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State of Conservation

Wadden Sea World Heritage Site

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Task Group World Heritage (TG-WH)



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Preface

The World Heritage Committee’s Decision 45COM 7B.23 expresses concerns about different human activities within, near, or beneath the transboundary World Heritage Site “The Wadden Sea”, including gas, oil, and salt extraction as well as infrastructure for renewable energy and their potential cumulative effects that should be addressed in a joint Strategic Environmental Assessment. Therefore, the States Parties of Denmark, Germany, and the Netherlands received various requests which are addressed in this report as a joint answer of the three States Parties, organised within the Trilateral Governmental Cooperation on the Protection of the Wadden Sea, in short Trilateral Wadden Sea Cooperation (TWSC).

Additionally, with letter CLT/WHC/EUR/23/14506 from 31 October 2023, the States Parties were requested to use the compulsory format for the submission of state of conservation reports by the States Parties (Operational Guidelines, Annex 13). In the same letter, the States Parties were strongly encouraged to consider Decisions 45 COM 7.1 and 45 COM 7.2 addressing general conservation issues.

This report responds to the requests in the World Heritage’s Committee Decision 45COM 7B.23 and summarises the most recent developments concerning the state of conservation and factors affecting the property, building upon information submitted in the nomination dossiers of 2008 (Dutch-German nomination), 2010 (minor boundary modification), 2013 (extension Denmark and Germany), the state of conservation report prepared by the States Parties in 2016, communications between the World Heritage Centre and the States Parties in accordance with para. 172 and 174 of the Operational Guidelines between 2017-2023, the Wilhelmshaven Declaration (2023), the Wadden Sea Plan (2010), the SIMP Integrated Management Plan for ONE Wadden Sea World Heritage (2023), the results from the Wadden Sea Quality Status Report 2016, 2019-2023, and on additional information received during consultation.

In addition, the three States Parties remain active in the implementation of other related international policies and conventions that add to the management system of the Wadden Sea World Heritage Site. This includes the Sustainable Development Goals of the Agenda 2030 for Sustainable Development, the Kunming-Montreal Global Biodiversity Framework, and the Climate Action for World Heritage.

The process of developing the SOC

Shortly after the 45th World Heritage Committee meeting (10-25 September 2023), the trilateral Task Group World Heritage met and discussed possibilities to follow up on requests in Decision 45COM 7B.23. A temporary *ad hoc* group was formed to gain insight and form an idea on the development of a joint Strategic Environmental Assessment. The work of these groups led to a proposal concerning the response to the Decision 45COM 7B.23 requests. This proposal was agreed upon during the Wadden Sea Board 42 meeting (23 November 2023). On 6 December 2023, the full draft SOC report was backed by the TG-WH for stakeholder consultation.

Consultation took place between 6 December 2023 and 19 January 2024. It involved the trilateral level of the Wadden Sea Team of environmental NGOs, who contributed with comments and statements to the draft SOC report. Additionally, the group of NGOs informed the TWSC about their communication to the World Heritage Centre from 18 December 2023¹. The national consultation process, organised by each of the countries as far as appropriate and in accordance with their governance structures, involved:

In Denmark, the Regional Round Table (Det Rådgivende Udvalg For Vadehavet), consisting of multiple Wadden Sea stakeholders, representing both public authorities as well as non-governmental organisations, has been consulted in the writing process of the SOC report. The Danish Minister of the Environment and Minister of Culture was informed about the SOC report.

In Germany, the National Park Advisory Boards received the draft version of the SOC report for information, with the opportunity to provide comments. Advisory Boards are representatives from the regional and local governments as well as regional stakeholders concerned with commercial, recreational, and environmental interests and of scientific institutions. The federal ministry of environment and the respective ministries of the three federal states (Länder) were involved.

In the Netherlands, two working groups were formed for consultation of the SOC: one including all government layers in the Wadden Sea Region, which led to an agreement in the Policy Board; the second working group included the various ministries which led to an agreement on the headlines of the response by the full council of ministers in the Netherlands. Parliament was informed and given the possibility to steer on the content of the reply. The advisory board (Omgevingsberaad) consisting of economic stakeholders, NGOs and knowledge institutes received the draft version of the SOC report and provided comments.

This report was endorsed by the Wadden Sea Board.

¹ Third party communication ref WV/WvdH/TP/23075: World Heritage Wadden Sea in danger? 18 December 2023 received by UNESCO's World Heritage Centre.

1. Executive summary

The State of Conservation Report 2024 provides information at the requests of the World Heritage Committee in Decision 45COM 7B.23, Wadden Sea (Denmark, Germany, Netherlands) (N 1314ter).

Regarding the request (3) to adopt a precautionary and strategic approach to the management of the property and to clarify longer-term projections on climate change, the States Parties provide information regarding the latest trilateral strategies and policies aimed at improving management: the Climate Change Adaptation Strategy, The Integrated Management Plan for ONE Wadden Sea World Heritage (The SIMP) and the Governmental Council Declaration of the 14th Trilateral Governmental Conference on the Protection of the Wadden Sea, Wilhelmshaven Declaration 2023 (WD 2023). The work of the trilateral Expert Group Climate Change Adaptation, as well as periodic Wadden Sea Quality Status Reports on coastal risk management and climate change, support the analysis of climate change projections and the integration of climate change adaptation in management (Chapter 2.1).

The Report also addresses the requests (4, 13a) regarding extractive activities focussing on oil, gas, and salt mining. The States Parties inform the World Heritage Centre (WHC) that they have reconfirmed their agreement to prohibit construction of wind turbines, oil and gas exploration, and exploitation and construction of new installations for oil and gas within the property (WD 2023). Exploitation in the vicinity of the property takes place following the best possible methods to protect the Wadden Sea ecosystem and safeguard its Outstanding Universal Value (OUV) and integrity (Chapter 2.2).

A legislative proposal in the Netherlands to stop the issuing of permits for salt and gas extraction under the Wadden Sea World Heritage property will be sent to Parliament in 2024 (request 5). The WHC will be informed as soon as a decision has been taken regarding the gas extraction permit for the Ternaard gas development, together with a detailed response regarding the assessment of environmental impacts on the OUV of the property (request 6). The GEMS project for gas extraction is located 20 km off the World Heritage Site boundary and therefore extractive activities are not extended below the property by the latter (request 8).

The models used by the Dutch approach to monitor gas and salt extraction, the so-called “hand on tap” system (Box 1), are periodically updated with the latest sea level rise projections, natural sedimentation estimations, and subsidence, and are further adjusted by field monitoring measurements. Accounting for uncertainties, and in line with a precautionary approach, conservative scenarios are applied. Additionally, the effectiveness evaluation of the “hand on tap” as a policy instrument by an independent scientific advisory board concluded that, so far, it has been sufficient to protect the Wadden Sea World Heritage Site. Implementing the recommendations from the evaluation, such as paying more attention to uncertainties, long-term projections and increasing the frequency of improving the

models, is on course (requests 3 and 7).

Regarding the concerns that future sediment accretion might be insufficient to offset sea level rise in the basin of Vlie due to salt extraction, the results of a scientific study are expected by 2024. Additionally, the operators are to submit an update of their production plan from 2015, including a new strategy to minimize seabed subsidence after abandonment (request 10).

Concerning the application of Wintershall Dea GmbH for extending their existing oil production field southwards, Wintershall Dea’s response to a hearing into a draft rejection notice is currently being evaluated (request 8 and 9).

The expansion of offshore energy transmission grids and pipelines is crucial for achieving the EU’s renewable energy targets and climate change mitigation goals. In the North Sea, projects and plans are increasing in number and density and are to be further upscaled and accelerated to reach the ambitious goals. Trilateral agreements to mitigate as much as possible the impacts of submarine high-voltage power cables and pipelines crossing the World Heritage Site are anchored in the WD 2023 as well as in The SIMP and the Wadden Sea Plan 2010. In this line, the PAWOZ Programme in the Netherlands aims at finding the most feasible and preferable routes. The Strategic Environmental Assessment (SEA) that is being prepared in the framework of the Programme will explicitly address the OUV (request 11). The State of Conservation Report also includes information regarding grid development planning in Denmark and Germany (Chapter 2.3).

The construction of new wind turbines is not allowed within the property, as stated in the WSP 2010 and reconfirmed in the WD 2023. The States Parties will recommend that competent authorities engaged in planning and approval of wind energy projects apply the new Guidance for Wind Energy Projects in a World Heritage Context in the framework of the mandatory impact assessment procedures, to support decision-making and make the respective outcome a recognisable part of the justification for the plan or approval decision (request 12). This report also includes information regarding wind energy projects in the vicinity of the Wadden Sea World Heritage Site (Chapter 2.4).

Current permitting procedures in the three countries strictly follow EU and national law, which also covers the aspect of potential adverse impacts including cumulative effects. Based on EU and national law, putting permitting procedures on hold while developing the joint strategic environmental assessment (SEA) might not be possible in all cases (request 13b and c). Effects on planned activities and economic and legal consequences need to be considered (Chapter 2.5).

Regarding the request for conducting a joint SEA (request 13b), the States Parties acknowledge the need to continue developing knowledge on cumulative and combined effects of both climate change and human use. The States Parties think that the best way to developing a joint SEA is to base it on nationally implemented EU legislation. EU legislation considers the cumulative nature of impacts, as well as covering the requirements of the Guidance and Toolkit for Impact Assessments in a World Heritage Context. This task will

build methodologically on environmental assessments established in planning and approval procedures in the three states, following the requirement to refer to the OUV. The States Parties propose a three-step process which is described in Chapter 2.6.

Other current conservation issues which may have an impact on the OUV are presented in Table 2 of this Report. These are grouped by the SIMP key topics and other general issues and cover the time period since the 2016 SOC report (Chapter 3).

Developments or projects which may affect the OUV of the property, to be reported in conformity with paragraph 172 of the Operational Guidelines, will be referred to the ongoing communication with UNESCO (Chapter 4).

2. Response to the Decision 45COM 7B.23

2.1 Precautionary and strategic management approach including long-term climate change projections (Decision para. 3)

3. “*Welcomes the development of the ‘Agenda for the Wadden Sea Region 2050’ in 2021 and the adoption of the ‘Single Integrated Management Plan’ (SIMP) for the transboundary property in 2023 and strongly encourages the States Parties of Denmark, Germany and the Netherlands to adopt a precautionary and strategic approach to the management of the property, including to clarify longer-term projections based on the latest scientific climate change data for the Wadden Sea;*”

Trilateral policy instruments and organisational structures are in place in the Wadden Sea to support the analysis of climate projections and the integration of climate change adaptation into management. All Wadden Sea countries observe the effects of climate change through targeted monitoring (e.g., of sea level rise and natural sedimentation) and have regional climate change mitigation and adaptation strategies in place, which are revised regularly.

The Wadden Sea Plan 2010 already recognised climate change as a relevant theme for the Wadden Sea and, therefore, the trilateral strategy on increasing adaptability to its effects was developed. In the 2016 SOC report, the States Parties shared with WHC the trilateral Climate Change Adaptation Strategy (CCAS, included in Annex 4 of the 2016 SOC report). In The SIMP, climate change is taken up as a cross-cutting aspect aiming at supporting ongoing trilateral efforts. An overview of the trilateral policy instruments and structure to integrate climate change adaptation in management is provided below. A compilation of national instruments can be found in Annex 3 to this report.

The SIMP

The SIMP Integrated Management Plan for ONE Wadden Sea World Heritage² (SIMP 2023, Annex 2) is an overarching, trilateral strategy that facilitates a strategic, proactive, and collaborative transboundary management approach to maintaining the Outstanding Universal Value (OUV) and addresses the various pressures identified, including potential cumulative impacts. The SIMP, as an umbrella plan, supplements existing plans and strategies, in particular the Wadden Sea Plan 2010, and presents overarching information on how the Trilateral Cooperation is organised. It highlights five key topics (prioritised urgent threats) that need to be addressed at a trilateral level and shows how the TWSC is addressing the overarching effects of climate change as a cross cutting issue.

The SIMP includes proposals for management activities for climate change adaptation based

² <https://www.waddensea-worldheritage.org/simp>

on the work of the trilateral Expert Group Climate Adaptation (EG-C) and on the trilateral CCAS. Among the proposed activities are:

- Facilitate trilateral knowledge exchange and interdisciplinary discussions about the cumulative and combined effects of both climate change and human use to advise permitting procedures;
- Improve communication on OUV key values and climate change effects on the ability of the Wadden Sea to deliver ecosystem services in relation to economic, social, and cultural values;

The Trilateral Cooperation continuously stresses the imperative of climate mitigation measures, such as CO₂ emission reduction, and repeatedly refers to the Paris Agreement of the United Nations Framework Convention on Climate Change of 2016 in their governmental council declarations, including the recent Wilhelmshaven Declaration 2023. The three Wadden Sea countries signed the Paris Agreement and work on mitigation of climate change. The TWSC agreed to:

- “Support the global and national efforts to mitigate causes of climate change at the regional level, by calling especially upon local and regional competent authorities and stakeholders” (Sylt Declaration 2010). CO₂ emission reduction policies and plans are at the national levels and include transition to renewable energy.
- Explore and emphasise the potential of typical Wadden Sea habitats as “blue carbon” ecosystems to contribute to natural CO₂ sequestration (e.g. saltmarshes, sediments), while taking into account anthropogenic pressures possibly impacting these processes (see SIMP, Chapter 4. Climate change vulnerability and adaptation).

The Wilhelmshaven Declaration

With the recent Trilateral Governmental Council Declaration on the protection of the Wadden Sea, the Wilhelmshaven Declaration³ (WD, 2023, Annex 2), the States Parties have set the political aims of the Trilateral Wadden Sea Cooperation for the upcoming period (2023-2026). They agreed, among others, to enhance the resilience of the Wadden Sea ecosystem and World Heritage property to impacts of the manifold challenges arising from the triple crises of climate change, biodiversity loss, and pollution. Now the States Parties are working to implement the agreements. In the chapter “Mitigate and adapt to Climate Change” (paras. 38-43), the ministers recognise and support initiatives to reduce greenhouse gas emissions and decarbonisation, focussing on the energy, traffic, and tourism sectors. The ministers instructed the Wadden Sea Board (WSB) to continue implementing the trilateral Climate Change Adaptation Strategy (CCAS, Annex 4, Tønder Declaration 2014), update it if needed, and to enhance and facilitate regular professional exchange on coastal flood defence and protection. Further, to promote investigations and stimulate appropriate initiatives on how Nature-Based Solutions for climate change adaptation can integrate coastal protection and water management with nature conservation goals (WD §§ 31, 40, 41).

³ <https://www.waddensea-worldheritage.org/2023-wilhelmshaven-declaration>

Trilateral Climate Change Adaptation Strategy

The permanent trilateral working group monitors and stimulates the implementation of the trilateral CCAS, updates priorities, and provides recommendations for trilateral policies and projects based on the latest scientific climate change data and projections, supporting adaptive management. The expert group stimulates trilateral exchange of knowledge on the effects of climate change with respect to the morphology and ecology of the Wadden Sea and possible adaptation measures. It also contributes to the Trilateral Monitoring and Assessment Programme and thematic reports on geomorphology (addressing, among others, criterion viii), coastal risk management, and climate change of the Quality Status Report (QSR).

