime Organisation (IMO), best environmental practice in accordance with international conventions on ocean protection and the state of the art in science and technology are to be taken into account. (P) | Protection of the marine environment |

Justification

As a coastal state under UNCLOS, the Federal Republic of Germany does not exercise sovereignty; rather it only has functional sovereign rights in the EEZ. Similarly, freedom of navigation in accordance with Article 58 paragraph 1 UNCLOS applies in principle within the EEZ. Freedom of navigation must therefore be given special consideration when organising the functions of the EEZ over which the coastal State exercises sovereign rights. In particular, according to Article 60 paragraph 7 UNCLOS, artificial islands, installations and structures and the safety zones surrounding them shall not be constructed where they may impede the use of recognised shipping lanes important for international navigation. Accordingly, the ROG as well as various specialised laws give high priority to the safety and efficiency of navigation in respect of use of the EEZ. The main purpose of the requirements for ensuring the safety and efficiency of navigation is therefore to keep important shipping routes clear of uses which could impede their use.

In particular, the traffic separation zones in the North Sea and Baltic Sea designated by the IMO must be taken into account. In addition, the actual shipping lanes determined on the basis of AIS traffic analyses as well as the lanes identified as being important in the future are also taken into account.

Justification of the objectives and principles

Re (1) Priority areas shipping:

The spatial planning provisions for shipping serve in particular to provide additional spatial planning safeguards for basic nautical requirements in the area of important routes. Any requirements going beyond this (nautically necessary extension of shipping routes/manoeuvring space etc.) remain unaffected.

The width of the designated areas is based in particular on the need to ensure the basic spatial planning safeguarding of a shipping route network. Here, nautical considerations are important. The priority areas represent the basic framework which must be kept free of all incompatible uses, in particular construction above the seabed.

From a planning point of view, this will safeguard the safety and efficiency of navigation into the future, and vessels will be able to use all regularly used routes as smoothly and easily as possible.

In the North Sea EEZ, the Terschelling German Bight and German Bight Western Approach traffic separation zones are designated as priority areas (SN1 and SN2) over their entire width, including corresponding safety zones. In addition, the main shipping lanes identified based on their traffic level are defined as having a width of 3 nautical miles (1 nautical mile (NM) corresponds to 1.852 km) (SN3 - SN17, with the exception of SN10). The width of 3 NM is based on the shipping routes designated in the 2009 plan, which essentially comprise a 1 NM wide priority area and reservation areas flanking it on both sides, also each 1 NM wide. A differentiation between priority area and reservation area is now dispensed with, since the areas of the former reservation areas are also necessary for sustainably safe shipping and therefore it must not be possible for other uses to supplant them.

An exception is Route SN10, which in the south takes up traffic from existing traffic separation schemes in the Netherlands and essentially acts as a transit route through the German EEZ to the Danish EEZ and from there to the Baltic Sea. In contrast to the other main shipping routes outside traffic separation schemes, the route is much more heavily used and the traffic is also widely distributed due to the traffic inlets and outlets. Against this background, priority areas are designated here based on the recorded traffic flows.

The German EEZ in the Baltic Sea is a very busy shipping area due to its tightly-meshed spatial interdependencies.

The current traffic observation based on AIS data essentially confirms the picture of 2009, so that the priority and reservation areas designated so far continue to exist. In addition, a designation (SO4) will be made to adapt to the traffic flows and the provisions in the draft Swedish spatial development plan.

By respecting existing traffic flows, the operational objective UZ2-03 to prevent and combat marine pollution and to improve maritime emergency preparedness and management of the MSFD are also supported.

Re (2) Temporary priority area shipping:

The internationally recognised shipping route Den Helder - Skagen (SN10) is navigated by more than 16,000 ships per year with a continuing upward trend and has a high lateral distribution, with a high proportion of tanker traffic in the western and a high proportion of cargo traffic in the eastern

part of SN10. The increase in traffic requires appropriate areas dedicated to shipping to ensure the safety and efficiency of navigation. Therefore, the SN 10 shipping route is designated as a priority area.

However, in conjunction with the Netherlands and Denmark, the Federal Government is currently investigating traffic-directing measures, such as a traffic separation zone in the area of the current shipping route SN 10. If the results of this investigation are positive, corresponding international initiatives, e.g. negotiations in the IMO, will be launched. If these initiatives are positive, the traffic management measures would increase safety and security, since they could, among other things, segregate vessels travelling in opposing directions and in this way possibly reduce the space required for shipping. In this case, a further update of the spatial plan could result in areas no longer required for shipping being allocated for other uses. In this case, utilisation by offshore wind energy could be considered in order to achieve the climate objectives at national and European level. Accordingly, any areas within SN 10 that may no longer be necessary are defined in designation 2 as temporary priority areas until 2035. However, in order to ensure that the safety and ease of traffic will continue to be guaranteed even in the event of the failure of internationally coordinated traffic management measures, a reservation for shipping from 2035 is also designated for these areas.

Re (3) Protection of the marine environment:

International agreements on the prevention of marine pollution, in particular the International Convention for the Prevention of Pollution from Ships⁴ and the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention)⁵, aim to ensure that shipping causes the least possible damage to the marine environment. In addition to the mandatory regulations of the IMO, best environmental practice under the OSPAR Convention and the Helsinki Convention of 1992 with its updates (last update on 1 July 2014) and the respective state of the art must be taken into account.

Compliance with the limit values for sulphur oxide (SOx) emissions and nitrogen oxide (NOx) emissions as part of the International Convention for the Prevention of Pollution from Ships (MARPOL) also supports environmental objective 1 of the MSFD: oceans that are not impaired by the effects of anthropogenic eutrophication.

⁴ Of 2 November 1973 (BGBl. 1982 II p. 2, 4) in the version of the protocol of 17 February 1978 (BGBl. 1982 II p. 2, 24) (MARPOL).

⁵ Of 22 September 1992 (BGBl. 1994 II p. 1355, 1360).

2.2 Other economic uses (Section 17 subsection 1 sentence 2 number 2 ROG)

2.2.1 General requirements for economic uses

Objectives and principles

- | | | |
|-------|---|---|
| (1) | Economic uses should interfere with each other as little as possible. (P) | Mutual consideration |
| (2) | Economic uses should be as space-saving as possible. (P) | Economic use of space |
| (3) | Fixed installations are to be dismantled at the end of their use. Further or deviating legal regulations remain unaffected. (O) | |
| (4) | Economic uses should not compromise the safety and efficiency of navigation. (P) | Traffic |
| (5) | Economic uses should not compromise the interests of scientific research. (P) | Scientific research |
| (6) | Economic uses should not interfere with the interests of national and NATO defence. (P) | Defence |
| (7) | During the planning, construction and operation of facilities for commercial use, known sites of cultural assets should not be adversely affected; the same applies if previously unknown cultural assets are found.

Impairment of the underwater cultural heritage, including research into it, should be avoided. (P) | Cultural heritage |
| (8.1) | Threats to the marine environment, in particular adverse impacts on natural functions and the marine ecosystem arising from economic uses, are to be avoided; this also includes consideration of species-specific periods of time during which species are particularly susceptible to disturbance, and consideration of ecological interrelationships between animal and plant species.

Best environmental practice in accordance with international conventions on marine protection and the state of the art in science and technology should be taken into account. (P) | Preventing threats to the marine environment

Best environmental practice |
| (8.2) | The effects of economic uses on the marine environment are to be investigated and evaluated at project level within the framework of an effect monitoring system. (P) | Monitoring |

Justification

Justification of the objectives and principles

Re (1) Mutual consideration:

Due to the large number of existing and planned economic uses in the EEZ, the sometimes high rate of usage and the resulting pressure of use, it is necessary to plan the economic uses in such a way that they affect each other as little as possible. This principle applies to all uses and requires mutual consideration and coordination. This can be implemented, for example, by coordination in terms of time or by maintaining distances between uses. Thus, this general principle takes up the requirement of the 2009 spatial development plan that a sufficient distance from existing pipelines and submarine cables for safe operation and maintenance must be maintained during measures of raw material extraction.

Re (2) Economic use of space:

Economic uses, in particular energy production, should be carried out as economically as possible. The German EEZ is very limited in size, but at the same time its area is of great importance for various uses and the marine environment. Great importance is therefore attached to the consumption of space. This can lead to a situation where not always the desirable area is available for use, but rather the sufficient area.

Re (3) Dismantling:

This objective ensures that the land is still used after the respective end of use. Due to the limited space available, it is essential for the sustainable use of the EEZ that facilities no longer in use are dismantled.

This basic idea is already expressed in various technical regulations, such as Section 55 subsection 2 number 3 BBergG, Section 15 subsection 1 SeeAnIG and Section 58 subsection 3 Wind-SeeG and is generalised here for all uses. This does not affect the statutory regulations and their concerns. However, the limited area of the EEZ will also have to be taken into account when deciding on decommissioning under technical legislation.

The second sentence of Article 60 paragraph 3 UNCLOS already provides for an obligation under international law to dismantle all abandoned or no longer used installations or structures in order to ensure the safety of navigation, taking into account the generally accepted international standards established in this regard by the competent international organisation.

Going further than Article 60 UNCLOS, the objective set out here is not based solely on the protection of one use - maritime navigation - but serves the permanent preservation of the EEZ for all uses.

In particular, the dismantling of offshore wind turbines and other facilities for energy generation is intended to create new space for subsequent use, e.g. repowering of wind turbines.

Re (4) Transport:

This requirement takes into account the requirements of international law, in particular Articles 58 paragraph 1 and 60 paragraph 7 UNCLOS. These requirements have already been specified in some specialised legislation, such as Section 48 subsection 4 number 2 WindSeeG and Section 5 subsection 3 number 2 SeeAnIG.

The principle reflects at the same time the high importance of shipping for the Federal Republic of Germany and the high importance of the German EEZ for international shipping.

Re (5) Scientific research:

Various research institutes for marine and fisheries research, but also e.g. the BSH, carry out extensive research activities in the EEZ, often regularly and over long periods of time, on recurring routes and at the same locations. These activities should not be impaired by economic uses, and in the event of potential conflicts, early coordination on possible solutions should be carried out with the research institutes concerned.

At stationary measuring stations with permanently installed measuring equipment of authorities and research institutes, continuous long-term measurements are usually performed. In order not to jeopardise the series of investigations for basic research and environmental monitoring, uses that could interfere with these measurements should maintain an appropriate distance.

In areas of wind energy, the aim is also to continue to enable marine scientific research not directly related to the planning, construction and operation of wind farms. To this end, the interests of the research institutions are to be taken into account as early as in the approval procedures for wind farm projects and during the operation of the installations. The general exclusion of research vehicles in the wind farms, which will cover ever larger areas of the North and Baltic Seas, would lead to an inappropriate spatial restriction of scientific research in the marine environment. Navigation regulations should therefore also take into account the concerns of marine scientific research.

Re (6) Defence:

National and NATO defence is not one of the functions of the EEZ where UNCLOS grants sovereign rights to the coastal State. Nevertheless, the coastal State is free to take its defence interests into account when planning the uses over which it has sovereign rights.

Under Section 2 subsection 2 number 7 of the ROG, the spatial requirements of defence and civil protection must be taken into account. According to Section 17 Subsection 1 ROG, security aspects and thus defence concerns must be taken into account in spatial planning designations. This is to ensure that the Bundeswehr has sufficient spatial and legal possibilities for training, exercises and mission preparation required within the framework of national and NATO defence and other mandated missions.

The EEZ is indispensable for the defence of the Federal Republic of Germany and for securing supplies in case of defence. Any impairment of national and NATO defence in this critical area should therefore be avoided.

A more specific definition of this in technical legislation can already be found in Section 48 subsection 4 number 3 WindSeeG and Section 5 subsection 3 sentence 3 SeeAnIG.

Re (7) Cultural heritage:

The UNESCO convention defines underwater cultural heritage as all traces of human existence that have been under water for more than 100 years and are of historical or cultural significance.