Wadden Sea Quality Status Reports

The thematic report on Climate Change was last published in 2017; a new assessment is in progress and is expected to be released in 2024. The thematic report contains a comprehensive overview on the trilateral level of the status and trends in greenhouse gases, weather and climate, hydrodynamics, morphodynamics, and biodiversity (including invasive species and ecosystems as well as human activities). The report gives research-based recommendations for monitoring, further research, and management. The QSR recommendations represent scientific advice to the Trilateral Governmental Council (formed by the responsible ministers of the participating governments) about priority issues that need further attention.

2.2 Natural resource extraction below the property, including a map (Decision paras. 4 and 13a)

4. Reiterates its position that extractive activities are incompatible with World Heritage status, and considers that natural resource extraction below the property has the potential to adversely impact its Outstanding Universal Value (OUV);

Developments since the 2016 SOC report regarding extractive activities have been addressed in communications with WHC in conformity with paragraphs 172 and 174 of the Operational Guidelines. The further WHC requests are addressed in the following text organised by gas, salt, and oil extraction, including an overview on Maps 1 and 2.

The States Parties, in the recent Governmental Council Declaration, the Wilhelmshaven Declaration (WD 2023, Annex 2):

“§ 28. Reconfirm the existing trilateral agreement that prohibits the construction of wind turbines, oil and gas exploration, and exploitation and construction of new installations for oil and gas within the boundaries of the Wadden Sea World Heritage Site;”

The Nomination Dossier 2008 contains information on gas and oil fields below the property

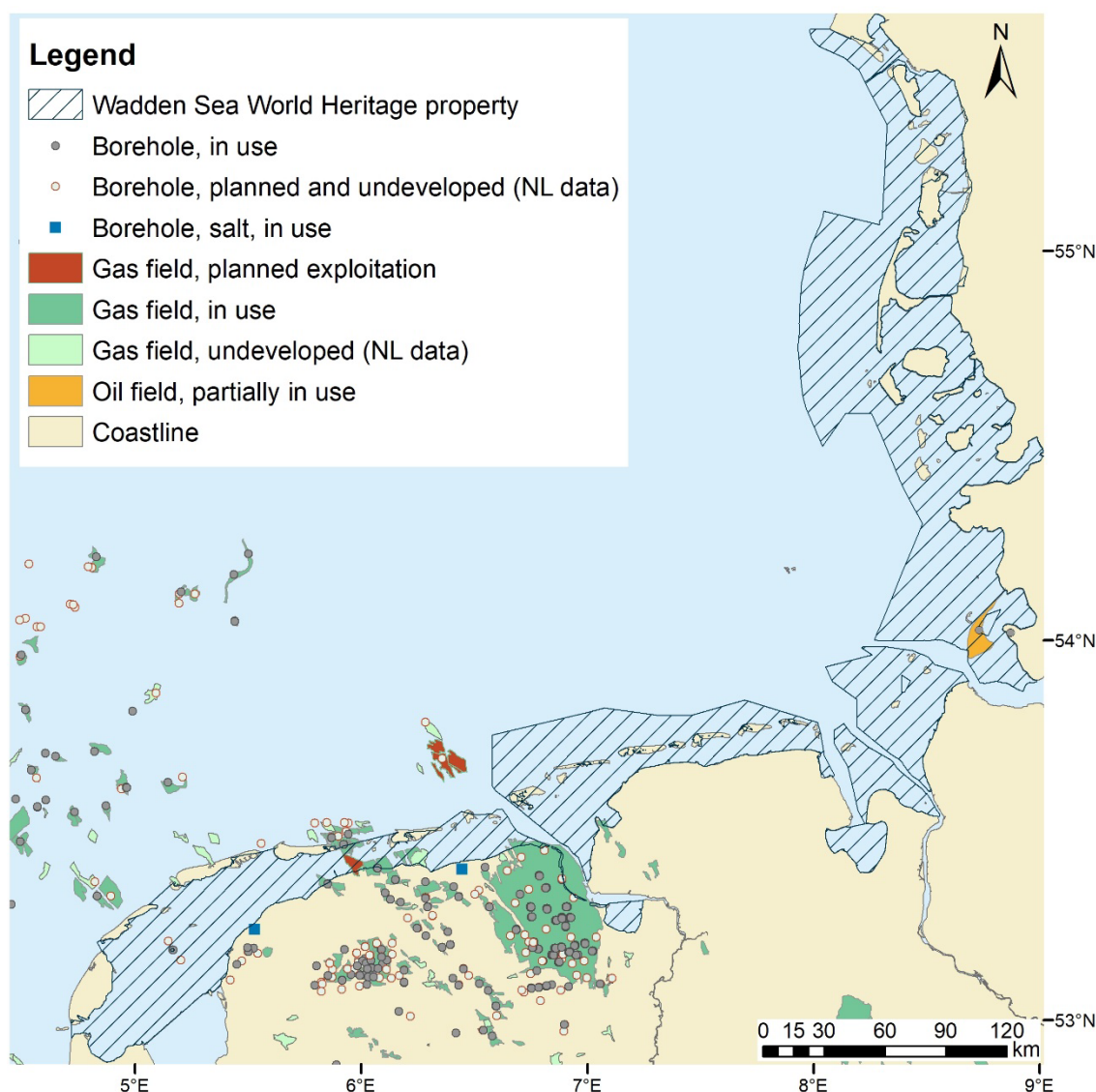
and how they are explored and exploited. With Supplementary Information February 2009, Appendix 5 Integrity, the States Parties confirmed their commitment not to explore and extract oil and gas at locations within the revised boundaries of the nominated property in line with law in force. Therefore, exploration and exploitation are only permitted from sites outside the property. Project permits need to be regarded following strict regulations and in accordance with binding international and national mining and nature conservation legislation. Legislation in all three countries protects the Wadden Sea ecosystem and safeguards its OUV and integrity by generally prohibiting negative effects.

Overview of existing and planned extractive activities on the map

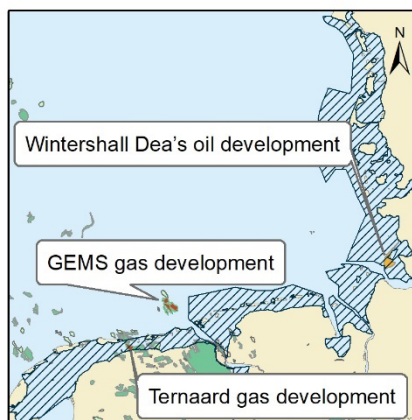
13. Further notes the multiple existing and/or proposed extraction and infrastructure developments within and around the property, and further requests the three States Parties to:

a) Provide to the World Heritage Centre and IUCN an overview of all existing and planned extractive activities within and around the property, with appropriate maps,

Map 1 provides an overview of existing and planned gas, oil, and salt mining activities below and around the property with the respective bore holes. In line with the trilateral agreement prohibiting the construction of installations for oil and gas in the World Heritage property (Nom. Dossier 2008, Wilhelmshaven Declaration 2023), exploration and exploitation is only permitted from sites outside the property. Boreholes in use (see Map 1) are situated outside or in exclaves excluded from the World Heritage property.



Map 1. Operative and planned gas, oil, and salt extraction. Gas fields planned for exploitation are under permitting process; gas fields in use are currently under extraction (for Lower Saxony, fields delimitation is according to geological demarcation; for the Lower Saxon Wadden Sea area, currently there are no permits issued under German law (§§ 7, 8 BBergG) that allow the exploration or extraction of mineral resources); gas fields undeveloped are shown in the Netherlands and Lower Saxony (production license granted) since these might start the process of obtaining drilling permits; oil field partially in use shows the reservoir that is in parts under extraction; salt boreholes in use currently under extraction. The exact coordinates of the salt fields where production takes place were not available for this report, but from the location Harlingen they are below the Wadden Sea. Borehole symbols on the map do not indicate their surface extent. Data sources: NIBIS® MAPSERVER Landesamt für Bergbau, Energie und Geologie (<https://nibis.lbeg.de/cardomap3/?lang=en>), NLOG Dutch Oil and Gas portal (<https://www.nlog.nl/en/welcome-nlog>), LKN-SH, ONE-Dyas B.V., and CWSS (map servers include further information).



Map 2. Labels indicating the location of the specific extractive activities with WHC requests.

2.2.1 Gas (Decision paras. 5, 6, and 8)

5. Also welcomes the confirmation by the State Party of the Netherlands that no new gas extraction permits will be issued in the Wadden Sea, but notes with serious concern the approval of a new salt extraction project and the ongoing consideration of a proposed gas development at Ternaard, in the vicinity of the property, which would extend extractive activities below the property;

6. Notes with further concern that, in the Environmental Impact Assessment (EIA) process, the State Party of the Netherlands has not undertaken a comprehensive assessment of the potential impacts of the proposed Ternaard gas extraction project on the OUV of the property when, based on information available, it would appear that the project has direct negative impacts on the OUV of the property, and therefore urges the State Party not to approve the project;

8. Also notes with serious concern the Wintershall Dea's oil development, which is currently being considered by the State Party of Germany, and appears to be located inside the property, as well as the GEMS gas development located close to the boundary of the property;

In accordance with the agreements under the World Heritage Convention, the States Parties are making every effort to protect and preserve the OUV of the UNESCO Wadden Sea World Heritage Site. This means that activities in the Wadden Sea and below the seabed may only take place if there is reasonable assurance that no significant damage will occur to the unique and vulnerable natural environment.

New permits for gas and salt extraction under the Wadden Sea

The government of the Netherlands no longer wants to issue new permits for gas and salt extraction under the Wadden Sea and has drafted a legislative proposal to deny new permits. The proposal went through public consultation (from 14 July to 25 August 2023). An updated legislative proposal will be presented to parliament in 2024.

Update on procedure for the gas extraction permit in Ternaard

The Dutch Government announced on 10 January 2022, in the “Coalition Agreement” and a letter to the parliament⁴, that the procedure for the gas extraction permit in Ternaard will be completed by applying the relevant mining and nature legislation. The WHC will be informed as soon as a final decision on the proposed Ternaard gas extraction project is taken. This communication will include an in-depth response to the concerns expressed in the Decision’s para. 6 and the IUCN evaluation. It is to be noted that local governments and the Wadden Sea Area Stakeholder platform oppose the gas exploration from Ternaard. In a recent legal procedure, it was ruled that a final decision on Ternaard has to be taken before 1 April 2024. See location of Ternaard on Map 2.

The GEMS gas development

The GEMS (Gateway to the Ems) project encompasses gas fields in the Dutch and German parts of the North Sea, outside the World Heritage Site. The project aims mainly at developing field NO5-A, which is located over 20 kilometres off the World Heritage Site boundary (see location on Map 2). The North Sea is about twenty-five metres deep at this location, and the gas field itself lies about four kilometres deep in the subsurface⁵. Legal proceedings are pending in the Netherlands. Information was sent to WHC on 7 February 2023 in response to the letter Ref: CLT/WHC/EUR/22/13887. Additionally, the exact location on a map (with the respective ESRI shapefiles) was sent to the WHC in communication ref. L23-77 on 10 August 2023.

Box 1

Evaluation of the ‘hand on tap’ system (Decision para. 3 and 7)

The ‘hand on tap’ is an approach used in the Netherlands to monitor salt as well as gas extraction. The entire ‘hand on tap’ consists of an abiotic and a biotic component. The abiotic component is based on models that consider natural sedimentation, subsidence, and climate change projections on sea level rise. Subsidence and sea level rise (both cause a deepening of the Wadden Sea) have to be balanced by a minimum natural sedimentation rate. This ensures that no effects will occur in the Wadden Sea. Additionally, the biotic component considers the entire ecosystem and consists of monitoring activities to ensure that the natural values of the Wadden Sea are not affected. If an effect on the ecosystem is detected which is due to the mining, the activities will be adjusted or halted. The estimations used in the models are updated periodically as soon as new data is available and conservative estimates are used. Thus, the latest scientific climate change knowledge is included in the decision for granting permits for mining activities which take place deep in the subsurface, and a precautionary approach is used.

Additionally, in 2020/2021 a reassessment took place of the effectiveness of the ‘hand on tap’ as a

⁴ Kamerbrief Contourennota aanpassing Mijnbouwwet of 20 January 2023 (Tweede Kamer 32849 nr. 214)

⁵ <https://www.gemsnorthsea.co.uk/gems-project/>

policy instrument. The following text provides an overview on the main uncertainties and how they are addressed by periodical updates, as well as the overarching outcome of the evaluation of the ‘hand on tap’ as a policy instrument.

Natural sedimentation uncertainties

Natural sedimentation cannot be measured accurately due to the natural dynamic interactions between wind, water, and sand that characterise the Wadden Sea (outstanding geological processes, criterion viii). The natural degree of sediment accumulation, known as “growth capacity”, is measured over time, but a detailed forecast is almost impossible. Therefore, conservative estimates are used in the ‘hand on tap’ as a precautionary measure.

In 2021, the Ministry of Economic Affairs and Climate Policy asked Deltares (an independent knowledge institute) to evaluate natural sedimentation rates in the tidal basins of the Dutch Wadden Sea, taking into account the imbalance caused by the Afsluitdijk dyke built in 1933. Deltares improved the prediction models ASMITA and Delft3D for natural sedimentation rates, as well as for morphological changes within the tidal basins due to relative sea level rise and subsidence due to gas and salt production. The final report is expected in 2024, including a note on the subsidence capacity for the tidal basin of Vlie where salt extraction is taking place and concerns were expressed regarding potential insufficient sedimentation to compensate for sea level rise in the long term.

Sea level rise rates uncertainties

For the ‘hand on tap’ system, the Ministry of Economic Affairs and Climate Policy makes a forecast on expected sea level rise every five years, based on scientific advice. Since different methods exist for calculating the average rise per year from measured water levels, different estimates have been calculated for the Dutch Wadden Sea.

With the publication of the IPCC AR6 report and the Climate Signal Report from the Dutch Meteorological Institute ‘KNMI klimaatsignaal’ in 2021⁶, the Ministry of Economic Affairs and Climate Policy requested a group of experts (KNMI, TNO, Deltares, University of Utrecht) to update the last scenario calculated in 2020. The new calculation was within the range of the sea level rise of 2.4 ± 1.5 mm/year considered in 2020 and, hence, at that time a new scenario was not necessary.

New estimations of sea level rise were provided by KNMI in 2022⁷ considering the latest data and a wind correction arrived at 3.3 mm per year until 2026. In 2023, the results from the last quadrennial report of the Dutch Sea Level Monitor ‘Zeespiegelmonitor’⁸ concluded that the average annual rise over the last 30 years was of 2.9 ± 0.4 mm/year (which is higher than the 2020 estimation but within the standard deviation). On further request from the Ministry for advice on which estimate to use, the State Supervision of Mines recommended applying the estimate of 3.3 mm per year as a policy scenario until 2026. After 2026, sea levels are expected to rise at an increasing rate, influenced by greenhouse gas emissions and climate development. Therefore, for the years following 2026, a guideline scenario is suggested based on expectations for global greenhouse gas emissions, ranging

⁶ <https://www.knmi.nl/kennis-en-datacentrum/achtergrond/knmi-klimaatsignaal-21>

⁷ <https://egusphere.copernicus.org/preprints/2022/egusphere-2022-935/egusphere-2022-935.pdf>

⁸ <https://www.deltares.nl/expertise/onze-expertises/zeespiegelstijging/zeespiegelmonitor>

between 4.8 and 7.6 mm per year. Choosing RCP2-4.5 would result in a 6.4 mm/year scenario.

With a current sea level rise of 3.3 mm/year, no production reductions would be necessary for gas or salt production within the ‘hand on tap’. The current subsidence rates within the ‘hand on tap’ for the tidal basins of Pinkegat, Zoutkamperlaag, Vlie, and Marsdiep, are 1.43, 0.73, 0.34, and 0.03 mm/year respectively; these are well within the bounds of the “acceptable subsidence”⁹ limit of 6, 5.5, and 5 mm/year respectively.

Ground subsidence

Subsidence is measured periodically in some places and continuously in other (e.g., Harlingen salt mining area). It is to be noted that subsidence happens over time, not all at once; therefore, companies are required to report field measurements annually based on a measurement plan. Royal Netherlands Institute for Sea Research (NIOZ, in their 2023 publication on the changes on the quality of tidal mudflats due to gas extraction¹⁰) suggests that long-term research is needed, including measurements before any extraction takes place, to obtain more accurate data on subsidence considering variables such as soil composition and soil life.

Reassessment of the effectiveness of ‘hand on tap’ as a policy instrument

The reassessment was requested by the Dutch parliament to the Ministry of Economic Affairs and Climate Policy. An independent advisory board (Advisory Board, also known as Independent Scientific Advisory Board - ISAB) composed of the Technical University Delft, the University of Utrecht, Deltares, NIOZ, and the Dutch Geological Survey (TNO) was specifically installed for this reassessment. The Advisory Board further sought input from, among others, the Dutch UNESCO Commission, the State Supervision of the Mines, and the Royal Netherlands Meteorological Institute.

The Advisory Board concluded on 8 January 2021 (letter to parliament on 28 June 2021¹¹) that the ‘hand on tap’ system has been sufficient to date to protect the Wadden Sea World Heritage Site. They add:

“Looking ahead, however, a better analysis of longer-term uncertainties is desirable, especially where expected sea level rise and natural sedimentation are concerned. The uncertainties in subsidence due to mineral extraction are, in the opinion of the Advisory Board, already sufficiently taken into account. The Advisory Board believes that the current interpretation is sufficient until a new version of the ‘hand on tap’ principle can be formulated. This means that the current interpretation is sufficient for the time being and that the Advisory Board is of the opinion that the Wadden Sea is adequately protected at the moment as regards the currently permitted gas and salt extraction.

At the same time, the Advisory Board points to uncertainties that lead to the conclusion that some effects of economic co-use in the Wadden Sea can never be completely ruled out, whereby, moreover, there could possibly be cumulation. For the broad nature quality of the Wadden Sea, this touches on

⁹ Acceptable subsidence: As long as measurements and forecasts, combined with the expected sea level rise, remain below the established growth capacity, harmful effects are virtually excluded.

¹⁰ <https://www.nioz.nl/en/news/quality-of-tidal-mudflats-changes-in-gas-extraction-area-of-wadden-sea>

¹¹ https://www.tweedekamer.nl/kamerstukken/brieven_regering/detail?id=2021Z12034&did=2021D26021

a complex issue concerning the carrying capacity of nature in the Wadden Sea. The minister of LNV therefore wants to pay more explicit attention to uncertainties and the application of the precautionary principle when assessing the substantiation of permit applications. This from the point of view of safeguarding the natural quality of UNESCO World Heritage Wadden Sea.”

Among the recommendations provided by the Advisory Board in the evaluation of the ‘hand on tap’ system are, in addition to the five-yearly update of the relative sea level rise scenarios, to conduct yearly evaluations of sea level rise and to improve the integration of uncertainties regarding sea level rise and natural sedimentation. The Advisory Board further recommends investigating how an improved ‘hand on tap’ methodology can be developed and applied, considering the long-term uncertainties.

Furthermore, the ‘hand on tap’ monitoring results are assessed by independent audit commissions operating under the Dutch Commission for the Environmental Impact Assessments. The Audit Committees gas and salt extraction give advice to the Ministry of Economic Affairs and Climate Policy and the Ministry of LNV for adequate monitoring of all relevant parameters and inclusion of latest developments, and thus testing whether mineral extraction has remained within the scope of use. Monitoring plans include effects on the sandbanks, the dry flat area, but also on soil life, and birds that depend on it for rest and food. Additionally, State Supervision of Mines monitors the extraction and the measurement plans of the mining operators. The Audit Committees recently concluded regarding gas extraction activities¹² and the salt extraction¹³ that monitoring results are of good quality and they support the conclusions from the operators that no negative effect on nature takes place. The Audit Committees do recommend giving more attention to the speed of sea level rise.

Therefore, in June 2023, the Ministry of Economic Affairs and Climate Policy published a letter to parliament indicating the need for a new sea level rise scenario for the ‘hand on tap’ system. The Ministry further asked the group of experts formed by KNMI, TU Delft, NIOZ, Deltares, TNO, and University of Utrecht to advise on the short term (next five years) and long term (up to the end of gas production) sea level rise for the Dutch part of the Wadden Sea as input for the ‘hand on tap’. This advice is expected at the beginning of 2024 and will likely lead to a change in the sea level rise scenario in the ‘hand on tap’ in early 2024.

¹² <https://www.commissierner.nl/adviezen/3731>

¹³ <https://www.commissierner.nl/adviezen/3746>

2.2.2 Salt (Decision paras. 5, 7, and 10)

5. Also welcomes the confirmation by the State Party of the Netherlands that no new gas extraction permits will be issued in the Wadden Sea, but notes with serious concern the approval of a new salt extraction project and the ongoing consideration of a proposed gas development at Ternaard, in the vicinity of the property, which would extend extractive activities below the property;

7. Requests the State Party of the Netherlands not to approve further extractive projects, in line with the precautionary principle, to assess whether adaptation of the ‘hand on tap’ monitoring mechanism is required to account for uncertainties linked to climate change, and to consider limiting or halting existing salt extraction activities, as required, to effectively maintain and protect the OUV;

10. Further notes with serious concern the scientific advice from the Independent Scientific Advisory Body (ISAB) established by the State Party of the Netherlands that, as a result of salt mining, there is a reasonable probability that future sediment accretion will be insufficient to offset sea level rise and that the potential for subsidence of the seabed will be prolonged once the mining operation is stopped, and also considers that subsidence of the seabed, especially in the light of projected sea level rise as a result of climate change, could reduce the extent of the tidal flats, which are one of the main attributes of the property’s OUV, and therefore directly result in a significant negative impact on the property’s OUV;

Salt extraction in the Netherlands, like gas extraction, is monitored using the ‘hand on tap’ approach. As presented in Box 1, the models are periodically updated with the latest prediction data and calibrated with field measurements.

Various Dutch scientific studies provide further insight to improve models for long-term predictions of natural sedimentation rates¹⁴. As mentioned above (Box 1), in 2021, the Dutch Ministry of Economic Affairs and Climate Policy asked Deltares to evaluate natural sedimentation rates in the Dutch part of the Wadden Sea to improve the hydro-morphologic numerical models (ASMITA and Delft3D). This evaluation will provide specific information on the basin of Vlie, where the Advisory Board thought there is a chance that there will be insufficient sedimentation to compensate for sea level rise in the long term. The final report is expected in 2024.

Once a salt mining operation is stopped, potential for prolonged subsidence of the ocean floor depends on the technical manner of the abandonment of the mining operation. In 2019, a scientific study was carried out by leading European experts within the Dutch Knowledge Program for the Effects of Mining (KEM)¹⁵. It was concluded that abandonment of salt mining caverns at high pressure might induce a risk of hydraulic fracturing and therefore of leakage from the caverns. However, abandonment at low pressure or a prolonged period of abandonment with temporary mining will lead to more subsidence compared to an

¹⁴ Chen (2021). A new approach to simulate the Ameland inlet’s response to sea level rise and subsidence; Bonenkamp (2023) Long-term morphological modelling of tidal inlet systems: implementing salt marshes in ASMITA. Le Zhang (2021) Modeling long-term morphological development of intertidal flats. Diepeveen (2022) small scale equilibria in tidal basins: a data-analysis and case study in the Ameland inlet.

¹⁵ www.KEMprogramma.nl

abandonment at high pressure without hydraulic fracturing.

The operator must produce salt within an “acceptable subsidence” in the Dutch Wadden Sea; this is calculated based on measurements and forecasts of the growth capacity of the system and subsidence¹⁶. Since subsidence after abandonment depends on the method of abandonment and the technical details (volume of the cavern, pressure and temperature in the cavern, ‘hard’ shut-in, or ‘soft’ shut-in), the operator must take this into account during operation of the salt mine. The operator of salt mines in the Wadden Sea has carried out studies to minimize subsidence after abandonment under supervision of State Supervision of Mines. The report¹⁷ was delivered to State Supervision of Mines in 2021.

In 2024 a new request for a production plan for salt mining has been received by the Dutch Ministry. This is an update of the production plan of 2015, not a new permit, and encompasses the new strategy to minimize subsidence after abandonment.

2.2.3 Oil (Decision paras. 8 and 9)

8. *Also notes with serious concern the Wintershall Dea’s oil development, which is currently being considered by the State Party of Germany, and appears to be located inside the property, as well as the GEMS gas development located close to the boundary of the property;*

9. *Also urges the State Party of Germany not to proceed with any proposed oil exploration inside the property and to conduct a detailed EIA, including an assessment of potential impacts on the OUV of the property, for any oil or gas extraction project that may negatively impact the property, in accordance with the Guidance and Toolkit for Impact Assessments in a World Heritage Context;*

Wintershall Dea’s oil development

The framework for oil production in the Wadden Sea of Schleswig-Holstein is stated in the Nomination Dossier 2008 (p. 62-63) and in the Supplementary Information 2009 (Appendix 5). Oil production occurs at one location in the Wadden Sea of Schleswig-Holstein (See location on Map 2). Concessions were already issued in the 1950s. In the 1999 amendment of the National Park Act, the permit for oil production within the boundaries of the National Park was restricted to the existing exploitation site Mittelplate A. The production license is limited to 2041.

In Schleswig-Holstein, the production site for oil, together with areas in which the concessionaire intended to carry out exploration drillings, have been excluded from the nominated property (see Supplementary Information 2009, Appendix 5, Figure 1, and revised Figure 2.13 Rev.). The concessionaire applied for three exploration drillings in 2011 but recalled the applications in 2018. Considerations have shown that new exploration drillings outside the existing platform Mittelplate A are not permissible within the regulatory

¹⁶ <https://www.sodm.nl/onderwerpen/winning-onder-de-waddenzee>

¹⁷ Havenmond Cavern Abandonment Risks, Analysis and evaluation of scenario-based risks

framework in place. No further applications for oil explorations inside the property are on hand. Therefore, Schleswig-Holstein intends to reduce the area of the existing exclaves to the platform Mittelplate A and its direct surroundings; see also Wilhelmshaven Declaration para. 2 “[...] prepare an application to UNESCO for minor boundary changes of the World Heritage Site, for instance to adjust to morphological changes and close existing exclaves within [the World Heritage Site] as far as possible.”

In October 2019, Wintershall Dea Deutschland GmbH applied for a new oil drilling field approximately 2,000 m below the Wadden Sea National Park. The requested field would border the south-western part of the existing production field and would be exploited via the existing platform Mittelplate A outside of the World Heritage Site (see Map 1). Regarding the application, Wintershall Dea was given a hearing on a draft rejection notice. Wintershall Dea’s response is currently being evaluated.

2.3 Submarine high-voltage power cables and pipelines (Decision para. 11)

11. Further welcomes the decision by the State Party of the Netherlands to carry out additional studies on the proposed routing to connect the planned offshore wind power installation to the mainland, through impact assessments specifically focused on the property’s OUV and including an assessment of the impacts of the potential hydrogen production north of the Wadden Sea and the pipelines to be constructed for delivering the substance to the mainland, and also requests the State Party to submit these assessments to the World Heritage Centre for review by IUCN prior to a final decision on the project;

North Sea wide expansion of offshore energy transmission grids and pipelines

The expansion of offshore energy transmission grids and pipelines is crucial for achieving the EU’s renewable energy targets and climate change mitigation goals. Therefore, plans and projects are increasing in number and density (including in the North Sea) and are to be further upscaled and accelerated to reach the ambitious targets. A key aspect is the proper planning, construction, operation, and maintenance of transmission lines between offshore transformer substations and onshore connection points.

The Esbjerg Declaration¹⁸ (May 2022), signed by the Heads of State of the North Sea coastal states on the occasion of the North Sea Summit II, contains the political intention to develop the North Sea as a "Green Power Plant [...] while promoting balanced co-existence of renewable energy and a healthy marine ecosystem" as a principle, stated by the energy ministers of Denmark, Germany, the Netherlands, and Belgium¹⁹. In their Ostend Declaration²⁰ (April 2023), the energy ministers (including Denmark, Germany, and the

¹⁸ <https://windeurope.org/wp-content/uploads/files/policy/position-papers/the-esbjerg-declaration-north-sea-as-green-power-plant-of-europe.pdf>

¹⁹ <https://windeurope.org/wp-content/uploads/files/policy/position-papers/20220518-Declaration-of-energy-ministers.pdf>

²⁰ <https://www.bmwk.de/Redaktion/DE/Downloads/Energie/ostend-declaration-energy-ministers-north-seas-europes-green-power-plant.html>

Netherlands) reaffirmed in this context that “To this end, renewable energy should serve public interest and public safety while promoting balanced co-existence of renewable energy, biodiversity and environmental protection as well as to contribute to a healthy marine ecosystem.”

Mitigation of potential significant impacts on the OUV

Against this political background, the Wilhelmshaven Declaration (WD 2023, Annex 2) states in the preface that “*Future offshore grid connections and pipelines that need to cross the Wadden Sea will be addressed in a way that their potential impact on the site's Outstanding Universal Value will be mitigated [...]*” and

“**§ 25. Request** the Wadden Sea Board to facilitate exchange and collaboration with the energy sector, competent authorities, including also relevant stakeholders, regarding high voltage power grid connections from offshore wind farms with the intention to avoid, mitigate, and compensate for negative impacts on the Wadden Sea World Heritage Site, with the intention to develop a coordinated spatial strategy beyond 2030, striving to support the long-term expansion targets for offshore wind energy, making it more nature-friendly in line with conservation objectives;

“**§ 26. Urge** the Wadden Sea Board to explore the multi usage of space and how different interests, such as ecological, shipping, energy and economic interests can be combined and specifically to explore, in collaboration with the shipping authorities, the double usage of fairways for both shipping as well as for cables and pipelines with the purpose of mitigating negative ecological impact on some of the most vulnerable and unique elements of the World Heritage Site between islands and shore;”

The agreement presented in the Wadden Sea Plan 2010 is “To concentrate cable crossings through the Wadden Sea within a minimum of cable corridors and a minimum of cables, using the best available techniques, e.g., cables with highest capacity available, and avoiding salt marshes crossing as far as possible, and to communicate regularly on this item in order to use synergies.” This agreed procedure is picked up in The SIMP (2023, Annex 2; 5.4 Key Topic Energy) by promoting trilateral exchange, among others on “[...] optimisation of sensitive routing; laying techniques; cable design; maintenance; size of cables with a view to reducing their number; research on cumulative effects; application of Environmental Impact Assessment (EIA) and Strategic Impact Assessment (SEA) law; and avoidance and mitigation of impacts of new subsea cables and pipelines. This exchange could lead to the development of a common mitigation toolbox and enhanced transboundary coordination of integrated grids and interconnectors, further developing §29 from the Leeuwarden Declaration 2018²¹” and §25 WD.