The general principle for minimising the negative impacts of economic uses on the underwater cultural heritage aims to ensure that appropriate measures are taken at an early stage in consultation with the technical authorities in order to avoid or minimise negative impacts.

The early involvement of the authorities responsible for heritage management and archaeology in the context of projects in the EEZ is intended to ensure that the technical classification and appropriate evaluation and preservation of finds can be carried out in good time and that any existing findings of the authorities can be taken into account when planning investigations in the context of the projects. This applies in particular to those uses which may directly result in findings or impair the cultural heritage, such as exploration of the seabed by means of drilling or seismic methods.

Re (8.1) Threat to the marine environment:

Under Section 17 subsection 1 sentence 1 number 4 ROG, the spatial development plan is to lay down provisions which serve to protect and improve the marine environment. Any threat to the marine environment is to be avoided. Unavoidable impacts are to be reduced as far as possible. This principle also takes up existing technical regulations and generalises them in the interests of sustainable use of the EEZ using the ecosystem approach.

For wind energy at sea or in power cables, for example, the avoidance of hazards to the marine environment is already an assessment criterion in sectoral planning and in the individual approval procedure. Under Section 48 subsection 4 WindSeeG, the plan may only be adopted if the marine environment is not endangered. A similar provision is contained in Section 49 BBergG.

Best environmental practice:

Not all negative environmental impacts can be avoided in the actual economic use. In the interests of minimisation, existing best environmental practice in accordance with the OSPAR and Helsinki Conventions and the state of the art in science and technology should therefore be taken into account. The concrete implementation, e.g. the consideration of species-specific periods of time particularly susceptible to disturbance, is to be regulated, if available, at downstream planning levels, in particular individual approval procedures taking into account the special features of the project area.

The use of the state of the art in science and technology as a benchmark is made in order to take account of the existing uncertainty and the lack of knowledge at sea in many places, in accordance with the precautionary principle and the ecosystem approach. Where the state of the art does not yet exist, the state of science and technology should also be taken into account. This has long been the case, for example, with the minimisation of pile driving noise. Where recognised rules of technology or a state of the art have been developed, these can be used.

Where sustainable economic use - including repowering - no longer takes place, the aim of restoration is to restore the balance of nature to its original state or to secure a new ecological balance adapted to the new living conditions.

Re (8.2) Monitoring:

In order to ensure that the EEZ is used in the most environmentally sound manner possible, the effects of economic uses on the marine environment are to be examined within the framework of project-related monitoring. The intended monitoring can be regulated by corresponding requirements of the licensing authority and corresponds to the existing licensing practice of the technical authorities. For the investigation and monitoring of the impacts of wind turbines, the BSH standard investigation concept, for example, regulates the type and scope of the required project-related investigations. The results obtained at project level are used for monitoring the implementation of the maritime spatial plan.

At the same time, monitoring serves to gain further knowledge and thus enables future sustainable use using the ecosystem approach.

2.2.2 Offshore wind energy**Objectives and principles**

- | | | |
|-------|--|--------------------------------|
| (1) | The areas EN1 to EN3, EN6 to EN13 and EO1 and EO3 shown in Figure 5 and Figure 7 in the Appendix are designated as priority areas for offshore wind energy. (O) | Priority areas |
| (2) | The areas EN4, EN5, EN14 to EN19 and EO2 shown in Figure 5 and Figure 7 in the Appendix are designated as reservation areas for offshore wind energy. (P) | Reservation areas |
| (3) | During the planning, construction and operation of power generation installations, existing or approved pipelines and submarine cables as well as submarine cables specified within the framework of sectoral planning shall be taken into account. A distance sufficient for their safe operation and maintenance shall be maintained. (O) | Pipelines and submarine cables |
| (4) | Navigation regulations should allow fisheries to reach their fishing grounds by the most direct route possible. They should also allow passive fishing with traps and baskets within the wind farm safety zone in areas which are not in the immediate vicinity of the turbines or within the area bounded by the external installations of the wind farm. (P) | Fisheries |
| (5.1) | Wind farms and their safety zones may be passed through by Bundeswehr vessels in accordance with the principles of good seamanship. (O) | Defence |
| (5.2) | The Bundeswehr is to be given the possibility, as far as neces- | |

sary from their point of view, to install and operate fixed installations such as transmitting and receiving stations for national and NATO defence on installations for energy generation.

In the military training areas listed under 2.5.1 (1), the planning, construction and operation of installations for energy generation should not be undertaken. (P)

- | | | |
|-----|--|--------------------------------------|
| (6) | In accordance with the state of the art in science and technology, the introduction of noise into the marine environment during the construction of installations for energy generation should be avoided. | Protection of the marine environment |
|-----|--|--------------------------------------|

There should be overall coordination of the construction work of installations for energy generation and of installations which are spatially related to them. (P)

Justification

There is a staged planning and approval process for the wind energy sector. At the superordinate planning level, the maritime spatial plan essentially regulates the area categories (priority and reservation areas) as well as other objectives and principles.

The site development plan (FEP) serves as a sectoral planning instrument for wind energy, which, according to Sections 4 et seq. WindSeeG, is drawn up and updated by the BSH. The FEP was published for the first time on 28 June 2019 and serves to implement the expansion target for offshore wind energy in accordance with Section 1 subsection 2 WindSeeG. The plan mainly specifies areas and sites for wind turbines, the expected output to be installed on the sites and the order in which the sites are to be put out to tender. In addition, the FEP defines routes, route corridors, locations as well as planning and technical principles. Pursuant to Section 5 subsection 3 number 1 WindSeeG, designations of the FEP are inadmissible in particular if they do not comply with the requirements of spatial planning pursuant to Section 17 subsection 1 of the ROG.

Justification of the objectives and principles

Re (1) Priority areas:

The basis for the designation of priority areas for wind energy are initially the areas O-1 and O-3 (Baltic Sea), N-1 to N-3 and N-6 to N-13 (North Sea) as designated in FEP 2019 and possible extensions of the areas N-9 to N-13 in a north-westerly direction, which result from adapted spatial designations for shipping. These areas are designated as priority areas EN1 to EN3 and EN6 to EN13 (North Sea) and EO1 and EO3 (Baltic Sea).

The scope of the designated priority areas for offshore wind energy is intended to ensure the implementation of an increased expansion target in accordance with the draft law amending the Wind

Energy at Sea Act and other regulations (WindseeG-E (draft))⁶ adopted by the Cabinet on 3 June 2020, i.e. at least 20 GW installed capacity by 2030.

Re (2) Reservation areas:

The designation of reservation areas for wind energy serves to secure areas for the further expansion of offshore wind energy beyond 2030. Although there is currently no statutory expansion target for offshore wind energy beyond 2030, the need for further expansion can be derived, among other things, from Section 1 sentence 2 number 3 of the Renewable Energy Sources Act (EEG), which sets a target of an 80 percent share of renewable energies in gross electricity consumption by 2050. In addition, the Climate Protection Act adopted by the Bundestag in 2019 provides for greenhouse gas neutrality by 2050, with the expansion of renewable energies being a key measure. Furthermore, Section 1 subsection 2 of the WindSeeG-E sets an expansion target of 40 GW by 2040.

Similarly, the scenario framework 2021 - 2035/2040 of the transmission system operators approved by the BNetzA on 26 June 2020 provides for an installed generation capacity from offshore wind energy of 28 to 34 GW by 2035 and 40 GW by 2040, depending on the scenario. Significant spatial reserves for the implementation of these targets are only found in the area to the northwest of shipping route SN10. The above-mentioned objectives are to be secured by the maritime spatial plan, as they serve to develop the EEZ with a view to a sustainable energy supply for future generations. However, due to the lack of data, the reservation areas EN14 to EN19 cannot be designated as priority areas. In the case of the EO2 reservation area, questions relating to bird migration that cannot be conclusively assessed are to be examined in the context of subsequent planning levels and procedures. In the case of the EN4 and EN5 reservation areas, a significant cumulative impact on this important habitat for divers in the North Sea EEZ must be avoided to comply with species protection regulations.

Re (3) Pipelines and submarine cables:

To reduce the risk of damage to pipelines and submarine cables and not to restrict maintenance options, due consideration must be given to existing pipelines and submarine cables during the planning, construction and operation of wind turbines and other energy generating plants. An appropriate clearance distance from these must be maintained.

The definition of an appropriate clearance distance is a subject of the sectoral planning or is to be dealt with in the respective individual licensing procedure according to the circumstances of the individual case. The progressive technical development (e.g. improved dynamic positioning of maintenance vessels) shall be taken into account in the sense of mutual consideration.

⁶ Available at https://www.bmwi.de/Redaktion/DE/Downloads/E/entwurf-eines-gesetzes-zur-aenderung-des-windenergie-auf-see-gesetzes.pdf?__blob=publicationFile&v=6

Re (4) Fisheries:

In the existing wind farms in the EEZ, fishing in the wind farm safety zone is excluded for reasons of safety. As a result, and due to the large-scale use of other areas in the EEZ for energy production, large areas are no longer available for use by fisheries.

Additional extensive restrictions are expected to be imposed under the European Common Fisheries Policy. A joint recommendation⁷ on fisheries management measures, which is currently being prepared with neighbouring countries in the Scheveningen Group, initially for the nature reserves of the German North Sea EEZ, provides for the partial, temporary or total exclusion of certain fishing techniques over large areas. The draft recommendation is currently being discussed with neighbouring Member States. This is⁸ likely to further reduce significantly the share of the EEZ which can be exploited by fisheries or certain types of fisheries. For the Baltic Sea, only one coordinated proposal for management measures for bottom trawling has been made so far⁹, but here too, in addition to the existing restrictions in the Oderbank area, further restrictions on fishing in nature reserves can be expected.

In order to mitigate these restrictions, an examination is to be carried out within the framework of sectoral planning for the expansion of wind energy and during the planning and operation of wind farms and connecting submarine cables to determine which activities may be permitted under certain conditions in the areas and their safety zones in the context of multiple use. Particular attention should be paid to fishing techniques compatible with the safe operation of the installations and their connection to the grid. In this context, possibilities for both passive and active fishing will be examined.

The current requirement is based on Section 15 subsection 1 number 1 of the BKompV¹⁰. Accordingly, no passive fishing is envisaged in the area of a safety zone bounded by the external installations of a wind farm. Outside this core area, passive fishing with traps and baskets can also take place in the safety zone. In this case, the fishing gear should not interfere with the safe operation of the installations. Further regulations on fishing within wind farms apply only at the project level.

⁷ "Joint Recommendation regarding Fisheries Management Measures under Article 11 and 18 of the Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy (CFP-Regulation) within the Natura 2000 sites Sylt Outer Reef, Borkum Reef Ground and Dogger Bank as Special Area of Conservation under the Habitats Directive 92/43/EEC of 21 May 1992, and the Natura 2000 site Eastern German Bight as a Special Protection Area under the Birds Directive 2009/147/EC of 30 November 2009" of 29. October 2018

⁸ In its initial response to the Scheveningen Group on 24 May 2019, the European Commission assessed the proposed measures as not yet sufficient to reduce fishing pressure and its negative impact on protected species and habitats in the protected areas. Although the measures have already been included in the published management plans for the NSRACs in the North Sea, their exact location is described as not yet finalised.

⁹ The draft management plans for the Baltic Sea protected areas (BfN, 2020) refer to the measures to be developed under the European Common Fisheries Policy, the outcome of which will be included in the documents "at a later stage".

¹⁰ Ordinance on the Prevention and Compensation of Interventions in Nature and Landscape within the Area of Responsibility of the Federal Administration (Federal Compensation Ordinance - BKompV) of 14 May 2020, (Federal Law Gazette I p. 1088)

Re (5.1) Defence:

The increase in fixed installations in the EEZ is associated with a restriction of the freedom of movement of Bundeswehr vehicles. In order to ensure effective national defence, it is necessary that existing wind farms can be crossed during peacetime training exercises.