A second relevant aspect of energy transition are plans for inter-regional grid (interconnectors) and hydrogen pipelines, which are intended to increase European energy

²¹ https://www.waddensea-worldheritage.org/sites/default/files/2018_leeuwarden_declaration.pdf

security. New plans for interconnector cables for the extra-high voltage grid and gas pipelines for the transport of hydrogen are currently at the political planning stage. These cables and pipelines are to connect other North Sea countries with the Wadden Sea countries. Some of these may also cross the Wadden Sea area. The PAWOZ Eemshaven Programme is also investigating possibilities for transferring hydrogen via pipelines. However, specific planning procedures have not yet been initiated.

The trilateral *ad hoc* Working Group Renewable Energy is working on initiatives to support a nature-friendly energy transition, including generating and collating relevant information on the environmental impact of grid connections implementation, operation, maintenance, and on mitigating the potential impacts as much as possible (see Table 2. Energy).

Grid development planning in Denmark

At present, one major electricity cable (the COBRACable link) crosses through the Danish part of the Wadden Sea from Endrup in Denmark to Eemshaven in the Netherlands: <https://www.tennet.eu/projects/cobracable>. WHC was informed by the Parties about the COBRACable in the 2016 SOC report.



In early project stages, the landing site of the Viking Link between Denmark and the United Kingdom was envisioned to pass through the Wadden Sea. However, the site has been moved north and is now well clear of the Wadden Sea (see map, left).

No further plans for cables crossing the Danish Wadden Sea exist.

Grid development planning in Germany

As mentioned in the 2016 SOC report, grid connection projects are also being planned in Germany. The implementation of energy transition has significantly increased in speed and scope due to new political expansion targets for offshore wind energy in the German Exclusive Economic Zone (outside of the World Heritage Site) and will continue to increase in the future. This has an immediate effect on the associated planning for grid connection to the mainland, most of which will cross the World Heritage property.

The planning instruments for grid infrastructure in the German Exclusive Economic Zone seawards of the World Heritage Site is the Site Development Plan²² (SDP) by the Federal Maritime and Hydrographic Agency. A central element of the SDP itself is a strategic environmental assessment (SEA). The German Grid Development Plan (drafted by the

²²https://www.bsh.de/EN/TOPICS/Offshore/Sectoral_planning/Site_development_plan/site_development_plan_node.html, <https://www.netzentwicklungsplan.de/>

transmission system operators and which needs confirmation by the competent federal authority) contains routes for HVDC systems connecting offshore wind farms with the mainland insofar as the grid connection points are defined. Both plans are currently being revised in order to adapt them to the new, higher EU and national expansion targets for offshore wind energy. For the coastal waters (12 NM zone), and thus also the property itself, spatial planning competence lies with the German federal states. Therefore, a corresponding connection planning for route corridors in Lower Saxon territorial waters is currently being drawn up as part of the amendment to the Lower Saxon state spatial planning programme, which is also subject to strategic environmental impact assessment. The newly planned corridors for high voltage submarine cables may run through the property. In the Schleswig-Holstein part of the Wadden Sea, additional offshore high voltage power cables up to a restricted number of grid systems are supposed to pass the World Heritage property bundled via the existing cable corridor only, according to the Spatial Development Plan 2021 of Schleswig-Holstein.

High voltage submarine cable projects have been so far confined to a restricted number of corridors that were identified as being the ones with the least impact on the environment. These corridors will have reached their maximum spatial capacity in the foreseeable future. Additional corridor routings are being developed at present. Appropriate assessments, in accordance with the EU Habitats Directive, are being carried out in the permission procedure. Due to mitigation measures, certain time frames and the best available cable laying techniques and horizontal directional drilling are applied. Although impact assessments for cable corridors include the best possible implementation of avoidance and minimisation measures, the negative impacts on the Wadden Sea ecosystem are likely to cumulate considerably in the planning period up to 2030 and beyond, depending on location, number, voltage, length, and construction time of the cable projects. The environmental compatibility of the additional cable systems defined in the draft grid development plan still has to be demonstrated in the course of planning and authorisation procedures. Furthermore, the aspect of removal or replacement of cable systems will have to be addressed in the planning period beyond 2030, also while considering repowering of offshore wind farms in the EEZ.

The Dutch PAWOZ Eemshaven Programme

The Offshore Wind Connection Programme (PAWOZ) - Eemshaven investigates the most feasible and preferable routes for cables and pipelines from wind farms in the North Sea to the Eemshaven area. Each of the possible routes will have to cross the Wadden Sea World Heritage Site. The Ministry of Economic Affairs and Climate Policy is currently undertaking a strategic environmental assessment (SEA) to support the programme’s decision-making.

The Dutch Government informed the WHC about this process in letters dated 20 January 2022, 18 May 2022, and 13 April 2023:

In the letter of 18 May 2022, the publication of the draft scoping document for this SEA (directly translated from Dutch: the “memorandum on the scope and level of detail” or NRD) was announced. This publication signalled the start of formal public participation in the scoping phase of the SEA. The letter from 13 April 2023 informed the WHC that the scoping phase had been completed, the input received had been addressed, and that the memorandum on the scope and level of detail of the SEA had been finalised and approved by the minister²³.

The memorandum on scope and level of detail contains a description of how the OUV of the Wadden Sea will be assessed in the SEA for the PAWOZ Eemshaven Programme (p. 66). In summary, the effects on OUV will be derived from the effects on nature, morphology, and landscape. These will be described in a separate note, as an appendix of the SEA. UNESCO’s Guidance and Toolkit for Impact Assessments will be used in the assessment. The Guidance for Wind Energy Projects in a World Heritage Context will be considered as well.

Due to the urgent need for mitigating and reducing CO₂ emissions, the integration of wind production in the North Sea with the Dutch energy grid needs to be taken up with the highest priority while safeguarding the OUV. The Dutch Government welcomes the input to the PAWOZ Eemshaven Programme’s SEA process by means of a IUCN technical review. The WHC will be notified when the draft SEA is published (expected in the second half of 2024). Continuing the PAWOZ Eemshaven Programme as planned is a key priority for the Dutch Government.

Formal adoption of the PAWOZ Programme is expected before the end of 2024. After this, assuming suitable routes have been identified, the Ministry will direct the relevant Transmission System Operator (TSO) to commence project development. During the project’s development, each route will be further detailed and permit applications submitted. A more detailed project-level EIA is also expected to be conducted and will be shared with the WHC. This procedure is expected to take approximately two years before the installation of cables and/or pipelines can start.

Please note that planning of the production of hydrogen in the North Sea is not included in the PAWOZ Eemshaven Programme as this Programme is limited to the Dutch pipeline and cable connections. The impacts of hydrogen production will therefore not be addressed in the SEA for the PAWOZ Eemshaven Programme. Also note that although hydrogen production is expected to take place in the North Sea it will not be in the proximity of the Wadden Sea.

²³ <https://www.rvo.nl/onderwerpen/bureau-energieprojecten/lopende-projecten/pawoz#notitie-reikwijdte-en-detailniveau>

2.4 Wind energy projects in the vicinity of the property (Decision para. 12)

12. Notes the numerous existing and proposed wind energy projects in the vicinity of the property and encourages the States Parties to use the online Guidance for Wind Energy Projects in a World Heritage Context when planning and assessing their impacts and taking proactive measures for the protection and preservation of the property’s OUV;

The new UNESCO guidance is considered a helpful tool to assist competent authorities engaged in the planning and approval of wind energy projects and key actors involved in the protection of the Wadden Sea World Heritage Site, to be applied in the context of EU and national environmental law. Although it also addresses cultural sites and also focuses on other World Heritage OUV criteria, it is recommended that competent authorities integrate it into the mandatory impact assessment procedures, to support decision-making and make the respective outcome a recognisable part of the justification for the plan or approval decision. The guidance contains the Wadden Sea as a case study for a policy framework for controlled wind energy development near a transboundary World Heritage property (Denmark, Germany, the Netherlands).

As stated in the 2016 SOC report, the construction of new wind turbines is not allowed within the property (Wadden Sea Plan 2010, WD 2023). In the course of the increased and accelerated expansion of offshore wind energy in the North Sea EEZ to become the “Green Power Plant”, the construction and structural maintenance of wind farms will also lead to an increase in marginal or crossing shipping and air traffic in the World Heritage Site and thus to indirect impacts on its protected assets.

Relevant regional information is presented below.

Wind energy projects in Lower Saxony

Since the last 2016 SOC report, no new offshore wind energy projects have been planned or implemented in the direct vicinity of the property in the coastal waters of Lower Saxony.

Within the inland coastal strip of approximately 5 km there is a chain of Special Protection Areas (SPA; EU Birds Directive), which act as an exclusion area for wind turbines. Thus, they have a significant lowering effect on the spatial development pressure by wind farm projects in the vicinity of the Wadden Sea World Heritage Site. In the neighbouring hinterland, expansion has initially been slowed down in recent years. In the coming years, replacement of smaller and technically outdated wind turbines can be expected (so-called repowering). As part of the acceleration policy for energy transition, legal regulations were recently adopted to speed up approval processes for repowering. However, specific legal regulations for species protection have to be considered.

Although the Lower Saxony National Park Act does not regulate any specific protection

outside the National Park, it does contain the special protection purpose for the Natura 2000 site, which has to be considered in impact assessments: “Suitable habitats of sufficient size for all life cycle phases such as reproduction, moulting, migration, resting, wintering and foraging, as well as the possibility of unhindered migration and movement between sub-habitats, also in the surroundings of the National Park.”

Wind energy projects in Schleswig-Holstein

Similar to Lower Saxony, no offshore wind energy projects have been planned or implemented in the vicinity of the property in the coastal waters of Schleswig-Holstein since 2016. Most of Schleswig-Holstein’s coastal waters is designated as Natura 2000 sites and is subject to the corresponding protection. Schleswig-Holstein’s spatial planning does not permit the construction and operation of wind turbines in Natura 2000 sites. Furthermore, buffer zones in relation to nature reserves, national parks, and protected areas designated under the EU Habitats and Birds Directives are specified. In the process of identifying areas suitable for wind energy turbines, the relevant impact assessments have been carried out regarding Natura 2000 and species protection.

Within the boundaries of the German National Parks (which are almost completely congruent with the boundaries of the World Heritage Site), the National Park Acts prohibit the construction or operation of wind turbines.

Wind energy projects in the Netherlands

In the Netherlands, wind farms are mainly located in the North Sea as offshore installations. On land there are windmills in the proximity of the Wadden Sea. For example: Windpark Fryslan in the Ijsselmeer. In Nij Hiddum Houw, windmills have been built and plans are well advanced to build further installations in the Eemshaven. Further wind farms are already installed or planned on the mainland. The construction of wind farms is assessed with a project specific Environmental Impact Assessment (EU Directive) and there is increasing attention on the ecological effects. If Natura 2000 sites in the vicinity may be affected, an additional assessment of the impact on the ecological features is conducted (Appropriate Assessment). However, in these assessments, the impacts on OUV criteria are not mentioned explicitly but do cover certain valuable aspects in this respect.

Therefore, assessments developed under EU law show significant overlap with an OUV assessment, although impacts on OUV criteria are not mentioned explicitly.

Wind energy projects in Denmark

The WHC informed the Danish Government about third party concerns regarding the possible development of a new wind turbine test centre in the vicinity of the property. In

accordance with para 174 of the Operational Guidelines, the WHC requested information (15 June 2023, letter ref. CLT/WHC/EUR/23/14361). The Danish Agency for Planning and Rural Development informed WHC (23 August 2023) about the designated areas for screening. In the same communication, the WHC was informed that after a first screening no decision regarding the location was possible. The second screening reached the conclusion (as of 1 February 2024) of omitting further investigation in the area relevant to the Danish Wadden Sea World Heritage Site, and to continue investigations at another location in Denmark.

An update of the Danish Maritime Spatial Plan issued in 2023 includes an extended N2000 area, connecting the N2000 Wadden Sea Area with the N2000 North Sea Area. In the new “connecting” Natura 2000 area there is an area originally reserved for wind turbines. This was pointed out by the Danish NGOs during the SOC stakeholder consultation process. In this connection the responsible Danish authority (The Danish Energy Agency) stated:

“In August 2023, the existing bird protection area (SPA) no. 113 was expanded to cover a part of the East German Bight and an area around Horns Reef that was not previously covered by the SPA. The Danish Maritime Spatial Plan (Havplanen), where an updated version is currently undergoing a public consultation procedure, has a designation for an area for offshore renewable energy within the SPA. The Danish Energy Agency can inform that the area was designated as potentially suitable for offshore wind as part of an initial screening back in 2019 and even though the area is designated in the Maritime Spatial Plan there are no current plans for specific projects in that area and the area is not part of the upcoming tender for 9 GW offshore wind to be operational by 2030.”

2.5 Authorisations of project proposals (Decision para. 13b and c)

13. *Further notes* the multiple existing and/or proposed extraction and infrastructure developments within and around the property, and *further requests* the three States Parties to:

b) Conduct a joint Strategic Environmental Assessment to assess the cumulative impacts of these developments on the OUV of the property, in line with the key principles of the Guidance and Toolkit for Impact Assessments in a World Heritage Context, prior to continuing to permit individual projects on a case-by-case basis,

This section addresses the WHC request to stop permitting individual projects on a case-by-case basis during the performance of the joint SEA. Section 2.6 describes the intended way forward in regard to the request to conduct a joint SEA to assess the cumulative impacts of various developments on the OUV of the property.

Pausing project permitting processes would impact projects which take place in the Wadden Sea World Heritage Site, or which might impact the Site’s OUV from outside. Based on EU and national law, pausing permitting procedures while waiting for the joint SEA study might not be possible in all cases due to legal rights (or other legitimations) for timely approval.

However, following this recommendation within the possible scope of action is a choice of policy which would have effects on planned activities and needs the involvement of a wide range of stakeholders since it would have significant economic and social consequences.

13. Further notes the multiple existing and/or proposed extraction and infrastructure developments within and around the property, and further requests the three States Parties to:

c) Authorise project proposals only if adequate assessments demonstrate that they will not have an adverse impact on the OUV of the property;

Current permitting processes in the three countries follow strict procedures under EU and national law which also cover the aspect of adverse impacts and possible cumulative effects. The States Parties always conduct adequate assessments on projects that could significantly impact a Natura 2000 site according to EU legislation. Natura 2000 aspects of sites spatially overlapping the property generally cover the OUV criteria of the Wadden Sea World Heritage Site. Therefore, assessments developed under EU law show significant overlap with an OUV assessment, although impacts on OUV criteria are not mentioned explicitly.

The improvement requested is the explicit consideration of the OUV in assessment/approval procedures. So far, this is considered within some planning processes but it is not common practice in environmental impact assessments for projects within and in the vicinity of the World Heritage Site. However, it has to be recognised that considering the protection of the OUV as a public concern in an environmental impact assessment, and in subsequent decisions on project permissions, might not necessarily entitle denial of a permit. Nevertheless, the protection of OUV is enforced through the above-mentioned correlation with established legally binding instruments²⁴.