Re (5.2) Defence:

According to the Bundeswehr, many of the to-be-installed new wind turbines will make reconnaissance more difficult; however, the wind farms and their ancillary facilities offer extensive possibilities for installing technical equipment. To prevent further impairment of the country and NATO defence, installation possibilities are therefore to be provided in particular for equipment used for reconnaissance.

The military training areas include both surface and underwater exercise areas. The maritime training areas are surface areas and the underlying water column down to the seabed. The above-sea maritime training areas comprise the airspace from the altitude defined for the area (usually sea level) up to the respective altitude.

Sufficiently large and reasonably accessible exercise areas are required to secure national and NATO defence. This designation takes this into account.

Re (6) Protection of the marine environment:

Noise immissions to the marine environment are reduced by applying state-of-the-art noise abatement measures. This principle is in line with the ongoing administrative practice of the BSH and the provisions of FEP 2019. Therefore, the use of effective technical noise mitigation systems is to be provided for at the specific project level during installation to safeguard species protection and territorial protection interests. The noise mitigation concept of BMU for the North Sea of 2013¹¹ will be taken into account. In the case of wind turbines located in or adjacent to the harbour porpoise reserve and/or adjacent to the priority areas for nature conservation, to avoid and reduce significant cumulative impacts on the harbour porpoise population and to comply with species protection requirements, any significant impairment of this important harbour porpoise habitat in the North Sea EEZ is to be prevented by appropriate and effective measures to counteract impulse-type noise inputs, especially during periods in which the porpoises are most sensitive.

Thus, environmental objective 6 "Oceans that are not impaired by anthropogenic energy inputs" and the operational objective UZ6-04 "Development and application of noise mitigation measures for the North and Baltic Seas" are both simultaneously supported.

If a state of the art for noise protection is established, it will no longer be necessary to fall back on the state of the art in science and technology from a spatial planning perspective.

In order to avoid or mitigate cumulative effects, an overall coordination of the timing of the construction work should be aimed for. This also includes the reduction to a minimum of shipping traffic for construction and operation and the associated acoustic and visual disturbances through op-

¹¹ BMU (2013) Concept for the protection of harbour porpoises from noise pollution during the construction of offshore wind farms in the German North Sea (noise abatement concept).

timal construction and time planning. Disproportionate additional expenditure for the expansion of renewable energy should not arise from the requirement for overall time coordination.

Destruction or significant impairment of known occurrences of legally protected biotopes pursuant to Article 30 BNatSchG should be avoided in the planning, construction and operation of energy production facilities.

Details are regulated within the framework of the sectoral planning of the FEP and the individual approval procedures for offshore wind energy.

2.2.3 Cables

The following objectives and principles do not apply to power-carrying submarine cables used for connection within a wind farm (farm internal cabling).

Objectives and principles

- | | | |
|-----|---|--|
| (1) | The LN1 to LN15 and LO1 to LO8 areas shown in Figure 9 and Figure 11 in the Appendix are designated as reservation areas for submarine cables. (P) | Reservation areas |
| (2) | Submarine cables should be routed in the designated reservation areas. (P) | |
| (3) | At the transition to the territorial sea, cables must be routed through the connecting gates GN1 to GN6 and GO1 to GO5 shown in Figure 9 and Figure 11 in the Appendix. (O) | Connecting gates |
| (4) | If the spatial capacity in the areas of the respective connecting gates with the above-mentioned routes is exhausted, the route of any additional lines that may become necessary should be bundled and, in coordination with the coastal federal state concerned, moved to suitable transition points on the border with the territorial sea. (P) | Appropriate transition points with the territorial sea |
| (5) | When laying cables, the aim should be to achieve the greatest possible bundling in the sense of parallel routing. In addition, the route should be as parallel as possible to existing structures and buildings.

Crossings of the lines among themselves should be avoided as far as possible. Submarine cables should be provided with a permanent covering to protect other uses and functions.

Submarine cables should be provided with such permanent covering as is necessary to safeguard other uses and functions. (P) | Avoidance of crossings |
| (6) | The traffic separation zones (Terschelling-German Bight, German Bight-Western Approach, South of Gedser, North of Rügen and its continuation as well as the Kiel-Ostsee-Weg), are to be crossed by the shortest route, insofar as routing parallel to exist- | Coverage

Crossing of Shipping routes |

ing structures and buildings is not possible. (P)

- | | | |
|-----|--|--------------------|
| (7) | No cables may be laid in the Baltic Sea submarine exercise areas Bravo 2, Bravo 3, Bravo 4, that are shown for information in Figure 34 in the Appendix. (P) | Defence |
| (8) | Existing nature reserves should be taken into account in the planning, laying and operation of submarine cables.

When laying cables, overall temporal coordination must be ensured and the most non-disruptive laying procedure possible must be chosen.

The operation of power-carrying cables should, as far as possible, prevent potential adverse effects on the marine environment due to sediment heating caused by the cabling. (P) | Marine Environment |

Justification

Justification of the objectives and principles

Re (1) and (2) reservation areas:

The designation of reservation areas for submarine cables ensures that other uses take into account their special protection requirements. Areas far from the coast for the use of offshore wind energy require onshore connections. Furthermore, a further expansion of cross-border undersea cables is foreseeable. The designation supports the securing of corresponding route corridors. The width or dimensioning of the reservation areas is based on forward-looking planning. Among other things, this is intended to ensure that the generated power can be transmitted.

Re (3) Connecting gates:

It must be ensured that the lines are routed to suitable transition points on the border with the territorial sea. The route and site planning of the grid connections for offshore wind turbines is the subject of the sectoral planning. The same applies to cross-border power lines. In the transition area to the territorial sea, connecting gates are designated for the bundling of cables, through which the cables must be routed from the EEZ to the territorial sea. The intention is to concentrate the cables as far as possible at these points and bundle them together for further outward routing to land. This will be coordinated with the coastal federal states and their spatial development planning.

Re (4) Appropriate transition points with the territorial sea:

The principle ensures flexibility in responding to a possible change in the situation which cannot be foreseen at this stage.

Re (5) Bundling:

To minimise impacts on other uses and the need for coordination among and with other uses, and to create as few constraint points as possible for future uses, cables should be bundled as far as possible. Bundling in the sense of parallel routing also reduces fragmentation effects. In accord-

ance with the guideline of economic use of space and to minimise interference, cables should be planned to use as little space as possible. The technically possible transmission capacity should be taken into account in the planning and used as fully as possible.

Crossings:

By avoiding crossing structures, the environmental impact and use of spaces associated with them should be reduced. This is because crossing structures are more susceptible to faults and thus require more maintenance, which in turn leads to an increased volume of traffic of maintenance/repair ships and the associated negative effects on the environment.

Cover:

The choice of the covering and the necessary laying depth of submarine cables should take particular account of the interests of shipping, fishing vessels and marine environmental protection. Increased covering of submarine cables can reduce the potential for conflict between them and other uses, such as the risk of damage from anchor casting or trawl nets/shearboards. The coexistence of submarine cables and shipping is subject to adequate coverage. The risk of submarine cables being uncovered by washing away of the covering and subsequent damage will be reduced, thereby reducing maintenance costs and significantly reducing the potential disruption to traffic and the environment that may result from repair work. In addition, increased cover can limit possible temperature increases in the upper sediment areas and reduce the effects of electromagnetic fields.

Re (6): Crossing of shipping routes

Some of the shipping routes in the German EEZ are very busy. In the North Sea, these are mainly designed as traffic separation schemes, in the Baltic Sea only partly. Due to their high importance for international shipping, a conflict of use between cables and shipping should be avoided by minimising the overlap of pipelines with the highly frequented shipping routes. This minimises potential conflicts during laying, operation and possible removal.

Re (7) Defence:

The designated submarine exercise areas are referred to as "safe bottoming areas" in which submarine bottoming is carried out. By avoiding installations in or on the seabed (pipelines, cables, etc.), the aim is to avoid structural underwater obstacles which could lead to damage to the pipeline or cable infrastructure or submarines. Furthermore, it should not be possible for the pipeline infrastructure to be used to detect underwater vessels located in these exercise areas.

Re (8) Marine environment:

Nature reserves:

The aim is to minimise potential adverse effects on the marine environment when laying cables. In order to avoid negative impacts on sensitive habitats, the submarine cables should be planned and laid outside nature reserves where possible.

Known occurrences of legally protected biotopes pursuant to Section 30 of the Federal Nature Conservation Act (BNatSchG) must be avoided as far as possible when laying pipelines in order to avoid destruction or significant impairment of known occurrences of legally protected biotopes.

Overall time coordination and gentle non-disruptive laying process:

Overall time coordination is to be strived for when laying adjoining submarine cables. Thus, the number of disruptive interventions can be reduced and possible cumulative effects can be avoided or reduced.

To minimise possible negative impacts on the marine environment caused by the laying of cables, the laying method which is expected to have the least impact and adverse effects on the marine environment should be chosen. Disproportionate additional expenditure for the expansion of renewable energy should not arise from the need for overall time coordination.

Sediment heating:

Effects on the marine environment due to cable heating appear possible in any event. To limit sediment warming caused by submarine cables, the sectoral planning specifies a threshold value which can be regarded as a precautionary value as regards nature conservation.

The reduction of cable-induced sediment heating also supports the MSFD environmental objective 6 "Oceans that are not impaired by anthropogenic energy inputs" and the operational objective UZ6-05 "Derivation and application of threshold values for heat inputs".

2.2.4 Raw material extraction

Objectives and principles

- | | | |
|-----|---|--|
| (1) | Areas SKN1, SKN2 and SKO1, shown in Figure 13 and Figure 15 in the Appendix, are designated as reservation areas for sand and gravel extraction, and areas KWN1, KWN2, KWN3, KWN4 and KWN5 as reservation areas for hydrocarbons. (P) | Reservation areas
raw material extraction |
| (2) | The extraction of sand and gravel in the divers reserve should be avoided as far as possible during the period 1 March to 15 May. (P) | Divers |

Justification

Justification of the objectives and principles

Re (1) Reserved areas:

The basis for defining the sand and gravel reserve areas are the licences BSK 1 and OAM III in accordance with Section 7 BBergG. Licences under mining law are granted on application and entitle the licence holders to actively and demonstrably search for the respective mineral resources (Section 7 BBergG).

Location in the priority area of the nature reserve NSG Sylt Outer Reef - Eastern German Bight does not exclude the mining of raw materials from a spatial planning point of view; the exact design is determined by the mining law procedure.

The extraction of sand and gravel at sea is subject to special site conditions that are not comparable with those on land. The deposits at sea are not available on land in comparable quantities. The raw materials are limited, localised and cannot be reproduced.

The spatial designation as reservation areas serves to secure land for raw material extraction and supports the mineral raw material security in accordance with the Raw Materials Strategy of the Federal Republic of Germany of 2010 and in the 2020 update.

The basis for the designation of the reservation areas for hydrocarbons are the licence fields NE3-0002-01 and B 20 008/71 according to Section 7 BBergG. The basis for the designation of KWN1 is the German North Sea sector permit licence A6/B4 under Section 8 BBergG. The permit is limited until 31.05.2028. In the area covered by the permit, gas has been produced via a platform since September 2000.

A location in the Doggerbank nature conservation priority area does not rule out the mining of raw materials from a spatial planning perspective, the exact form of the mining operation will be determined in the mining law procedure.

Spatial designations for the raw material extraction of hydrocarbons as reservation areas has supported safeguarding of the raw material supply of the Federal Republic of Germany.

Re (2) Divers:

The reservation areas for sand and gravel extraction are located in the diver reservation area. The population of divers is particularly dependent on this area in spring and is particularly sensitive to disturbance. Additional disturbance due to sand and gravel extraction should therefore be avoided wherever possible. Section 49 BBergG sentence 4 protects marine wildlife from unreasonable interference during explorations for raw materials. Under Section 4 subsection 1 ROG, spatial planning principles must be taken into account in the planning approval process. Raw materials are extracted after approval of an operational plan by the competent authority. In the plan approval of the main operating plan for the extraction of sand in the OAM III permit area, the incidental provisions of the plan approval stipulate a restriction of extraction during the period in which divers are most sensitive (1 March to 15 May).

2.2.5 Fisheries and marine aquaculture

Principles

- | | | |
|-----|---|--|
| (1) | The area FiN1 in the "Südlicher Schlickgrund", as shown in Figure 17the Appendix, is designated as a reservation area for Norwegian lobster fisheries. (P) | Fishery reservation area Norwegian lobster |
| (2) | To ensure the long-term viability of fishing activities, fish stocks should be managed sustainably. (P) | Sustainable management |
| (3) | Aquaculture facilities should be set up in close proximity to or in combination with other existing or under-construction installations. Maintenance and operation of the turbines should not be affected by the establishment and operation of aquaculture facilities. (P) | Site combination with other installations |

Justification

Justification of the objectives and principles

Re (1) Reservation areas for fisheries:

Fishing takes place throughout the North Sea and Baltic Sea EEZs. Data on fishing effort indicate focal areas, but also often a high degree of spatial variability from year to year, depending on target species, fishing gear or vessel origin. Against this background, it does not seem appropriate to define spatial areas to take account of the needs of specific fisheries.

One exception is the fishery for Norway lobster (*Nephrops norvegicus*) in the German North Sea EEZ. In the area of the "Südlicher Schlickgrund", the sediment provides a particularly suitable habitat for this species, which can be spatially delimited. The stock of *Nephrops norvegicus* in the North Sea is considered stable and is classified as "least concern" in the IUCN Red List (Bell, C. 2015. *Nephrops norvegicus*. *The IUCN Red List of Threatened Species 2015*: e.T169967A85697412) For the German fishing fleet, the nephrops fishery represents a valuable and reliable source of income.

The reservation area designated for this fishery is based on the overlap of the annual core areas (50% each of the VMS data from 2012 to 2018) of the fishing activities of the German fleet¹². By defining the reservation area, the Norwegian lobster fishery will be given special emphasis compared to other uses. This must be taken into account when weighing it up against other plans, measures and projects of importance to the area.

Re (2) Sustainable management:

The conservation of natural resources is a prerequisite for their use. Fish stocks should therefore be managed in a sustainable manner in order to ensure the long-term viability of fishing activities. European Council Regulation 2019/1241 applies to all vessels of the EU member states and also addresses recreational fishing. The subjects of regulation include restrictions on fishing gear, the protection of sensitive species and habitats, including the reduction of incidental by-catches such as marine mammals, marine reptiles or seabirds, but also the reduction of the impact on seabed habitats, minimum catch sizes for conservation and the reduction of by-catches and discards. Within the objective of sustainable exploitation of living resources, the MSFD sets several operational objectives for fisheries: economically exploited stocks should be exploited according to the maximum sustainable yield approach. Stocks should be of an age and size close to natural conditions. Other ecosystem components should not be adversely affected by fisheries in a way that jeopardises the achievement or maintenance of their specific good environmental status. The programme of measures includes fisheries regulations and management measures in protected areas.

The designation for sustainable management should further support these objectives at national level for the EEZ area.

Re (3) Site combination with other installations:

¹² Jonas Letschert, Vanessa Stelzenmüller: Description and spatial delimitation of the Norway lobster fishery in the Southern Mudflat Area, Bremerhaven 2020

The purpose of the designation is to provide a framework for possible future projects for the establishment of marine aquaculture. In order to create synergy effects, the use of existing installations - such as the foundations of wind turbines - as mooring possibilities is an option when setting up marine aquaculture facilities. These are necessary for the attachment of longlines or baskets. At the same time the smooth maintenance and operation of the existing installations must be ensured. Based on research project findings, locations close to the coast, such as North of Borkum, are particularly suitable for marine aquaculture.

2.3 Scientific uses (Section 17 subsection 1 sentence 2 number 3 ROG)

2.3.1 Marine Research

Principles

- | | | |
|-----|--|--------------------------------------|
| (1) | The areas FoN1 to FoN3 and FoO1 to FoO4 shown in Figure 19 and Figure 21 in the Appendix are designated as research reservation areas. (P) | Reservation areas |
| (2) | Research activities should not affect the safety and efficiency of navigation. (P) | Maritime Traffic |
| (3) | Research activities should not interfere with the interests of national and NATO defence. (P) | Defence |
| (4) | During the planning and implementation of research activities, known sites of cultural assets should not be adversely affected; the same applies to the discovery of previously unknown cultural assets. (P) | Cultural heritage |
| (5) | Research should take into account best environmental practice in accordance with international conventions on marine protection. (P) | Protection of the marine environment |

Justification

Justification of the objectives and principles

Re (1) Reservation areas:

In the designated reservation areas, research is given special emphasis over and above other uses to ensure the continuation of research activities. The areas correspond in size to the "GSBTS Boxes" (North Sea), which are located wholly or partly in the EEZ, and the updated "BALTBX" areas (Baltic Sea) of the Thünen Institute, in which large-scale studies on abundances and the composition of the fish fauna near the seabed are being carried out in long-term research series. The results of the trawl surveys carried out are included in the annual ICES stock survey, but also in the monitoring for the MSFD. The continuation of these research activities could be jeopardised by incompatible uses, in particular by structural installations.

Re (2) Maritime traffic:

In principle, research in the EEZ enjoys the freedom guaranteed under Art. 238 UNCLOS, but under the premise that other legitimate uses must not be unjustifiably interfered with (Art. 240 UNCLOS). Where maritime and air traffic are concerned, research activities are to be carried out in such a way that the safety and free flow of traffic are not impaired.

Re (3) Defence:

Certain marine scientific research studies may have adverse effects on national and NATO defence by collecting sensitive data. Due to the special physical properties of the planning area, these impacts are also of relevance to spatial planning. The principle therefore serves to protect national and NATO defence against adverse effects. It has already been specified in some cases in technical terms, cf. Section 1 subsection 2 number 4 in conjunction with Sections 6 subsection 1 and 7 number 2 SeeAnIG.

Re (4) Cultural heritage:

The early involvement of the authorities responsible for heritage management and archaeology in the context of research projects in the EEZ is intended to ensure that the technical classification and the appropriate evaluation and preservation of finds can be carried out in good time and that any existing findings of the authorities can be taken into account in the preparation of research projects.

The general principle of minimising underwater cultural heritage damage caused by research activities is intended to ensure that - in consultation with the specialist authorities - appropriate measures are taken at an early stage to avoid negative impacts as far as possible.

For the rest, reference is made to the designation justification 2.2.1 (6).

Re (5) Protection of the marine environment:

The practical arrangements for marine scientific research should avoid adverse impacts on the marine environment and in particular on the natural functions of the area. The best environmental practice under the OSPAR and Helsinki Conventions and the state of the art in science and technology will be taken into account.

2.4 Protection and improvement of the marine environment (Article 17 subsection 1 sentence 2 number 4 ROG)

2.4.1 Nature conservation / marine landscape / open space

In contrast to the other types of use, marine nature conservation is not a use in the narrower sense, but rather a fundamental spatial function covering the entire area, which makes clear the special importance of marine nature and the marine ecosystem and which must be taken into account when other uses lay claim to it. Since the landscape planning which is customary on land is lacking in the EEZ, here, maritime spatial planning is particularly responsible for nature conservation. The environmental objectives of relevant international agreements and directives as well as national regulations are taken as a basis. The European legal framework for marine environmental

protection and nature conservation, in particular the Maritime Spatial Planning Directive and the Marine Strategy Framework Directive, is explained in more detail in the environmental reports. The cross-border character of marine nature is also to be emphasised.

Objectives and principles

- | | | |
|-----|--|------------------------------------|
| (1) | <p>The national marine protected areas in the EEZ Borkum Reef Ground¹³ , Dogger Bank¹⁴ , Sylt Outer Reef - Eastern German Bight¹⁵ in the North Sea, and Fehmarn Belt¹⁶ , Kadet Trench¹⁷ and Pomeranian Bay – Rønne Bank¹⁸ in the Baltic Sea, as shown in Figure 24 and the Figure 25 in the Appendix, are designated as priority areas for nature conservation in accordance with their conservation objectives. Sentence 1 does not apply to the area of the northern approach and the outer roadstead of the ports of Szczecin and Świnoujście as shown on the map.</p> <p>When priority areas for the protection and improvement of the marine environment overlap with priority areas for shipping, shipping enjoys priority in accordance with the provisions of UNCLOS under international law.</p> <p>In the reservation areas for the extraction of sand and gravel or hydrocarbons, the extraction of raw materials is compatible with the respective nature conservation priority area from a spatial planning perspective. The final decision on the permissibility of raw material extraction is taken on a case-by-case basis at project level. (O)</p> | Priority areas nature conservation |
| (2) | <p>The "main concentration area of divers" defined in BMU's position paper of 2009 (cf. Figure 14) is defined as a reservation area for divers. (P)</p> | Reservation area divers |
| (3) | <p>The main summer concentration area of harbour porpoises in the North Sea EEZ identified in BMU's 2013 noise abatement concept (cf. Figure 28) is designated as a temporary reservation</p> | Reservation area harbour porpoise |

¹³ Ordinance on the designation of the nature reserve "Borkum Riffgrund" of 22 September 2017 (BGBl. I p. 3395)

¹⁴ Ordinance on the designation of the "Doggerbank" nature reserve of 22 September 2017 (Federal Law Gazette I p. 3400)

¹⁵ Ordinance on the designation of the nature reserve "Sylt Outer Reef - Eastern German Bight" of 22 September 2017 (BGBl. I p. 3423)

¹⁶ Regulation on the designation of the "Fehmarn Belt" nature reserve of 22 September 2017 (BGBl. I p.3405)

¹⁷ Ordinance on the designation of the nature reserve "Kadetrinne" of 22 September 2017 (BGBl. I p.3410)

¹⁸ Ordinance on the designation of the nature reserve "Pomeranian Bay - Rönnebank" of 22 September 2017 (BGBl. I p. 3415)

- area for harbour porpoise (May to August) . (P)
- (4) The bird migration corridor "Fehmarn-Lolland" (cf. Figure 30) is designated as a reservation area for bird migration. (P) Reservation area
bird migration
- (5) The EEZ should be permanently safeguarded and developed as a natural area for the conservation of biological diversity, in consideration of its typical natural features, ecological relations and interactions. Natural assets should be used sparingly and carefully in accordance with the guiding principle of sustainability in spatial planning. Impairments to ecosystems should be avoided and reduced, taking into account the objectives of the Federal Nature Conservation Act, the precautionary principle and the ecosystem approach. (P) Preservation of the
EEZ as a natural
area
- (6) Barrier effects in the sea to migratory species should be avoided. (P) Migratory species
- (7) The marine landscape in its natural uniqueness and its characteristic large-scale open character should be preserved. The EEZ should be permanently preserved and developed extensively as an ecologically intact open space. Its importance for functioning seabeds, marine waters, flora and fauna (biodiversity) and the climate is to be safeguarded. (P) Safeguarding and
preserving the ma-
rine landscape

Justification

Justification of the objectives and principles

Re (1) Priority areas nature conservation:

The designation of priority areas for nature conservation is designed to support the protection purposes of marine nature protected areas and to safeguard them through spatial planning. The Borkum Reef Ground, Dogger Bank, Sylt Outer Reef - Eastern German Bight, Fehmarn Belt, Kadet Trench and Pomeranian Bay – Rønne Bank nature reserves are of outstanding importance for nature conservation, particularly for the protection of marine mammals, seabirds and Natura 2000 habitat types.

In the nature conservation priority areas, uses that are not compatible with nature conservation are excluded. This serves the protection purposes of the nature reserves, particularly with regard to potential significant impacts on specially protected habitat types or species. As a matter of principle, the determination of which uses are excluded is left to the assessment of individual cases at project level. With regard to wind energy, it must be noted that this use may generally not be compatible with the protective purpose of the nature conservation priority areas. This assessment is in line with the provisions of technical legislation: under Article 5 subsection 3 sentence 2 number 5a WindSeeG, the designation of areas and sites for offshore wind energy in the site development plan is not permitted if they are located in a protected area designated under Article 57 BNatSchG. This does not affect already operating wind farms.