2.6 Joint Strategic Environmental Assessment (Decision para. 13b)

13. Further notes the multiple existing and/or proposed extraction and infrastructure developments within and around the property, and further requests the three States Parties to:

b) Conduct a joint Strategic Environmental Assessment to assess the cumulative impacts of these developments on the OUV of the property, in line with the key principles of the Guidance and Toolkit for Impact Assessments in a World Heritage Context, prior to continuing to permit individual projects on a case-by-case basis,

The States Parties acknowledge the need to continue developing general knowledge on cumulative and combined effects of both climate change and human use. This topic is

²⁴ Recent publications by the Waddenacademie argue for the Dutch situation that the implementation of international agreements, such as the World Heritage Convention, are in need of better implementation within the Dutch legal framework. A more detailed analysis has been done on protection of the OUV. The analyses and some proposals will be included in the SEA. Publications in Dutch:

<https://www.waddenacademie.nl/themas/natuur-en-recht/de-europees-en-internationaalrechtelijke-status-van-de-waddenzee/>,
https://www.waddenacademie.nl/fileadmin/inhoud/pdf/04-bibliotheek/2024-01_Reflectie_met_beleidsaanbevelingen_nav_rapport_De_Europees-en-internationaalrechtelijke_status_van_de_Waddenzee.pdf

incorporated into The SIMP Integrated Management Plan for One Wadden Sea World Heritage (SIMP 2023, Annex 2). At the national levels, some existing tools based on common EU law provide a framework on cumulative effects to build upon (see heading *Legal and policy framework for assessment and management of cumulative effects*, below).

In the Wilhelmshaven Declaration 2023, the ministers acknowledge the different management approaches in the Wadden Sea countries and regions. These differences are a challenge but also regarded by the Parties as an opportunity. Recognising the benefits of joining forces to meet the challenges ahead, the Parties are committed to involving as many actors from the Parties as possible and to learning from each other to achieve the highest standards. Also, to create added value for, among others, the mandatory implementation of EU legislation by the Wadden Sea countries by pooling their nature conservation competences and striving for the highest ecological denominator. The request by WHC offers a good opportunity for further improvements in this field.

Therefore, the States Parties think that the best way to address the task of developing a joint SEA is to base it on EU legislation. This will build methodologically on environmental assessments established in planning and approval procedures in the three states. This might lead to stronger consideration of World Heritage issues by the competent authorities, to better insights at the management level and, thereafter, it will support conversations on implementing outcomes in the national context and will allow for a trilateral learning experience on aligning policy on cumulative effects.

Considering that the implementation of EU Directives is done at the national level, and knowing that the relevant EU SEA and EIA Directives take into account the cumulative nature of impacts, as well as cover the requirements of the Guidance and Toolkit for Impact Assessments in a World Heritage Context, and that the requisite of explicit integration of OUV still needs further improvement, it is proposed that a trilateral approach be taken to develop common understandings and agreements on the method. In a second step, these agreements are to be taken up in national components of the joint SEA.

Finally, trilateral integration is proposed to produce the joint SEA with conclusions and recommendations in relation to the OUV and to be submitted to the WHC (Figure 1).

The nationally developed components of the joint SEA and the joint SEA itself can work as a strategic tool to account for and reduce the identified cumulative effects. The above proposed approach respects local differences, for example in content or legal framework. Trilateral integration will allow trilateral discussion on what and where the highest ecological denominators are being used. The methodological approach for the joint overarching assessment of cumulative effects will be arranged at a trilateral level. CWSS will develop the overarching report aligning the nationally developed SEAs, with the support of independent consultants.

Additionally, the TWSC will work closely with the WHC and IUCN and has sought and will continue to seek professional dialogue with other sites that have faced or are facing the same challenge of undertaking an overall SEA.

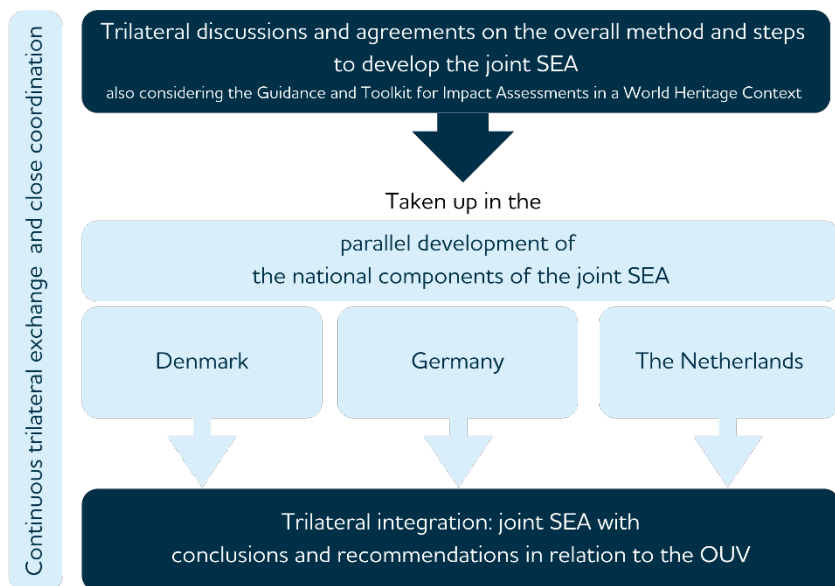


Figure 1. Proposed working structure for the development of the joint SEA to assess cumulative impacts.

Scope of the joint SEA

As the joint SEA is strategic, it should include relevant future projects, plans, and programmes if these may have potential impact on the OUV of the Wadden Sea World Heritage Site, also considering cumulative effects. The SIMP key topics can be used as categories to identify relevant projects, plans, or programmes.

Envisaged steps to develop the joint SEA

As a starting point, it is essential to have trilateral discussions and agreements on the goals: how the nationally developed SEAs and the integrative report might inform and improve current practices; the overall method, among others to allow for an appropriate consideration of the OUV and cumulative effects in future national decisions on projects, plans, and programmes, and the steps’ details.

The methodological agreements are to be taken up for the nationally developed SEA components produced in parallel to allow for later good trilateral integration.

The overall method with national and trilateral work steps envisages:

- Providing an overview of earlier permitted projects; screening expected plans,

programmes, and projects/scenarios for foreseeable future usage within and around the Wadden Sea (derived from existing plans and programmes) falling under the SIMP key topics’ categories. Methodologically, it is intended to define and agree on identification criteria and/or typology for plans, programmes, and projects at certain stages to be considered in the joint SEA.

- Combining scoped information on the known and expected impacts of plans, programmes, and projects on the OUV, as well as identifying knowledge gaps (including cumulative effects).
- Assessing the identified existing and expected impacts in relation to the baseline scenario (description of the relevant aspects of the current state of the environment).
- Working out mitigation options to safeguard the OUV.
- Exchanging and coordinating trilaterally during the national parallel work as well as providing regular progress information to the WSB and advisors.
- An appropriate stakeholder participation process per country, as well as other countries acting as stakeholder according to nationally implemented EU law.

Table 1 shows the preliminary steps to develop the joint SEA, including national work steps and the trilateral approach (previous agreements and coordination throughout the development process).

Table 1. Steps of joint SEA including a preliminary idea of which steps require trilateral work and national work.

Steps to develop the joint SEA	National work step	Trilaterally coordinated approach
1. Description of existing protection regime/legal system including map with Natura 2000 sites and other areas protected under different regimes and the WH area.	x	Integration on one map
2. Screening and scoping: identification of relevant types of plans, programmes, and projects to consider, the impact related delimitation, period to review, whom to involve, identification of key values-attributes and gaps.	x	Common understanding of what to include and whom to involve
3. Baseline scenario: description of relevant aspects of the current state of the environment. A previous agreement on method and approach is needed, i.e., baseline scenario based on expert assessment or based on indicators and including the OUV attributes.	x	Previous agreement on method and approach
4. Assessment and analysis of foreseeable future impacts on the baseline (current state of the environment), including cumulative impacts, taking up trilateral agreements.	x	x
5. Appropriate stakeholder consultation and participation.	x	TWSC groups, WST
6. Conclusions and recommendations: Trilateral compilation and integration of outcomes of step 4 with special focus on cumulation, recommendations, for example to adapt planning processes permitting procedures to include OUV and attributes	x	x
7. Submit the joint SEA report to WHC		x

Legal and policy framework for assessment and management of cumulative effects

EU legal requirement to assess if projects, plans, and programmes are likely to have a significant effect on the environment are set up in the SEA, EIA, and Birds and Habitats Directives.

In the SEA Directive²⁵ (2001/42/EC), the cumulative nature of the effects is among the criteria for determining the likely significance of effects. In the EIA Directive²⁶ (2011/92/EU), the cumulation with other projects is a selection criterion to decide in a case-by-case basis if a project is subject to assessment. In the Habitats Directive²⁷ (92/43/EEC), setting up the Natura 2000 network, any plan or project that is likely to have a significant impact on a Natura 2000 site should be subject of appropriate assessment. Considering cumulative effects is an obligation in national Habitats Directive implementation in the case of projects or plans seeking permission.

Additionally, implementation of the Marine Strategy Framework Directive (MSFD)²⁸ (2008/56/EC) requires Member States to assess environmental status on a regular base (every six years), among others by identifying predominant pressures and impacts including human activities and taking into account the main cumulative and synergetic effects.

Trilateral policies aiming at the consideration of cumulative effects are presented below, as well as a national example from the Netherlands working on reducing (cumulative) impacts of human use in the Wadden Sea and restoring the balance between ecology and economy.

The SIMP

Human use within the Wadden Sea World Heritage Site and the surrounding area is regulated through existing protection and planning regimes. However, stressors from the key topics (can) interact and combine over time, both with each other and with climate change effects, causing cumulative impacts on the marine and coastal environment. Assessment and management of cumulative effects require cross-sectoral and interdisciplinary consideration and exchange. In the SIMP key topics’ activities, cumulative effects are specifically asked to be considered in the analyses of existing data in terms of effects from tourism and in research around cable and pipeline laying, as well as when investigating (potential) effects of new types of energy production, storage, and transmission.

²⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32001L0042>

²⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32011L0092>

²⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31992L0043>

²⁸ https://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index_en.htm

The Wilhelmshaven Declaration

In the Wilhelmshaven Declaration (May 2023, Annex 2), to protect and strengthen the Outstanding Universal Value, the ministers:

“**§ 11. Instruct** the Wadden Sea Board to promote the inclusion of cumulative aspects in decision making by taking into account the Guiding Principle and the Outstanding Universal Value;”

Additionally, **§ 36.** “...taking into account the cumulative effects due to increasing pressures from more intensive use of adjacent area [...]”, to **§ 43.** “[...] enhance the level of science based, adequate adaptive management to systematically safeguard the Outstanding Universal Value of the Wadden Sea, mapping best practices while applying and in regard to the precautionary principle, cumulative effects and the ecosystem approach.”, and **§ 44.** “[...] to support [...] Research with a focus on impacts on the Outstanding Universal Value and its key values as well as their adaptive capacity in view of challenges such as climate change and increasing human uses that cause cumulative effects [...]”

At the national level, cumulative effects will be considered in the Netherlands in a new policy framework for the Wadden Sea that is currently being developed. At the end of the first quarter of 2024, the scope of the Nature Policy Framework will be determined, including a clear insight into the product. This will provide clarity on potential synergies with the joint SEA development.

3. Other current conservation issues identified by the State Party(ies) which may have an impact on the property’s Outstanding Universal Value

Effective management of the Wadden Sea needs to secure nature conservation and an ecosystem approach that integrates management of existing protected areas with other key factors affecting the property. These include the most important economic activities in terms of impact, whilst safeguarding the OUV. Fisheries, tourism, shipping and ports, energy, and coastal protection are the most important socio-economic factors in the region. Nevertheless, the Statement of OUV (2014) also identifies these as key threats requiring ongoing attention. The information in this chapter focuses on these five SIMP key topics. Other general issues affecting the OUV of the Wadden Sea (in positive or negative ways) are presented at the end of Table 2 as an additional category.

For each of the key topics, The SIMP presents objectives, a summary of main risks, the enabling environment, and activities directed to maintain and enhance the OUV of the Wadden Sea World Heritage; therefore, they are not repeated in the following table.

Table 2. *Activities at trilateral and national levels which may have an impact (negative or positive) on the property’s Outstanding Universal Value by SIMP key topics.*

Fisheries
<p>TRILATERAL</p> <p>Review and update the trilateral Framework for Sustainable Fisheries 2014. https://www.waddensea-worldheritage.org/framework-sustainable-fisheries</p>
<p>DENMARK</p> <p>The information presented in the Nomination Dossier 2014 is still valid: in the inner part of the Danish Wadden Sea there is no fishing. West of the islands, beam-trawl based fishing activities continue unchanged.</p>
<p>GERMANY</p> <p>Latest developments in mussel fisheries in Schleswig-Holstein: Blue mussel fishery and culture is regulated by the Fishery Law and the National Park Act of Schleswig-Holstein and are based on a specific mussel fishery programme. The current programme runs from 2017 until the end of 2031. Mussel fishery and culture include stocking mussel fisheries, management of mussel cultures, and the operation of seed mussel harvesting facilities. With the current programme, commercial blue mussel fishery and culture in the Schleswig-Holstein Wadden Sea National Park has been newly regulated. The new regulations are an important milestone in the protection and sustainable development of the National Park. Under the new agreements, 87 % of the National Park is free of any mussel fishery or farming. It only takes place in four tidal basins in the sublittoral (i.e., permanently flooded areas) of protection zone 2 of the National Park. In addition, various conditions in the permits (e.g., starfish and other bycatch must be handled with care, restriction of culture lots) ensure that</p>

management is as nature-friendly as possible.

Management plan on blue mussel fishery in Lower Saxony: A management plan for the fishery of seed mussels in the Lower Saxon part of the Wadden Sea has been in place since 2004. The third update (2019-2025) again goes beyond the legal conservation framework to, among others, exclude around one third of traditional eulittoral wild mussel reefs from this fishery http://www.muschelfischer.de/download/Bewirtschaftungsplan_2019-2023.pdf.

Dialogue process with the shrimp fishery sector: The German federal states are planning to start specific, regional dialogue processes with the shrimp fishery sector in 2024 with the aim of implementing strict protection in line with the EU Biodiversity Strategy.

THE NETHERLANDS

Buyout of fishing licences: In 2021, 10 million Euro were dedicated to the voluntary withdrawal of permits from shrimp fishermen in the Dutch part of the Wadden Sea. Nineteen out of 89 shrimp fisheries licences have been bought, leaving 70 with a permit for fishing for shrimps in the Wadden Sea. With the buy-out of licences, 11.3 % of shrimp fishing grounds (9300 ha) of the Wadden Sea are closed to shrimp fisheries, supported by an amendment in the Fisheries Implementing Regulation.

The closure contributes to protecting nature and allowing benthic life to recover, benefiting the Wadden Sea World Heritage Site and the Natura 2000 sites. In addition, buying out permits should offer the remaining shrimp fisheries better prospects for the future in areas that are not closed off. This will contribute to meeting the agreements made in the Viswad Agreement between NGOs and fisheries, such as achieving a level playing field.

Fishing licences need to be renewed periodically. The remaining shrimp fishers have recently requested the renewal of their licences based on the Nature Protection Law. This procedure has not yet been finished. Licences lost validity on 1 January 2023 and the Dutch Government allows shrimp fishing on these licenses as if still valid. This situation will continue until 31 December 2024. Funds are being sought for additional buy-out of licences. Completing the process will take two years and approval from the European Commission. Simultaneously, work is being done on giving the shrimp fisheries better economic prospects. Measures are being worked out in more detail.

Tourism

TRILATERAL

Review and update of the trilateral Sustainable Tourism Strategy (2014) and implementation of the action plan in the work fields: tourism operations and nature conservation; One World Heritage destination; transport; accommodation and gastronomy; environmental education and interpretation; and capacity building and raising standards in a collaborative approach. (Updated action plan on implementing the Sustainable Tourism Strategy <https://www.waddensea-worldheritage.org/de/node/1894>)

Transnational and cross-border EU funded projects: Several EU funded projects for transnational (Interreg B) and cross-border cooperation (Interreg A) with neighbouring Wadden Sea states have been and are being carried out, for example on strengthening cross-sectoral collaboration and developing and marketing products and services in the fields of nature and cultural tourism in the context of the Wadden Sea World Heritage Site. For examples see:

- PROWAD LINK: <https://northsearegion.eu/prowad-link/>
- NAKUWA: <https://www.interreg5a.eu/blog/projekt/nakuwa/>
- VABENE: <https://www.interreg-de-dk.eu/news-events/news/detail/2>
- WATTENAGENDA 2.0: <https://interregv.deutschland-nederland.eu/en/project/watten-agenda/> | <https://deutschland-nederland.eu/project/watten-agenda-2-0/>

Wadden Sea Quality Status Report Tourism <https://qsr.waddensea-worldheritage.org/index.php/reports/tourism>

DENMARK

Visitor management to protect nesting birds: Due to excessive pressure from tourists on the beach areas of Rømø, Skallingen, and Fanø, specific areas are closed at critical times to

protect nesting birds. Volunteers (guided by the National Park) fence nesting areas every season to protect birds - not only from visitors (humans) but also from predators. Bird nesting sites move almost every year so the fences are temporary.

GERMANY

Visitor management to protect nesting birds: During the breeding season, the settlements of nesting birds on the beaches are recorded at an early stage. The breeding areas are demarcated by a mobile fence for the duration of the breeding season and signposted.

Implementation of the trilateral and regional action plans on sustainable tourism: To implement the Trilateral Strategy on Sustainable Tourism (2014) on the ground, the National Park Authorities of the German federal states are working together with the tourism sector to implement nature-friendly tourism in the Wadden Sea region on the basis of trilaterally coordinated regional action plans adopted in 2022.

THE NETHERLANDS

Since the 2016 SOC report, there has been an increase in arrivals and days spent (CBS: <https://opendata.cbs.nl/#/CBS/nl/dataset/82059NED/table>). Most tourism activities take place outside the World Heritage Site. Inside the World Heritage Site, tourism activities are mainly restricted to recreational boating, mudflat walks, excursions by boats, and ferry transport. The evaluation of the Natura 2000 management plan showed that recreational disturbance is among the top three pressures on the Wadden Sea.

https://www.waddenzee.nl/publish/pages/17012/natura_2000-beheerplan_waddenzee_jan2024.pdf

Visitor management: The recreational boating sector, together with the nature conservation sector, developed a code of conduct for the Wadden Sea. The code needs updating but is widely adopted.

New projects, like cycling along the dyke or designating specific zones for potentially harmful activities like kite surfing, consider potential negative impacts from recreational activities at the edge of the World Heritage Site and sensitive locations are avoided. There are, however, signs that mudflat walks are disturbing birds in certain areas that are hotspots for tourism. Currently the various site managers, Rijkswaterstaat, and the Management Authority are working on ‘interim measures’ to address the most relevant threats in the prelude to a new Natura 2000 management plan for the Wadden Sea.

In line with the trilateral Sustainable Tourism Strategy and the respective updated Action Plan, new tourism projects point towards sustainable tourism activities with strong OUV interpretation; for example, a project about hospitality addressing visitors and inhabitants is currently in preparation, including interpretation of the OUV by professionals, and aims at guiding visitors towards less sensitive areas. As part of the project, a special role is envisioned for entrepreneurs having a positive contribution to the OUV via their behaviour and a stewardship role towards visitors. They would be awarded with the label of World Heritage Ambassador.

For dredging for deepening of shipping routes for ferry traffic, see next section (“Shipping and ports”).

Shipping and ports

TRILATERAL

Led by the Dutch Ministry of Infrastructure and Water Management, the **status of implementation of the PSSA operational plans** will be reviewed trilaterally in collaboration with the competent authorities and other actors.

Sustainable shipping and ports operations in the Wadden Sea: To collaboratively address some of the current challenges (such as dredging and accidents), environmental NGOs, ports, ship owners, and other stakeholders developed a framework for collaboration. During the 14th Trilateral Governmental Conference in November 2022, the parties signed a joint statement that highlights their intention to further collaborate towards more sustainable shipping and port operations in the Wadden Sea: https://www.bund-niedersachsen.de/fileadmin/niedersachsen/bilder/pressemitteilungen/2022/2022.11.18_Joint_document_SustSPI_-_final_version.pdf

Most recent and largest shipping accidents:

- **MSC Zoe:** As a result of the incident with the containership MSC Zoe in 2019, the maritime administration of the Netherlands, in consultation with the maritime administrations of the other Wadden Sea countries, has taken several measures to prevent the loss of containers, to the extent possible, both at a national and international (through IMO) level.
Some of the preventive measures are:
 - Provide warnings and route advice to containerships in specific environmental circumstances, based on several in-depth studies on the hydrodynamic phenomena of high transverse waves, and actively informing the maritime sector and IMO;
 - Develop active vessel traffic support to containerships;
 - Place the holistic approach of issue of container loss on the agenda of IMO;
 - Creating a better information position to the crew on board containerships, e.g., through the carriage requirement of an electronic inclinometer, and through an application predicting dangerous behaviour of the ship by parametric rolling;
 - Undertaking a broad study (called TopTier) on the causes of container loss worldwide, with the involvement of the relevant stakeholders, including the world’s largest companies employing large containerships. This study runs until mid-2024 and is envisioned to provide results and recommendations that can be translated into enhanced or additional IMO instruments to be implemented worldwide.

- **Fremantle Highway:** On the night of 25-26 July 2023, the car carrier “Fremantle Highway”, under the flag of Panama, caught fire 27 km north of Ameland and the Wadden Sea World Heritage Site. The ship was abandoned, with one crew member’s life lost. The ship was cooled down and kept in position. A pollution-control vessel stood by for immediate response to a potential oil spill or capsize. The fire died out within a week and a salvage company towed the ship to the port of Eemshaven. As of now, it is unknown if any pollution was released. Panama’s authorities are investigating the incident, supported by the Dutch Safety Board.

The incident was a potential threat to the Wadden Sea World Heritage Site and underscores the significance of the Wadden Sea’s designation as a Particularly Sensitive Sea Area (PSSA) in 2002, also referred to in the 2023 Wilhelmshaven Declaration. The Wadden Sea Board ensures the further implementation of the 2014 PSSA Wadden Sea Operational Plans and, in 2024, as mentioned above, will evaluate and review the existing safety measures to the PSSA Wadden Sea with the responsible shipping authorities and relevant stakeholders.

Wadden Sea Quality Status Report Harbours and Shipping

<https://qsr.waddensea-worldheritage.org/reports/harbours-and-shipping>

DENMARK

Expansion of the shipping lane into Esbjerg. EIA and World Heritage Impact assessment was shared with WHC (Letter 2 April 2020 Jour.nr. 18/02878. Response from WHC CLT/WHC/EUR/20/12866).

GERMANY

Regulation of marine traffic: Since 1992, navigation on the waters within the three German Wadden Sea National Parks has been regulated by a Navigation Ordinance (Verordnung über das Befahren der Bundeswasserstraßen in Nationalparks im Bereich der Nordsee; [Befahrensverordnung – NPNordSBefV](#)). This was amended 2023. It supplements the protective provisions of the respective National Park Acts with regulations governing navigation, such as by spatial and temporal restrictions and also on speed. As such, it takes account of especially sensitive areas, notably resting and moulting areas of birds and resting areas for seals. The recent amendment takes up, for example, the introduction of new kinds of water sports as well as the seaward extension of the Wadden Sea World Heritage Site (2014).

Adaptation of estuaries to the requirements of marine traffic: The large outer estuaries of the Ems, Weser, and Elbe (adjacent to the World Heritage Site) are important access routes for the German import harbours and have therefore been successively adapted

to the requirements of international shipping traffic for decades by straightening and deepening the fairways. Adaptation and ongoing maintenance of the fairways require dredging and deposition of dredged material. The adaptation procedure for the Elbe estuary was approved 2012, amended 2018 by the responsible shipping authority. Permission procedures for the deepening of the Weser and Ems outer estuaries are currently under preparation, the latter with transboundary aspects to the Netherlands.

<https://www.bvwp-projekte.de/wasserstrasse/w06/w06.html>, New opening planning approval procedure announced for 2024.

https://www.weseranpassung.wsv.de/Webs/Projektseite/Weseranpassung/DE/01_Startseite/startseite_node.html

Scoping date in 2022 <https://bvwp-projekte.de/wasserstrasse/w45/w45.html>

THE NETHERLANDS

Pollution from discharge waste: It is illegal to discharge (industrial) waste into the Wadden Sea. Recently, (social) media attention was given to the news that almost sixty companies are discharging wastewater into the Dutch part of the Wadden Sea. These discharges are permitted and not expected to have a significant impact on the water quality of the Wadden Sea, even though the Dutch part of the Wadden Sea does not meet European regulations as defined in the European Water Framework Directive. The permits for discharge will be reviewed on a project basis and, if needed, adapted. Rijkswaterstaat, from the Ministry of Infrastructure and Water Quality, will prioritise starting with the highest environmental added value. Accumulation will be included in the review through including the water framework measurements. The emission test – now obligatory under law – will determine whether discharge is acceptable from the water quality point of view. A court case was started against the responsible authorities demanding additional work to be done to enhance the water quality.

Dredging for ferry traffic: The volume of dredging in the Dutch Wadden Sea has doubled in the past 15 years. The most important areas for dredging are the fairway to the island of Ameland (almost 50 % of total dredging volume) and the fairway from Harlingen to Terschelling and Vlieland. For the island of Ameland, the government of the Netherlands has started a participatory process for ensuring accessibility of the island while minimising the impact on nature. This should include lowering the dredging volume. Possible solutions are other types of ships and repositioning of harbours. For the other fairways, solutions such as a change of dumping locations and maintaining different fairway dimensions are also being investigated.

Energy

TRILATERAL

The topic of energy is addressed in the trilateral Task Group Coordination and Management with *ad-hoc* Working Group Renewable Energy (WG-RE). The WG-RE’s objective is to “Intensify the application of common best practices to protect the Wadden Sea, to support nature-friendly energy transition, and to foster a level playing field with the highest applied environmental standards for all three countries in a collaborative approach with the energy sector”.

In February 2024, the WG-RE started a trilateral project to generate information on the environmental impact of grid connection planning, permitting, construction, operation, maintenance, and removal, as well as mitigation options (including a mitigation toolbox). Such information is also intended as additional input to the Dutch project PAWOZ Eemshaven programme aimed at finding the best connection routes for offshore energy transmission.

Wadden Sea Quality Status Report Energy <https://qsr.waddensea-worldheritage.org/reports/energy>

DENMARK

Denmark does not have any oil and gas development that directly affects the Wadden Sea, but there are potential indirect effects as the Port of Esbjerg is the base harbour for all Danish energy activities in the North Sea (oil, gas, and green energy).

GERMANY

The NORD.LINK project (cable connecting Norway and Schleswig-Holstein) described in the 2016 SOC report has been operating since 2021. As planned, the same corridor was used as for submarine high-voltage power cables from offshore wind farms.

LNG-Terminals in Wilhelmshaven: Information was sent on 23 March 2023 upon request CLT/WHC/EUR/22/14101 from 19 December 2022.

THE NETHERLANDS

In the framework of the **Agenda for the Wadden Sea Region 2050 and its implementation programme**, abbreviated after its Dutch name as UP (for more information see Annex 3 Agenda for the Wadden Sea Region 2050), a research project will investigate the implications of the agreed Agenda and UP on energy transition plans. The project will also examine the potential contribution of the Wadden Sea Area to achieve the energy transition target and possible effects of on the Wadden Sea Region.

Coastal Flood Defence and Protection

TRILATERAL

With increasing climate change and its effects, such as sea level rise and the increase in storm events and floods, coastal protection is also facing new challenges.

Project MANABAS COAST: Funded by the EU Interreg North Sea Region Programme, this project intends to set the stage for widescale application and implementation (mainstreaming) of Nature-based Solutions (NbS) in coastal systems of the North Sea Region by developing a proven and accessible framework, tools, and guidelines based on pilot examples. In doing so, the project will ultimately enable integrated policies and decision making for the joint delivery of flood and coastal erosion risk management (FCERM) as well as biodiversity conservation. Pilot examples reach from Sweden to France and include several cases in the Wadden Sea.

www.interregnorthsea.eu/manabas-coast

DENMARK

The Wadden Sea dykes in the Danish part of the Wadden Sea are subjected to a regular safety and strength assessments. The aim is to adapt the dykes in the Wadden Sea in a timely manner in relation to future climate changes. Adaptation and reinforcement have been designed and completed for Kirkeby dyke and Juvre dyke on the island of Rømø. For the Darum-Tjæreborg dyke, planning work is currently being carried out and it is expected that strengthening work will begin in 2025.

During 2023, a new survey of the Danish tidal basins started. The survey will include all geographical elements of the Wadden Sea, such as tidal channels, tidal flats, and salt marshes. Survey data for the entire Danish Wadden Sea is expected to be available in 2026.

GERMANY

Coastal protection: In recent years there have been successive projects on raising and strengthening existing dykes, measures that need to be continued in the future. There are several projects and strategies such as the Schleswig-Holstein Wadden Sea Strategy 2100, the Generalpläne Küstenschutz in Schleswig-Holstein, and Lower Saxony, as well as innovative projects:

https://www.nlwkn.niedersachsen.de/startseite/hochwasser_kustenschutz/kustenschutz/generalplane_fur_insel_und_kustenschutz/generalplan-kuestenschutz-45183.html

<https://www.schleswig-holstein.de/DE/fachinhalte/K/kuestenschutz/strategieWattenmeer2100.html>

schleswig-holstein.de - Küstenschutz - Generalplan Küstenschutz des Landes Schleswig-Holstein – Fortschreibung 2022

<https://sandkueste-spo.de/>

<http://gute-kueste.de/en/gute-kueste-niedersachsen-en/>

THE NETHERLANDS

Due to the rising sea level, most flood defences around the Wadden Sea must be strengthened in the coming decades to protect human interest in the hinterland. The Netherlands is striving

to improve the quality of ecosystems in the coastal zone by, for example, applying building with nature concepts as much as possible. Building flood defences carries a potential threat towards the OUV. In some cases, building into the Wadden Sea is preferred by project owners. This is generally not supported by the legal protection regime. To maintain and protect inhabited islands, the Netherlands continues to execute sand nourishment along the respective coastlines. Applying sand nourishment enables the coastal system and the Dutch Wadden Sea to adjust to the rising sea level.