In some areas, priority areas for shipping and priority areas for nature protection overlap. This is harmless, since according to the provisions of UNCLOS to be applied under Section 1 subsection 4 ROG, a restriction of shipping in the EEZ is only possible under the conditions laid down therein, so that there can be no legal conflict of interests. Furthermore, Section 57 subsection 3 number 1 BNatSchG stipulates that restrictions on shipping are not permitted in nature reserves. Furthermore, the priority areas for shipping serve primarily to keep important shipping routes clear of fixed installations and are therefore complementary to the priority areas for nature conservation in their regulatory purpose of preventing accidents.

In those areas in which the nature conservation priority area overlaps with reservation areas for sand and gravel extraction, raw material extraction in the existing licence areas will continue to be permissible from a spatial planning perspective, since mining conditions prevail here which cannot be found in comparable circumstances on land. Compliance with the requirements of the applicable nature reserve ordinances remains unaffected.

In areas where priority areas for nature conservation overlap with reservation areas for the extraction of hydrocarbons, the extraction of raw materials is compatible with the respective priority area for nature conservation from a spatial planning perspective. Compliance with the requirements of the applicable nature reserve regulations remains unaffected.

The designation of the nature conservation priority areas also supports MSFD environmental objective 3 "Oceans without deterioration of marine species and habitats due to the impact of human activities".

Re (2) Reservation area divers:

The main distribution area of the divers - defined in the "Position paper of the Federal Environment Ministry's division for the cumulative assessment of diver habitat loss due to offshore wind farms" (2009) - is of outstanding importance from a nature conservation point of view for the protection of the disturbance-sensitive diver species group. When considering the main concentration area of divers, spring is of particular importance because it is critical for the species.

In order to comply with species protection regulations, a significant cumulative impact on this important habitat for divers in the North Sea EEZ is to be avoided. In particular, allowance must be made for the fact that wind turbines will lead to avoidance effects and permanent habitat loss.

The designation of the area reserved for divers also supports the MSFD environmental objective 3 "Oceans without deterioration of marine species and habitats due to the impact of human activities".

Re (3) Reservation area harbour porpoise:

The main concentration area of harbour porpoises in the German North Sea EEZ from May to August, as defined in the Federal Environment Ministry's noise mitigation concept (2013), is of outstanding importance for the protection of harbour porpoises from a nature conservation perspective. Harbour porpoises use the area intensively during the summer months.

The designation of the area in the spatial plan is limited to the season in which harbour porpoises are sensitive to disturbances in the area.

In order to avoid and reduce possible significant cumulative impacts on the harbour porpoise population and to comply with species protection legislation, significant disturbance of this important harbour porpoise habitat in the North Sea EEZ should be avoided. When constructing wind turbines, special attention must be paid at licensing level to the effectiveness of avoidance and mitigation measures, particularly during the sensitive season. This primarily concerns impulse-type sound discharges. The aim is to ensure that sufficient suitable habitats are available to the porpoises at all times.

The designation of a harbour porpoise reservation area also supports the MSFD environmental objective 3 "Oceans without deterioration of marine species and habitats due to the impact of human activities".

Re (4) Reservation area bird migration:

The designation of the "Fehmarn-Lolland Bird Migration Corridor" reservation area takes into account the particular importance of bird migration across the Fehmarn Belt, the so-called flyway.

The designation of the bird migration corridor as a reservation area supports the MSFD environmental objective 3 "Oceans without deterioration of marine species and habitats due to the impact of human activities" and contributes to the implementation of operational objective UZ3-02 "Measures for the protection of migratory species in the marine environment".

Re (5) Preservation of the EEZ as a natural area:

Section 2 subsection 2 number 6 of the ROG formulates principles of spatial planning which are reflected in this principle, adapted to the conditions in the EEZ:

- Nature and landscape, including marine areas, are to be permanently protected, maintained, developed and - where necessary, possible and appropriate - restored.
- Natural resources should be used sparingly and carefully.
- In the case of permanently unused areas, the soil should be maintained or restored to its original state.

In addition, the conservation of biological diversity and the characteristic habitats and functions that determine it is just as much a part of sustainable planning in the sense of the principles of spatial planning under Section 2 subsection 2 number 6 of the ROG and of the ecosystem approach required with its integrated approach as is the consideration of negative cumulative impacts, interactions and exchange relationships.

Re (6) Migratory species:

The passability of marine space for large-scale migration of species is necessary to enable them to reach and use areas of functional importance to them. Therefore, connectivity between functionally relevant areas should be maintained and barrier effects avoided as far as possible. Area designations in the marine environment ensure such passability. Passability also corresponds to environmental objective 3.4 of the MSFD and measure M 3.5 of the North Sea Management Plans, which aims to ensure connectivity between nature protected and areas that are of functional importance to the assets they are protecting.

Re (7) Safeguarding and preserving the marine landscape:

Under Section 2 subsection 2 number of the ROG, open space must be protected; a large-scale, ecologically effective integrated open space system must be created. Further fragmentation of the open landscape is to be avoided as far as possible; land use in the open space is to be limited.

The planning principle which puts this into practice is essentially aimed at preserving the character of the North Sea EEZ as a large open space.

Against this background, large parts of the EEZ are kept free of area designations for uses that may affect the open space. In addition to the priority areas for shipping, the priority areas for nature conservation also contribute to safeguarding open space because uses incompatible with nature conservation are excluded in them. Economic uses are to be implemented in a way that minimises the use of space (cf. principle (2) of economic use of space under 2.2.1).

2.5 Other issues to be considered

2.5.1 National and NATO defence

Principles

- (1) The spatial requirements of defence and civil defence must be considered by taking into account security aspects in the sense of ensuring the functional capability of the Bundeswehr in the context of spatially significant economic and scientific planning and measures. This applies, in particular, to the following military exercise areas, which are shown for information in Figure 32 and 19 in the Appendix: Defence

In the North Sea:

- North Sea artillery range,
- Torpedo firing range NW-Helgoland,
- Submarine exercise areas (Alfa, Bravo, Charlie, Delta),
- Weser submarine exercise area,
- (Air) hazard areas above sea level (ED-D 44, ED-D 46, ED-D 41 A).

In the Baltic Sea:

- Western Baltic Artillery Shooting Range,
- Artillery firing ranges Pomeranian Bay,
- Troll submarine exercise area,
- Walkyria submarine exercise area,
- NATO submarine exercise areas (Bravo 2, Bravo 3, Bravo 4),
- Artillery shooting range West of Bornholm,
- Military (air) hazard areas above sea level (ED-D 47 A, ED-D 47 B, ES-D 140, ED-D 19 A, ED-D 19 B). (P)

Justification

Justification of the principles

Re (1) Defence:

Military exercise areas are necessary to ensure the Bundeswehr's continuing ability to function. The areas designated at the time the plan was drawn up were adopted for information. The construction and operation of offshore wind turbines, platforms and submarine cable systems should not impair the security of national and NATO defence. Defence concerns are taken into account accordingly when selecting sites for offshore infrastructure and the routing of cables. A distinction must be made between military training areas where military activities take place underwater, on

the water surface or in airspace. This is particularly important given that exercise areas include large areas and all connecting gates for cables between the territorial sea and the EEZ.

2.5.2 Air traffic

Principles

- | | | |
|-----|---|-------------|
| (1) | The spatial requirements of air traffic should be taken into account by as far as possible avoiding impairment of the safety and smooth flow of air traffic caused by economic and scientific uses. (P) | Air traffic |
|-----|---|-------------|

Justification

Justification of the principles

Re (1) Air traffic:

On the one hand, installations in the EEZ, in particular wind turbines, act as obstacles to aviation; on the other hand, additional aviation-specific requirements arise, in particular due to air traffic that results from offshore wind farms.

Therefore, the planning and implementation of economic and scientific activities should take into account the requirements of safe air transport which also serves these activities, including SAR air traffic, but also requirements to maintain the safety and ease of air traffic in the airspace over the EEZ.

2.5.3 Recreation

Principles

- | | | |
|-----|--|---------------------------------------|
| (1) | The spatial requirements of recreational and waterborne traffic should be taken into account by as far as possible avoiding any adverse effects resulting from economic and scientific uses. (P) | Recreational and water sports traffic |
|-----|--|---------------------------------------|

Justification

Recreational boat traffic and commercial fishing tourism in the EEZ are subject to the rules of the Convention on the Law of the Sea. Where, for reasons of installation safety, the navigability of areas is restricted within the scope of the offshore wind farm's licence, exemptions, which are also applicable to recreational and water sports traffic, can only be regulated as general rulings of the Federal Waterways and Shipping Administration.

*Justification of the principles**Re (1) Recreational and water sports traffic:*

Recreational use in the EEZ is generally associated with the use of recreational and sports boats. Economic and scientific uses which may lead to a restriction of use by recreational and sports boats should take this into account in planning and implementation.

The installation of wind turbines in the designated areas for wind energy will reduce the space available for general navigation and, as a consequence, vessel traffic will be concentrated in particular in the routes between the different areas reserved for this purpose. In order to allow the passage of smaller vehicles less than 24 metres in length through wind farm areas and to avoid detours through more busy shipping lanes, wind farm planning should take into account requirements for safe passage and the needs of recreational and water sports traffic.

3 Appendix

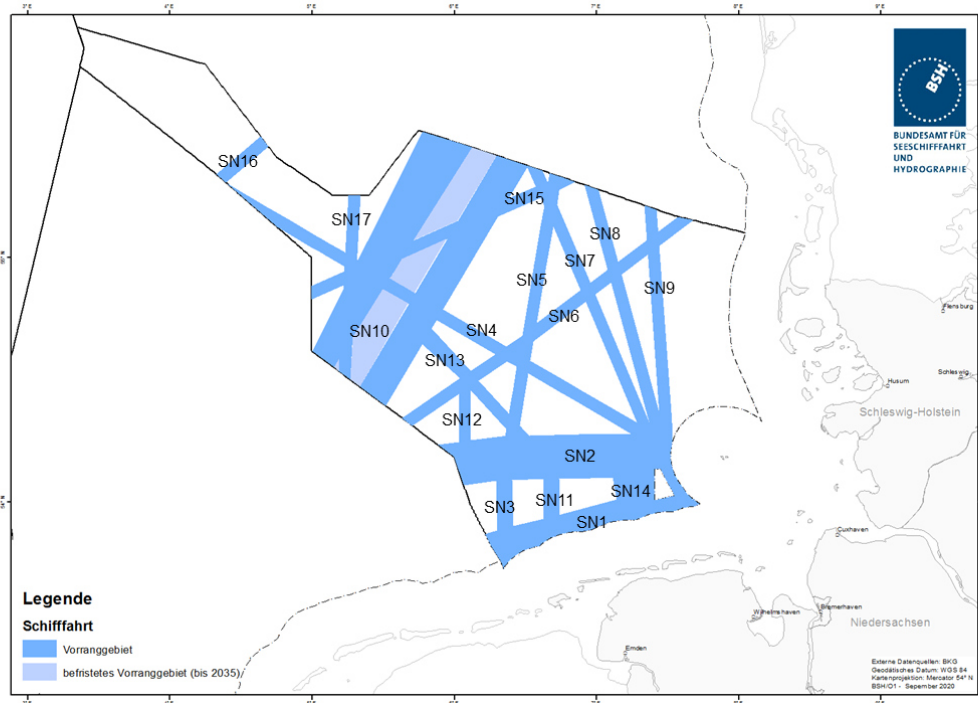


Figure 12: Designations for shipping in the North Sea.