Other general issues affecting the OUV

TRILATERAL

Trilateral Partnership in Support of UNESCO Wadden Sea World Heritage. To strengthen collaboration between sectors and across countries, a new network was founded in 2019. The Partnership Hub is a strategic, multi-stakeholder, transboundary partnership, incorporating governmental and non-governmental sectors and networks committed to the protection of the Wadden Sea and sustainable regional development. The Partnership is inscribed at the UN SDGs Action platform as a multi-stakeholder partnership:

<https://sdgs.un.org/partnerships/trilateral-partnership-support-unesco-wadden-sea-world-heritage>

Dark Sky/Dark Sky Initiative. The preservation of nocturnal darkness directly supports and further enhances the protection of the Wadden Sea World Heritage’s OUV, while creating chances for visitors to experience nature, admire pristine starlight skies, and make a valuable contribution to the sustainable development of local communities, as shown at the certified Dark Sky Places in the Wadden Sea region.

The Trilateral Dark Sky Initiative started in 2019 as an informal trilateral network group now consisting of nature management organisations and authorities, individuals, NGOs, research institutes, and municipalities, with the aim of bringing together and (through synergies) further strengthening existing local initiatives in the Wadden Sea region. The trilateral approach facilitates exchange of knowledge on how best to manage the ongoing issue of light pollution. As light pollution can have a wide reach, the joint effort among geographically scattered initiatives is important for the creation of wider naturally dark sky places and corridors to mitigate the degradation and fragmentation of nocturnal habitats.

Trilateral project led by universities: <https://www.interregnorthsea.eu/kid>.

European project: <https://www.interregnorthsea.eu/darker-sky>

Continuation of the International Wadden Sea School (IWSS). Detailed information provided in Annex 5 of the 2016 SOC report. www.iwss.org

The WSFI’s objective to strengthen capacity includes work with youth. The **East Atlantic Flyway Youth Forum** serves as an annual platform for young wetland conservationists to develop a useful skillset previously identified as needed, especially from a flyway perspective.

Youth Engagement. In September 2022 a first Trilateral Youth Conference was organised. Young people already engaged in the Wadden Sea came together to exchange, discuss challenges, and collect ideas that were transferred to the trilateral ministers during the 14th Trilateral Governmental Conference in 2022. Currently, a trilateral youth network is being built to further sustain the engagement of young people and the exchange among them across the three countries.

<https://exchange.waddensea-worldheritage.org/node/129>

Dutch-German science-call “Understanding complex pressures on the Wadden Sea and options for action”. Overarching topics to be addressed are climate change, rapid change in biodiversity, pollution, and the effect of local human activities on the Wadden Sea ecosystem. The Wilhelmshaven Declaration 2023 and The SIMP are among the framework documents for proposing and designing activities.

Since its establishment in 2012, the **Wadden Sea Flyway Initiative** (WSFI) has continued to strengthen close collaboration with local, regional, and international partners along the East-Atlantic Flyway. With its monitoring programme and the capacity building and management programme, the WSFI addresses key objectives to continuously strengthen cooperation and the integrated monitoring programme, establish a research programme,

promote the wise use of coastal resources, strengthen capacity for conservation, management, and monitoring, strengthen policies, and build awareness.

<https://flyway.waddensea-worldheritage.org/>

The **Climate Vulnerability Index (CVI)** rapid assessment method was applied in the Wadden Sea in 2020, based on the IPCC 2019 report “Ocean and Cryosphere in a Changing Climate”. It includes new projections on global mean sea level rise – a factor highly relevant to the Wadden Sea ecosystem. Results were the identification of three key stressors of climate change which will affect the Wadden Sea World Heritage Site: extreme heat events, temperature increase, and sea level rise. The three stressors were held against the key values of the OUV, and possible impacts of climate change were discussed for two timeframes: 2050 and 2100. The rapid assessment suggested that the OUV’s vulnerability is high overall for both timeframes. The impact of the first two key climate stressors was considered as high for both time periods. The sea level rise stressor was seen as low with regard to 2050, with a less rapid rise in this period, and as high for 2100, with the sea level expected to rise more rapidly between 2050 and 2100. The “high vulnerability” scenario states that a major loss or substantial alteration of the majority of the OUV attributes is foreseen if the climate continues to change.

<https://www.waddensea-worldheritage.org/resources/2020-cvi-report>

DENMARK

The second-generation **Marine Strategy Framework Directive Action Plan** is presently in a public hearing process. The plan includes Wadden Sea specific measures and brings together the decided actions that contribute to achieving and maintaining good environmental conditions in the sea, thus implementing specific Wadden Sea measures, such as the SIMP.

Nature restoration projects; the National Park and the Nature Agency, together with the Danish Nature Fund and other partners, are involved in major restoration projects benefiting the OUV:

Nature restoration to increase habitats primarily for breeding birds on Mandø, see:

<https://naturfonden.dk/natur/mandoe/> (in Danish)

Nature restoration and bird protection: <https://lifewaddenseabirds.dk/>

And a newly started project: <https://lifewaddenseabirds.dk/projektomrader/margrethe-kog>

Regional partnership programmes: For more than ten years, the Wadden Sea National Park has been facilitating partner programmes to support local communities, including local businesses. On a voluntary basis, partners focus on more sustainable development, especially regarding tourism. The World Heritage Partnership Programme provides education on the Wadden Sea World Heritage Site and its OUV. <https://nationalparkvadehavet.dk/udvikling-og-samarbejde/partnerprogrammet>

GERMANY

Expansion of the UNESCO Biosphere Reserves: The three German Wadden Sea National Parks in the federal states of Schleswig-Holstein, Hamburg, and Lower Saxony have been UNESCO Biosphere Reserves under the Man and the Biosphere Programme since the early 1990s. In 2022, the three states submitted an application to UNESCO to extend the respective transition area of their Biosphere Reserves. In 2023, the application was accepted. The expansion of the Biosphere Reserves also supports the achievement of the Sustainable Development Goals (SDGs), which is a key objective of the Trilateral Cooperation, for example in the areas of tourism and education within the wider setting of the Wadden Sea World Heritage Site.

Habitat restoration for increased CO₂ sequestration: Salt marshes and seagrass meadows play a special role in natural carbon storage in the Wadden Sea ecosystem. With a spatial focus on Lower Saxony, the restoration measures of salt marshes already mentioned in the 2016 SOC report were continued by opening summer dykes and restoring a near-natural tidal drainage and watering system. Further restoration projects with the aim of increasing natural "Blue Carbon" storage capacities are also in preparation for the near future.

Management planning for Natura 2000: To supplement and concretise the trilateral

Wadden Sea Plan 2010 as an overarching Natura 2000 management plan, the federal states have drawn up detailed sectoral plans for maintaining and restoring the favourable conservation status of Natura 2000 sites, some of which are problem-specific, for partial areas or region-wide. See for example:

<https://www.nationalpark-wattenmeer.de/wissensbeitrag/ffh-massnahmenplanung-fuer-das-ffh-gebiet-001-nationalpark-niedersaechsisches-wattenmeer/>

Marine Strategy Framework Directive: In the course of implementing the MSFD, the second generation of German Programme of Measures was published in 2022. The implementation of measures is on-going. The programme includes measures to achieve and maintain good environmental conditions and strengthens the protection level, including in the German Wadden Sea, thus contributing to safeguarding the OUV and integrity of the World Heritage Site.

<https://mitglieder.meeresschutz.info/de/berichte/massnahmenprogramm-art-13.html>

Education / visitor centres: The Wadden Sea National Park houses and visitor centres in the federal states of Schleswig-Holstein, Hamburg, and Lower Saxony are to receive substantial additional funding from the Federal Government of Germany in the coming years to extend the existing network of facilities and modernise the exhibitions, among other things. National Park visitor centres interpret the World Heritage Site to interested guests and inhabitants, which thus supports protection of the Wadden Sea.

Regional partnership programmes: For more than ten years, the German Wadden Sea National Park Authorities in Schleswig-Holstein and Lower Saxony have been facilitating partner programmes, which they have been able to expand significantly in recent years, both in terms of the number of partner organisations and the range of sectors represented. They also exchange information across the Wadden Sea as part of the trilateral Partnership in support of the Wadden Sea World Heritage, the Partnership Hub. The certified partners of the National Parks and UNESCO Biosphere Reserves are ambassadors of the Wadden Sea region. With their commitment, National Park and Biosphere Partners raise awareness among guests and locals for the protection and sustainable development of the Wadden Sea region. <https://www.nationalpark-wattenmeer.de/mitmachen/kooperation/nationalpark-partner/>

THE NETHERLANDS

The Dutch Management Plan of the Wadden Sea for Natura 2000 is being evaluated and will be updated, starting in 2024. The aim is to improve management, the design of the area (regarding habitats like salt marshes, for example), and potentially drafting measures to reduce human impacts.

The plan is based on the Birds and Habitats Directives and maps the status of legally protected habitats and species. The evaluation shows that the general conservation status of the Dutch part of the Wadden Sea is insufficient: the status of the habitat type “sandbanks covered all the time” (H1110A) and salt marshes are not optimal and various bird targets are not met. The update of the plan will be done in consultation with competent authorities.

<https://www.rijkswaterstaat.nl/nieuws/archief/2024/01/natuurbescherming-waddenzee-kost-meer-tijd>

https://www.waddenzee.nl/publish/pages/17012/natura_2000-beheerplan_waddenzee_jan2024.pdf

The Dutch Management Authority

The Dutch Management Authority, installed in 2020, works on measures and activities which strengthen the integrated management of the Dutch part of the Wadden Sea. This implicitly includes the protection of the OUV. The Management Authority therefore has a wider responsibility than the Dutch Management Plan of the Wadden Sea for Natura 2000. Responsibilities of the Management Authority include increase in legal enforcement capabilities, nature management in salt marshes, and supporting further cooperation between the various site managers involved in the protection of the Dutch part of the Wadden Sea.

The Wadden Fund, a fund of 600 million Euro, was established in 2007 to compensate for the gas drilled under and near the Wadden Sea. Its main objectives are:

- To strengthen nature and landscape of the Wadden Sea area.

- To reduce external threats to the Wadden Sea World Heritage Site.
- Transition toward a sustainable economy in the Wadden Sea area, including sustainable energy.
- Knowledge development.

Through the Fund, often with extra finance from the provinces and the central government, over 200 projects have been financed so far (see a full list of projects in Dutch: <https://waddenfonds.nl/projecten/>). Some notable projects since 2016 directly influencing the OUV are:

- Fish migration river through the “Afsluitdijk”
- Restoration of sea grass
- Integration of coastal protection with nature development resulting in a large successful breeding colony of sandwich terns at Prins Hendrik Zanddijk,
- Green shipping Wadden Sea
- Fleet redundancy shrimp fishery
- Support to various visitor centres
- Scientific research by the Wadden Academy for improving the understanding of the Wadden Sea system.

Programmatic Approach to Large Waters. In the Netherlands, various projects take a strategic approach on preparing the Wadden Sea for the effects of climate change, among them the Programmatic Approach to Large Waters (PAGW, 2018-2050), which is a programme of the Ministries of Infrastructure and Water Management (IenW) and Agriculture, Nature, and Food Quality (LNV). This national programme was set up to strengthen ecosystems in large waters to create conditions under which ecological water quality is improved and nature can become more robust. PAGW brings together regional governments, knowledge institutions, companies, social partners, and nature organisations, investigating with them potential synergies with regional tasks.

Specific projects:

- Lauwersmeer-Vierhuizergat, dyke improvement to restore the connection between the Wadden Sea and the hinterland, soften the hard edges of the mudflats, build gradual fresh-salt transitions, and develop salt marshes.
- Investigating potential (large-scale) system interventions to restore the connection between the Wadden Sea, the Eems, and the hinterland.
- Creation of a vision for the Wadden Sea to provide a quantitative picture of what is needed to achieve PAGW’s goals for 2050. The target image will indicate the need to improve habitats, the connections needed between water and land, and water to allow for natural processes and dynamics to proceed undisturbed. But, in addition, a description of the management needed and possible human use. A first version of the target image, based on existing information, is planned for 2024. The vision will be a shared product between the Programmatic Approach, the Dutch Management Authority, and the Policy Framework for the Wadden Sea.

Ecological Wadden Sea Impulse Package (18 million Euro for the period 2023-2026) to be invested in strengthening the ecology of the Dutch part of the Wadden Sea World Heritage Site. Specific projects funded by the Impulse Package are, for example, implementation of the second phase of the Dutch Breeding Bird Action Plan “We & Wading birds”, additional research and monitoring of waterbirds, the Dutch Integrated Wadden Sea Management Plan under development by the Management Authority together with the site managers of the Dutch part of the Wadden Sea, restoration of fresh-salt transitions such as the project Fish Migration River, and research into ecological effects of climate change.

<https://www.vismigratierivier.nl/>

4. Potential major restorations, alterations, and/or new construction(s) that may affect the Outstanding Universal Value of the property

For specific aspects of new developments or projects which may affect the OUV of the property to be reported in conformity with paragraph 172 of the Operational Guidelines, we refer to the ongoing communication with UNESCO.

5. Public access to the state of conservation report

The State of Conservation Report 2024 should be made fully available for public access on the World Heritage Centre’s State of Conservation Information System, as well as the home page of The Trilateral Wadden Sea Cooperation.

6. Signature of the Authority

This report is signed and submitted by Denmark on behalf of the three States Parties.

7. Annexes

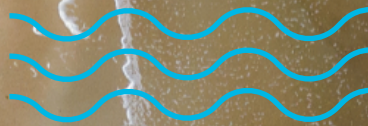
- I. Wilhelmshaven Declaration 2023**
- II. The SIMP Integrated Management Plan for ONE Wadden Sea World Heritage**
- III. List of relevant Climate change plans and policies at the national level**
- IV. Decision 45 COM 7B.23**

Annex I. Wilhelmshaven Declaration 2023

TRILATERAL WADDEN SEA COOPERATION

WILHELMSHAVEN DECLARATION

**14th Trilateral Governmental Council
on the Protection of the Wadden Sea**
Signed in Esbjerg, 15 May 2023



THIS PUBLICATION SHOULD BE CITED AS

Common Wadden Sea Secretariat (2023) Wilhelmshaven Declaration. Ministerial Council Declaration of the 14th Trilateral Governmental Conference on the Protection of the Wadden Sea. Common Wadden Sea Secretariat, Wilhelmshaven, Germany.

The Wilhelmshaven Declaration is a publication of the Common Wadden Sea Secretariat (CWSS) Virchowstr. 1, 26382 Wilhelmshaven, Germany +49 (0)4421 9108 0 info@waddensea-secretariat.org www.waddensea-worldheritage.org Represented by Sascha Klöpffer Editor-in-Chief Annika Bostelmann Illustrations by Creative Concern



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ONE Wadden Sea
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**Ministry of Environment
of Denmark**



**Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection**



**Ministry of Agriculture,
Nature and Food Quality**

COMMON WADDEN SEA SECRETARIAT

PREFACE

The **14th Trilateral Governmental Conference** on the Protection of the Wadden Sea of Denmark, Germany, and the Netherlands was held in Wilhelmshaven, Germany, on **28 November to 1 December 2022**. The meeting of the Trilateral Governmental Council and the Wadden Sea Conference were accompanied by an extensive programme developed by numerous partners, all under the event's motto "Together for ONE Wadden Sea World Heritage". The Conference was well visited with over 250 participants.