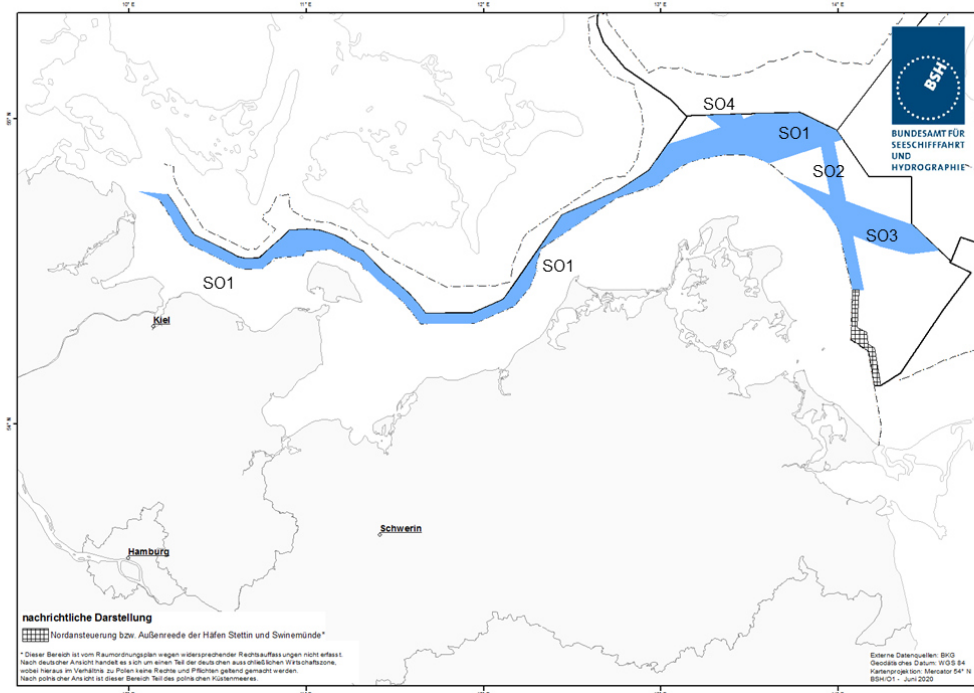


Figure 34: Designations for shipping in the Baltic Sea.

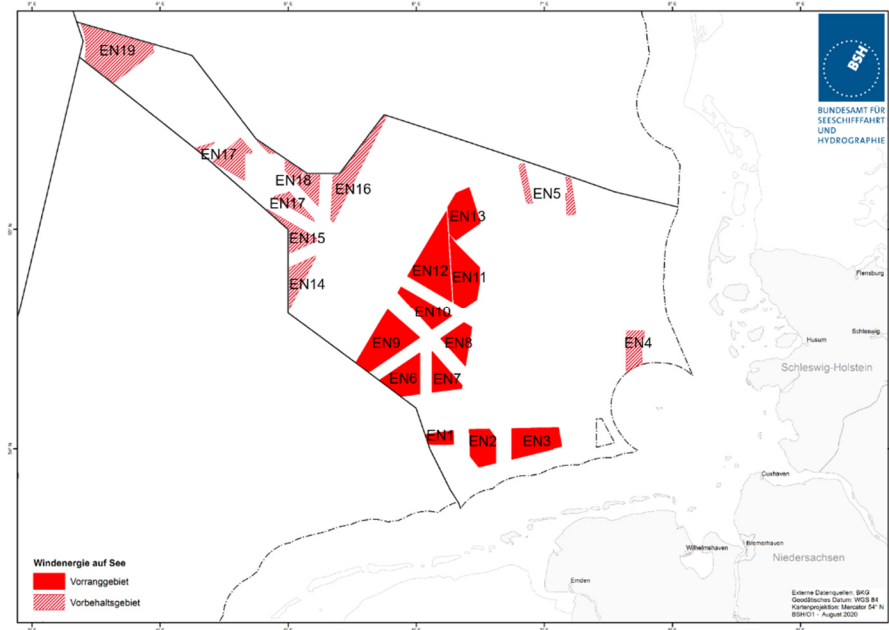


Figure 56: Designations for offshore wind energy in the North Sea.

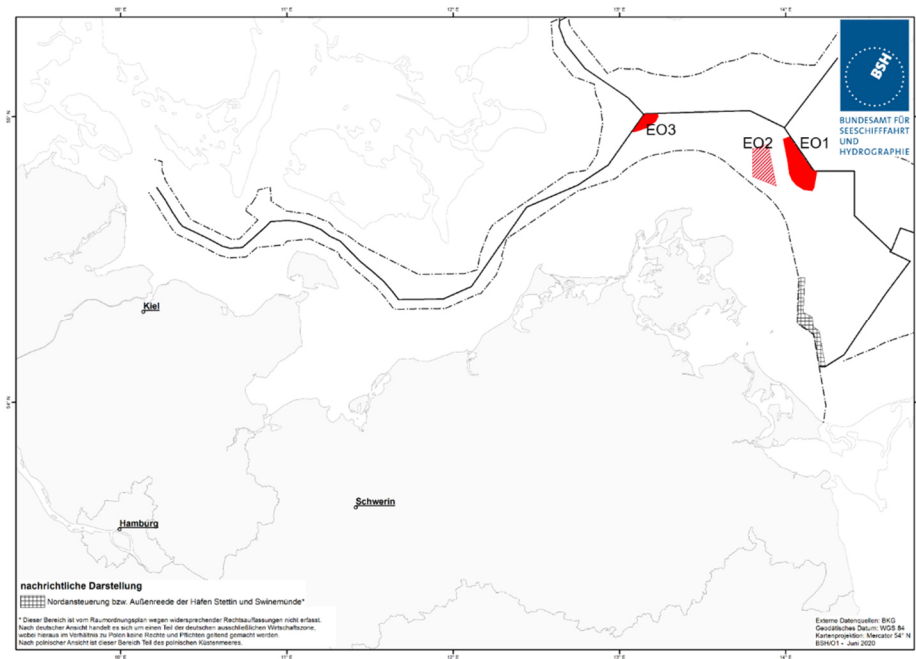


Figure 78: Designations for offshore wind energy in the Baltic Sea.

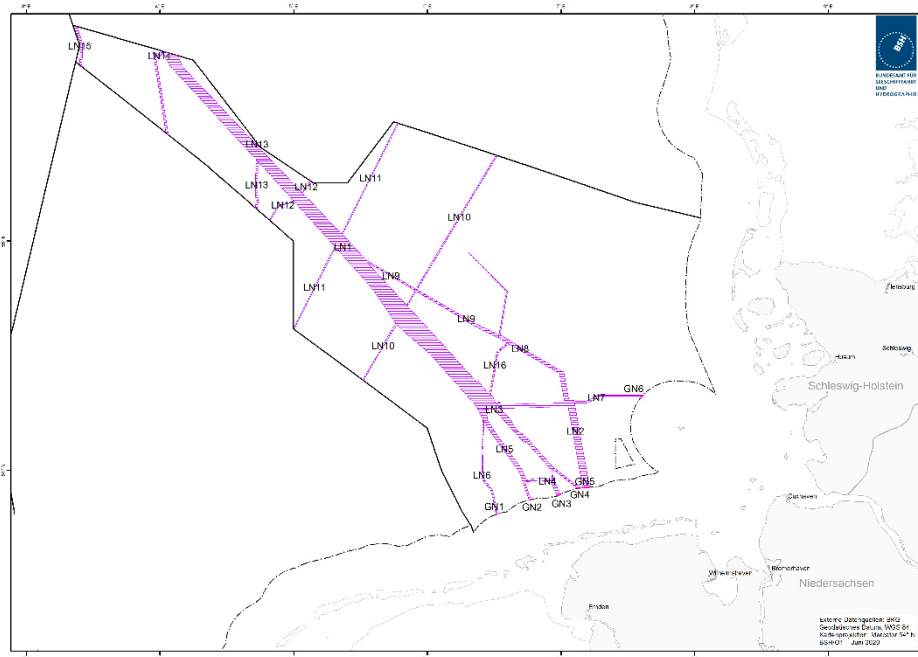


Figure 910: Designations for submarine cables and connecting gates in the North Sea.

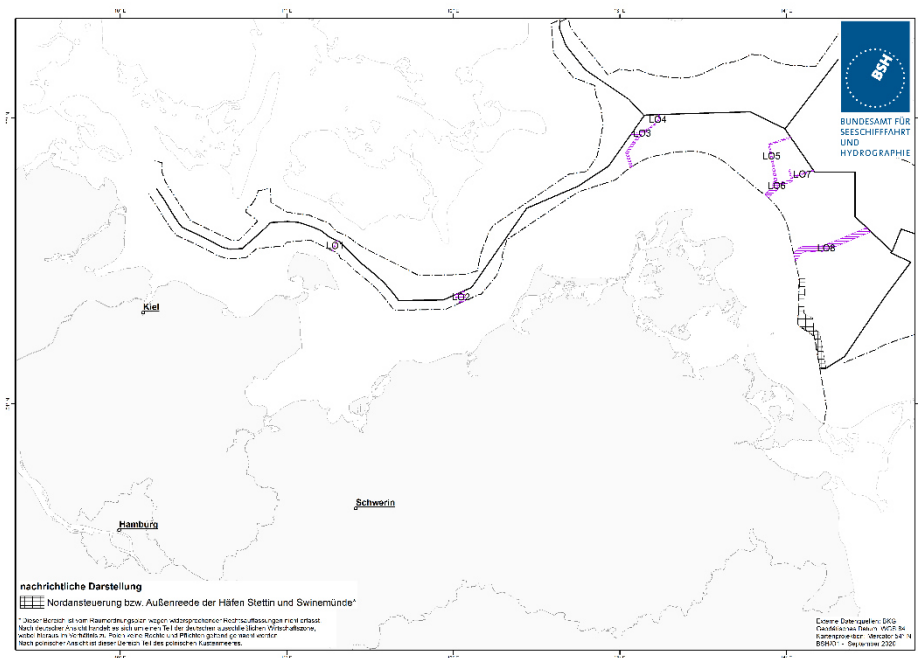


Figure 1112: Designations for submarine cables and connecting gates in the Baltic Sea.

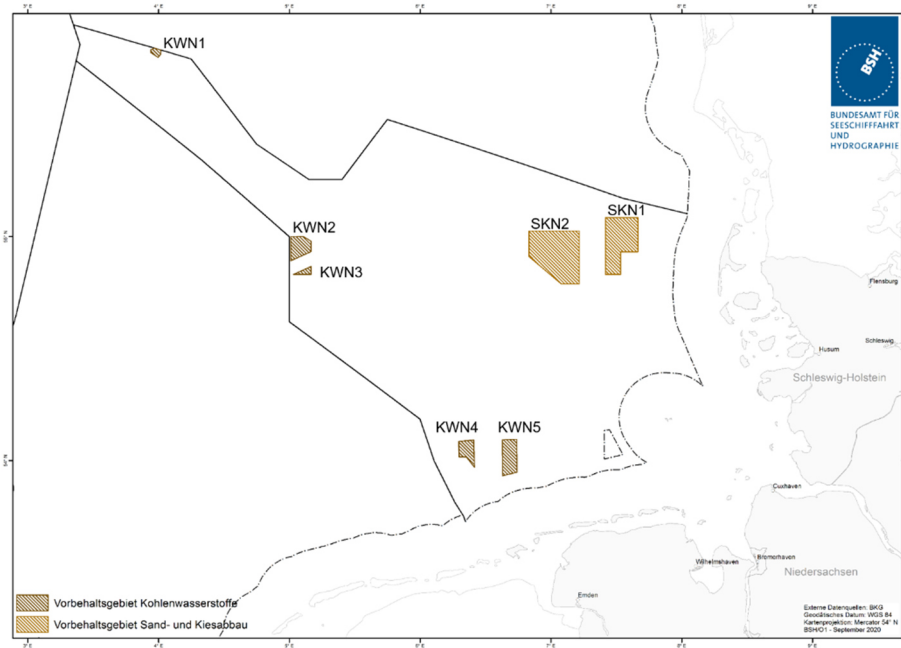


Figure 1314: Designations for raw material extraction in the North Sea.

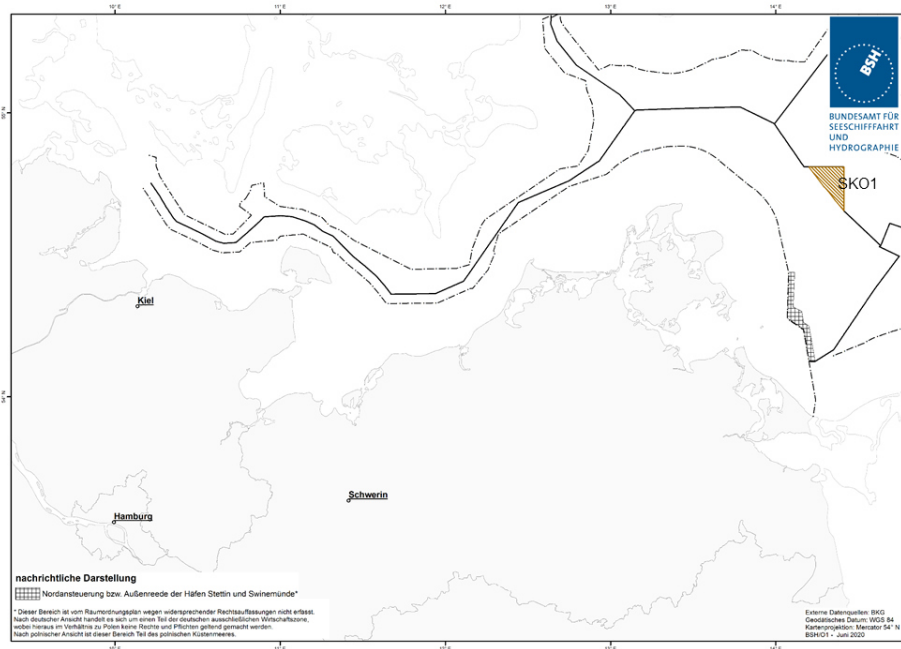


Figure 1516: Designations for raw material extraction in the Baltic Sea.

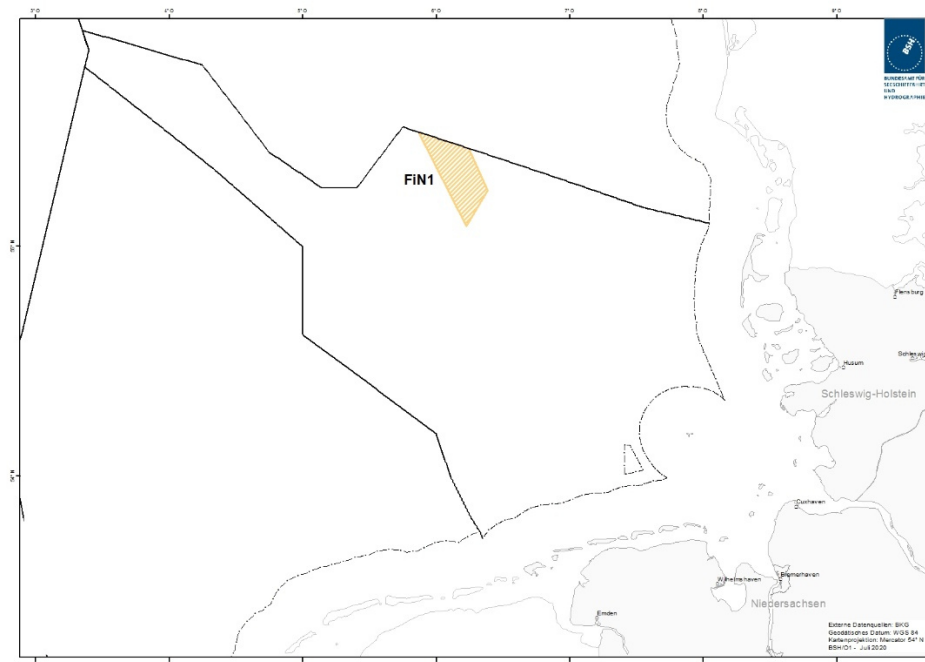


Figure 1718: Designations for Norway lobster fisheries in the North Sea.

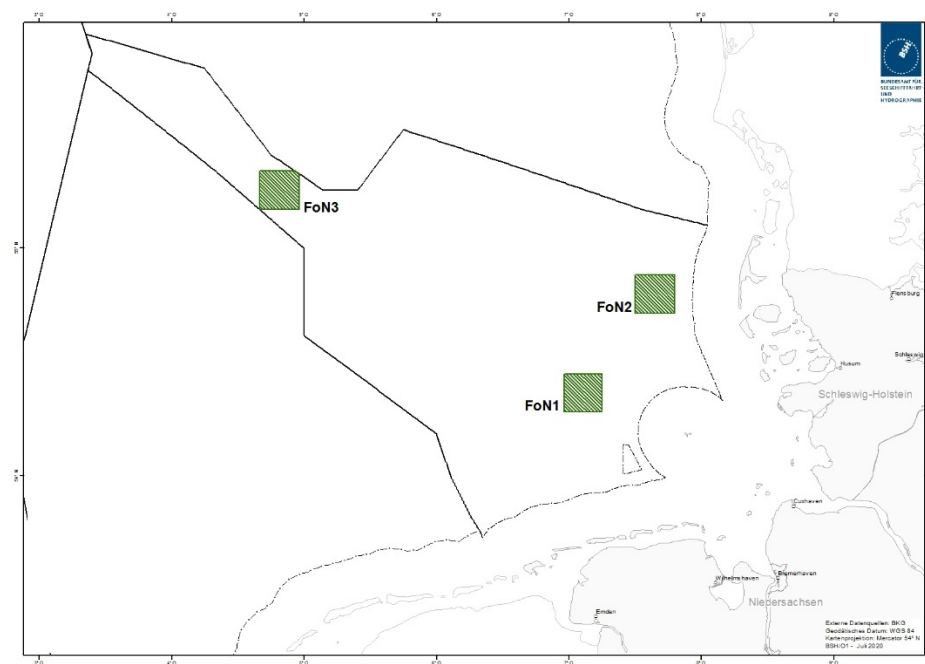


Figure 1920: Designations for research in the North Sea.

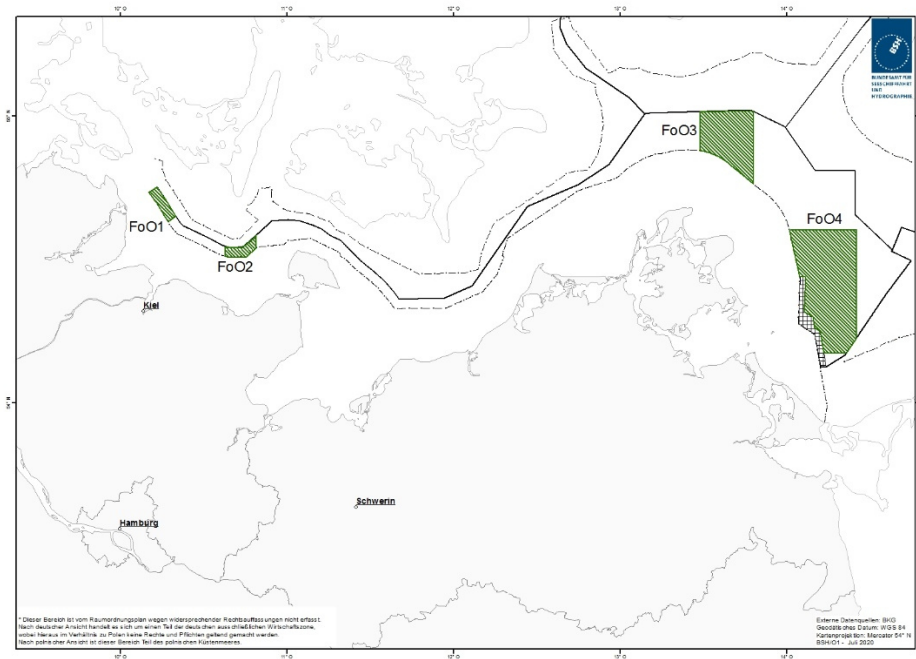


Figure 2122: Designations for research in the Baltic Sea.

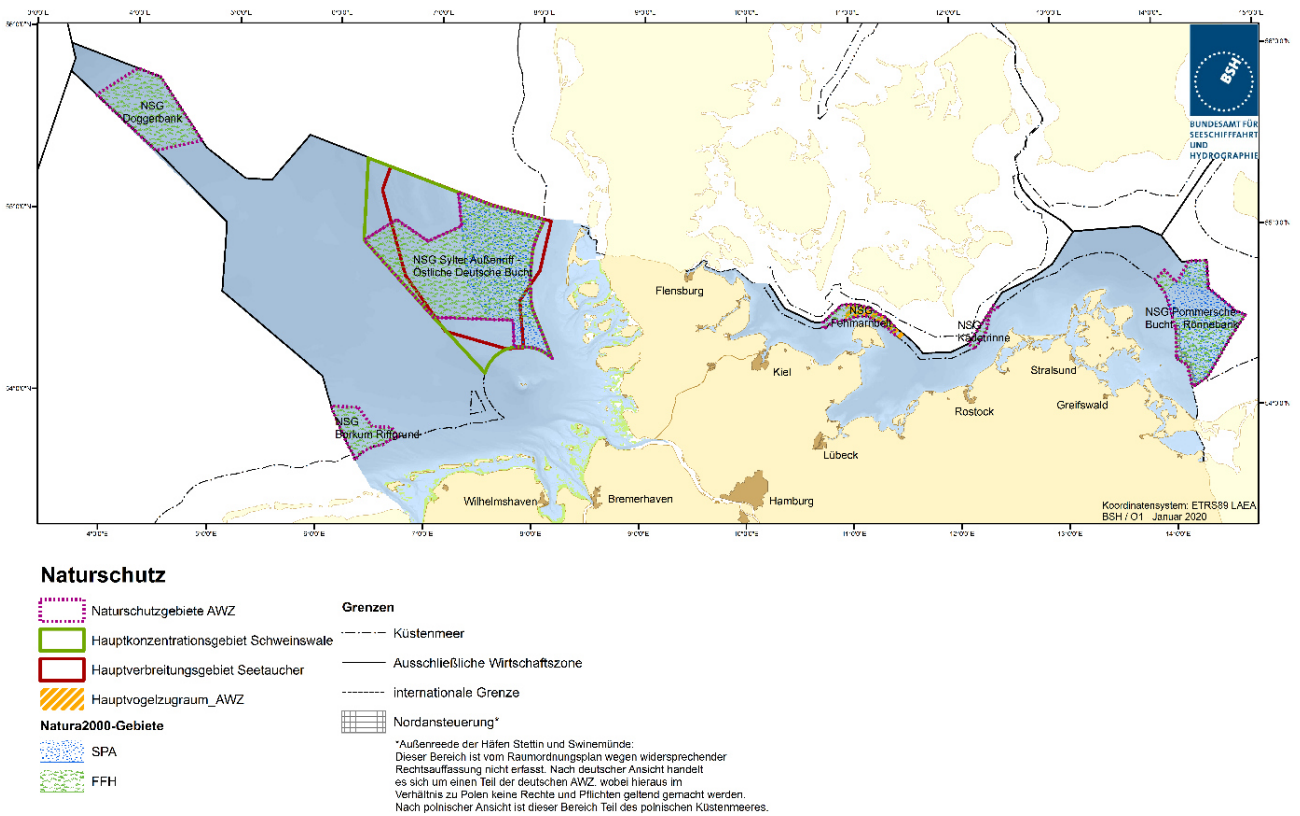


Figure 23: Explanatory map on nature conservation.



Figure 24: Designations for nature conservation priority areas in the North Sea.

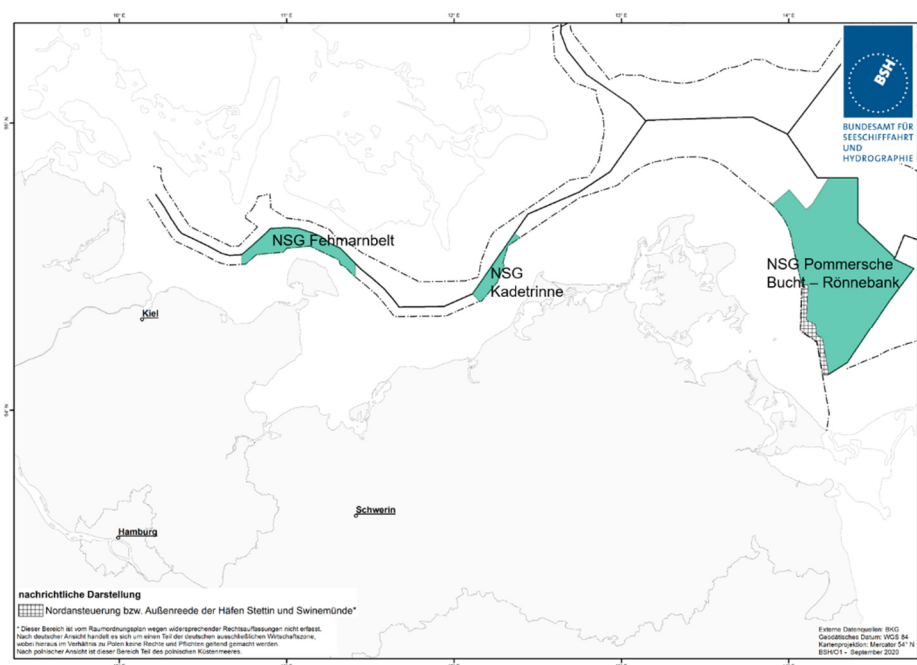


Figure 25: Designations for nature conservation priority areas for in the Baltic Sea.

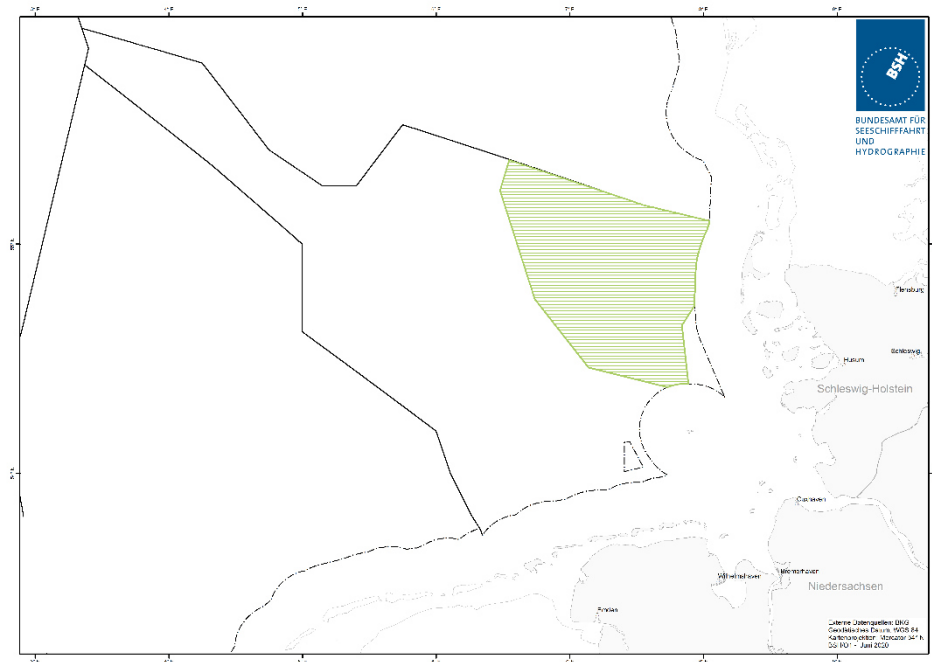


Figure 2627: Designation for divers in the North Sea.

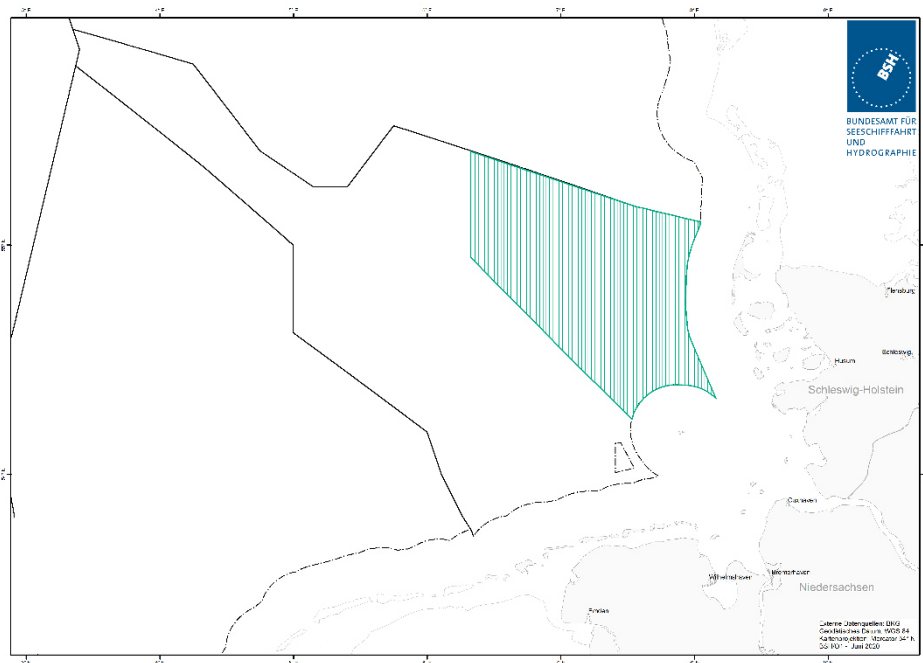


Figure 2829: Designation for harbour porpoises in the North Sea.

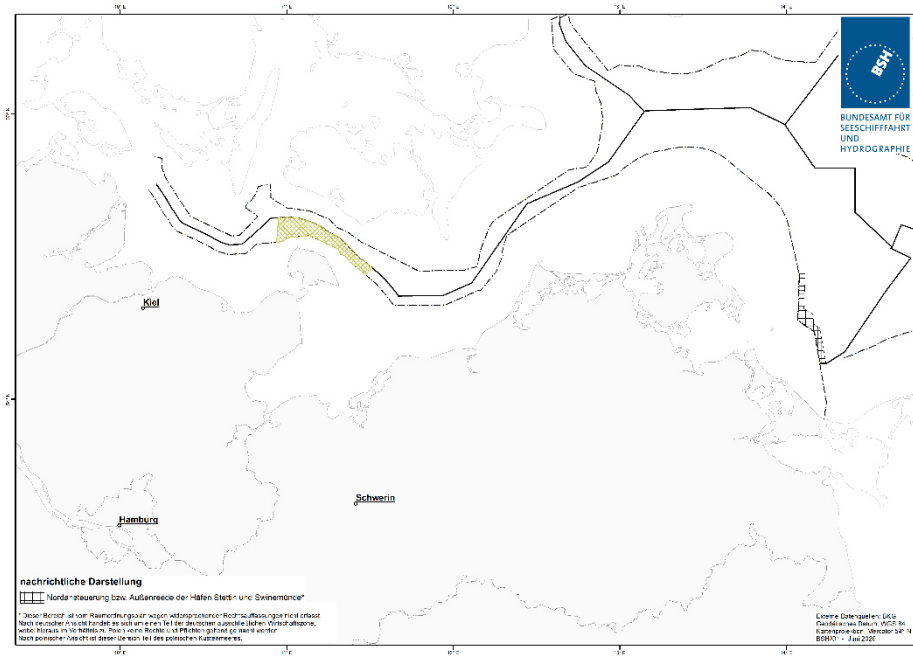


Figure 3031: Designation for "Fehmarn-Lolland" bird migration in the Baltic Sea.

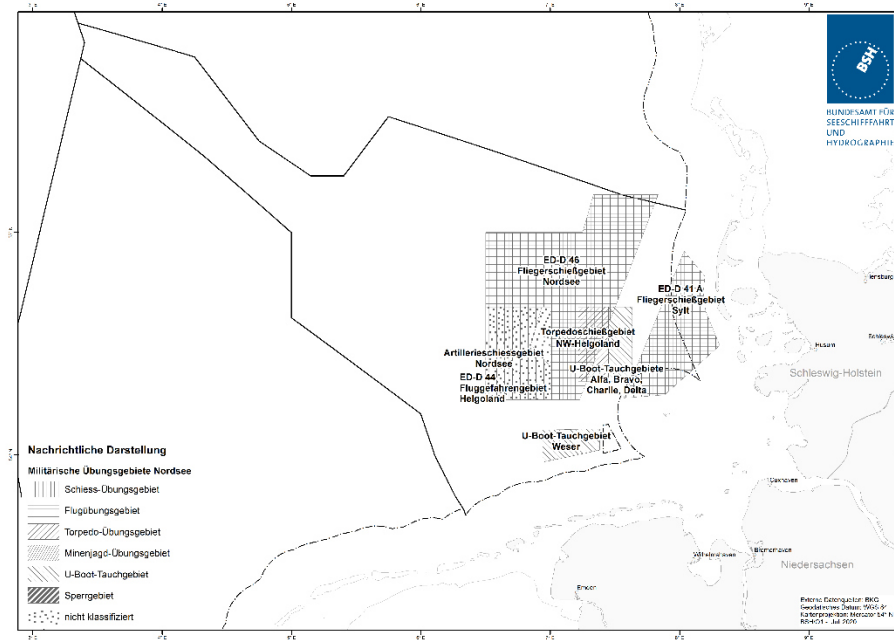


Figure 3233: Military training areas in the North Sea

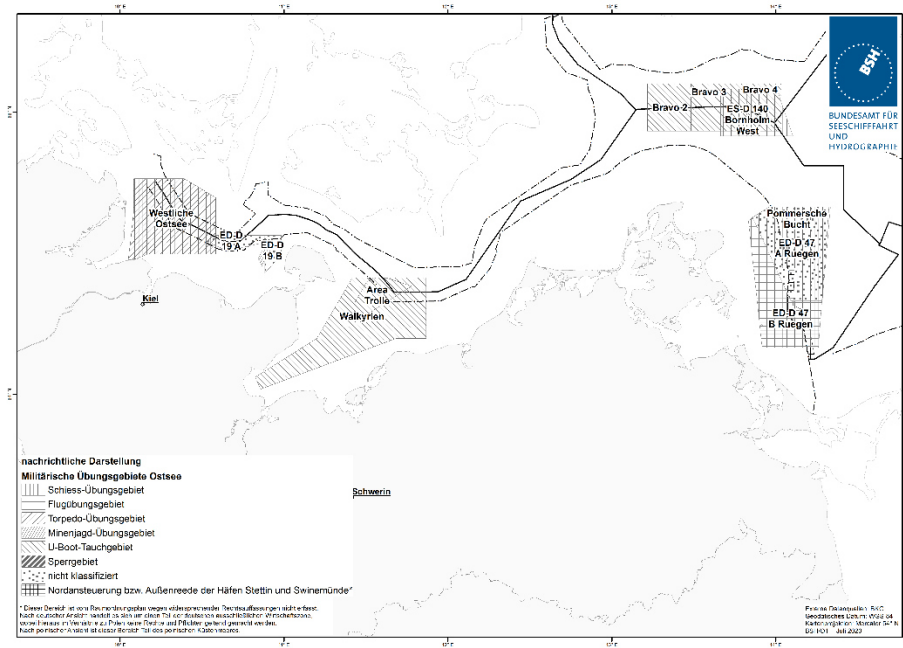


Figure 3435: Military training areas in the Baltic Sea