Hosted by the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) and the Ministry for the Environment, Energy, Building, and Climate Protection of the State of Lower Saxony, the Conference was chaired by BMUV Parliamentary State-Secretary Bettina Hoffmann. Christianne van der Wolf, Minister for Nature and Nitrogen Policy, represented the Netherlands. Charlotte Brøndum, Head of Department of the Ministry of Environment, participated for Denmark. The State Ministers of Environment Christian Meyer (Lower Saxony), Tobias Goldschmidt (Schleswig-Holstein), and Jens Kerstan (Hamburg) also participated.

Due to the concurrent process of government formation in Denmark, the drafted Wilhelmshaven Declaration could not be formally adopted and signed at the time of the Conference. The Danish representatives underlined their firm continued commitment to the Trilateral Wadden Sea Cooperation. It was decided that the signing of the "Wilhelmshaven Declaration" should be done at the earliest possible date after a new Danish government is in place. The delegations thanked Germany for chairing the Trilateral Wadden Sea Cooperation in 2018-2022 and welcomed the Danish presidency.

The Conference ended with the political representatives of Germany and the Netherlands issuing a **Joint Statement** on the main issues in the draft Wilhelmshaven Declaration stating to be "united in their willingness to continue and increase the level of ambition in protecting the UNESCO Wadden Sea World Heritage Site". They agreed to start immediately on several important issues regarding the implementation of the SIMP Integrated Management Plan for ONE Wadden Sea World Heritage.

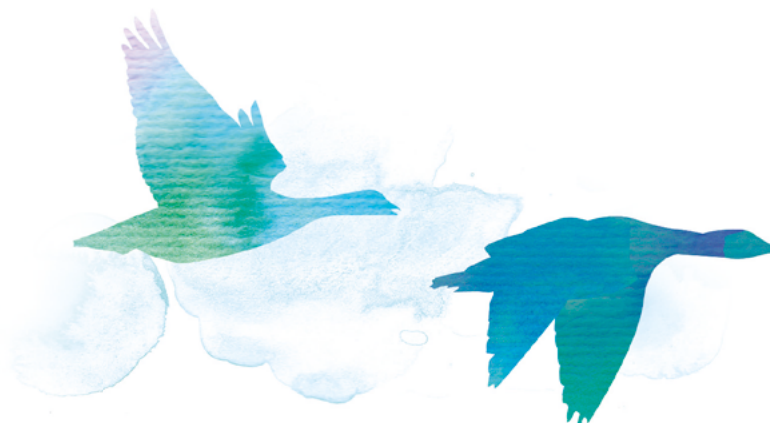
The two countries, including the three Länder, agreed to intensify cooperation with a.o. site managers and stakeholders and to find solutions towards a climate resilient Wadden Sea World Heritage Site. A joint coordinated research call was pre-announced with the aim to develop more knowledge on the (cumulative) ecological effects of climate change and human activities in the Wadden Sea. Future offshore grid connections and pipelines that need to cross the Wadden Sea will be addressed in a way that their potential impact on the site's Outstanding Universal Value will be mitigated, including the exploration of double usage of fairways for both shipping and cables and pipelines. Finally, together with the responsible shipping authorities and stakeholders, Germany and the Netherlands jointly stated to executing an evaluation and review of existing safety measures to the Particular Sensitive Sea Area (PSSA) Wadden Sea.

Other outcomes of the Wilhelmshaven Conference reflected **the support and the engagement** to collectively contribute to **safeguarding the Wadden Sea's Outstanding Universal Value**: Close to 40 different organisations signed up to a new trilateral Dark Sky Vision. Green NGOs, ports, shipowners, and the Wadden Sea Forum signed a Joint Statement on the "Sustainable Shipping and Ports Initiative for a well-protected Wadden Sea". The trilateral Partnership Hub was joined by the Wadden Sea's regional partner and ambassador programmes. Launched at the Tønder Conference in 2014, the Wadden Sea Flyway Initiative gained new partners, who signed the Flyway Vision. The long-existing Memorandum of Understanding between the TWSC and the Banc d'Arguin World Heritage Site, Mauretania, was renewed to further enhance the partnership two of the main sites along the East Atlantic Flyway.

With the presentation of nine recently updated thematic Quality Status Reports, tribute was paid to the more than a hundred scientists involved in this multi-disciplinary research on the Wadden Sea's status.

With a new Danish government in place, the **Wilhelmshaven Declaration** could formally be adopted and signed at an extraordinary session of the Trilateral Governmental Council in Esbjerg on **15 May 2023**.

– May 2023



“TOGETHER FOR ONE WADDEN SEA WORLD HERITAGE”

WILHELMSHAVEN DECLARATION

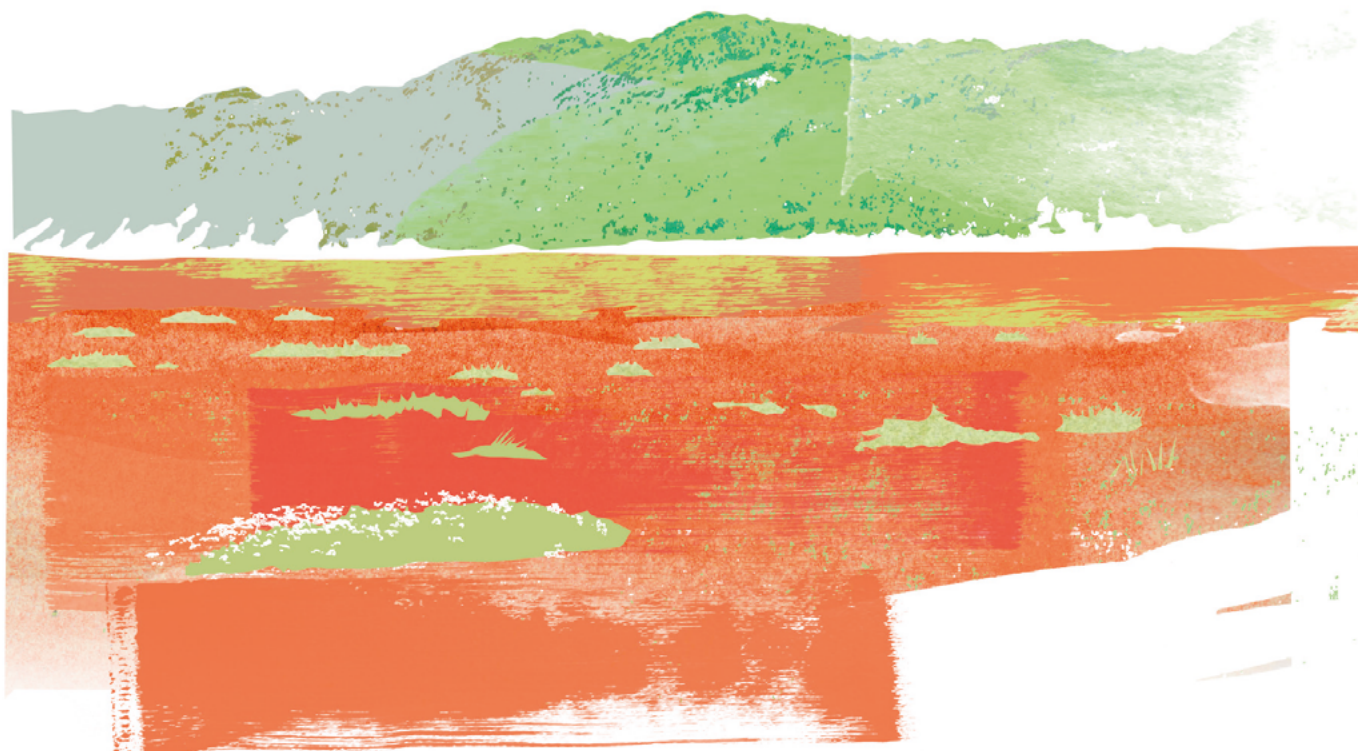
We, the ministers, recall the vision of our cooperation, a Wadden Sea which is a unique, natural and dynamic ecosystem with characteristic biodiversity, vast open landscapes, and rich cultural heritage, enjoyed by all, and delivering benefits in a sustainable way to present and future generations, as well as the Guiding Principle which is “to achieve, as far as possible, a natural and sustainable ecosystem in which natural processes proceed in an undisturbed way”.

We underline the great responsibility we have for this One Wadden Sea World Heritage and we are determined to take up a high level of ambition needed to achieve our goals and to be internationally respected, bearing in mind the challenges of climate change and biodiversity loss.

Acknowledging the different approaches in the Wadden Sea countries and regions in management as a chance and being aware of the benefit of joining forces facing the challenges ahead, our **mission** is to engage as many as possible and to learn from each other in performing to the highest standards, to gain added value a.o. for the mandatory implementation of i.e. EU legislation by the Wadden Sea countries by joining our nature protective competences and by striving for the highest ecological denominator.

This declaration sets the course for operationalising a framework of activities we will take up the next four years:

- We welcome the Trilateral Partnership Hub and the Trilateral Programming Committee on Wadden Sea Research, which will contribute to the improvement of our collaborative approach to sustain the protection of our common World Heritage Site and we will further expand this partnership approach;
- Aware of the international cooperation due to the crucial position of the Wadden Sea for migrating birds along the East-Atlantic Flyway, we will invest in this international responsibility beyond our borders;
- We will foster the implementation of the single integrated management plan to progress on reducing existing as well as upcoming human pressures;
- To safeguard the Wadden Sea World Heritage Site for the next generations, we welcome and support the involvement of the youth.



PREAMBLE

We, the Ministers

responsible for the protection of the Danish, Dutch, German Wadden Sea, inscribed as one World Heritage Site on the UNESCO World Heritage List being

the largest unbroken intertidal back-barrier sand and mudflat ecosystem in the world, a depositional coastline of unparalleled scale and diversity with natural processes undisturbed throughout most of the area and considered to be one of the most important areas for migratory birds in the world,

representing our respective Governments in the Trilateral Wadden Sea Governmental Council on the Protection of the Wadden Sea,

Appraise our trilateral cooperation of more than forty-five years and **reaffirm** the objective of the 2010 Joint Declaration and the Wadden Sea Plan 2010 to protect and manage the Wadden Sea as a single ecological entity shared by the three countries in accordance with the Guiding Principle, and pursue to apply the ecosystem approach;

Aware of the manifold challenges arising from the global triple crises of climate change, biodiversity loss, and pollution, we must address them together in order to strengthen the resilience of the Wadden Sea World Heritage Site, including the natural, social and cultural aspects, while ensuring the safety of inhabitants and visitors by minimising the negative impacts of human activities and restoring ecosystems, where necessary and possible;

Committed to contribute, through the work of the trilateral cooperation, to the implementation and achievement of the goals of the UN 2030 Agenda for Sustainable Development, the OSPAR North-East Atlantic Environment Strategy 2030 and the EU Biodiversity Strategy for 2030;

Determined to take on a position that supports the implementation of the goals of the EU Biodiversity Strategy for 2030 to demonstrate and improve our transboundary network as effectively managed and protected, including restoration of habitats and species, where adequate and practicable, contributing to the UN Decade on Ecosystem Restoration;

Committed to the World Heritage Convention in supporting the international cooperation with partners beyond the Wadden Sea Region by actively contributing e.g. to the UNESCO World Heritage Marine and Sustainable Tourism Programmes, to the African-Eurasian Water-bird Agreement (AEWA), and in the context of our Memoranda of Understanding with Mauritania, the Republic of Korea, and via the Memorandum of Intent with The Wash (GB);

Continue the cooperation along the East-Atlantic Flyway, acknowledging and furthering the Wadden Sea Flyway Initiative by enhancing the partnership while recognising the importance of the Arctic component, recalling the Wadden Sea's importance for global biodiversity, in particular as a staging area for migratory bird populations and **welcoming** the new partners of the Wadden Sea Flyway Initiative;

Express our great gratitude to all those who have contributed at international, regional, or local level in the outgoing period through their commitment and work to an improved Trilateral Wadden Sea Cooperation;

Appreciate the engagement of all the participating organisations and networks that jointly founded the multi-stakeholder Partnership in support of the Wadden Sea World Heritage together with the Trilateral Wadden Sea Cooperation: the Wadden Sea Team of green Non-Governmental Organisations, the Wadden Sea Forum, the research community, and the networks for sustainable tourism and for environmental education;

Acknowledge with appreciation the preparatory work done in exploring the establishment of a joint financial funding instrument to leverage further resources in addition to governmental action for the advancement of the protection of the Wadden Sea World Heritage Site;

Acknowledge the progress made by the Trilateral Programming Committee on Wadden Sea Research in establishing the Joint Programme on Wadden Sea Research which is dedicated to foster activities for a better protection and science-based management of the Wadden Sea;

Welcome the further integration of social, cultural, natural, economic, and demographic components including landscape and cultural heritage to understand the changes the Wadden Sea Area experiences in order to support sustainable transitions;

Express our continual commitment to the Trilateral Monitoring and Assessment Programme as the basis for our management and to adapt it to recognised challenges;

Acknowledge and foster the involvement of the next generation as the future guardians for the protection and the outlook of our Wadden Sea World Heritage.

By taking all this into account,

Welcome with great appreciation the participatory and integrative process of the development of an overarching and single integrated management plan for the Wadden Sea World Heritage Site, which will, as coherent plan complementing to the existing Wadden Sea Plan 2010 and strategies, strengthen the effectiveness of coordinated national management within the property to tackle the existing challenges for safeguarding the Outstanding Universal Value and our ONE Wadden Sea World Heritage Site;

Respond to the pressure on the Wadden Sea system by human activities like the growth in marine traffic, the effects of energy transition in the North Sea, the continuous process towards sustainable fisheries, sustainable tourism, and the need for coastal flood defense and protection measures, by addressing these prominently in the implementation of the single integrated management plan.



DECISIONS

PROTECT AND STRENGTHEN THE OUTSTANDING UNIVERSAL VALUE

The Ministers

1. **Instruct** the Wadden Sea Board to explore the potential benefits of adapting elements from the concept of “Rights of Nature” to our common Wadden Sea World Heritage Site in support of the Guiding Principle and thereby advancing our approach to protect the Outstanding Universal Value (OUV) and adding value to the Trilateral Wadden Sea Cooperation;
 2. **Instruct** the Wadden Sea Board to prepare an application to UNESCO for minor boundary changes of the World Heritage Site, for instance to adjust to morphological changes and close existing exclaves within as far as possible;
 3. **Reaffirm** that the Wadden Sea ecosystem is closely interconnected and dependent in its ecological functions and integrity with the offshore zone, the adjacent coastal area and the coastal mainland;
 4. **Instruct** the Wadden Sea Board to promote these interactions, especially in the field of migratory species protection such as marine mammals, fish, and birds, e.g., by supporting the creation of ecological corridors or safe passages;
 5. **Instruct** the Wadden Sea Board to contribute to an operationalisation of the EU objectives in this regard as well as to the implementation of international conventions such as the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention) and the Convention on Migratory Species (Bonn Convention), the RAMSAR Convention, the Ottawa Convention (Arctic Council), and the Agreement on the Conservation of African-Eurasian Migratory Water Birds (AEWA) including its specific work on species and management plans;
 6. **Request** the Wadden Sea Board to analyse and identify efficient ways to create added value through improved coordinated measures for a coherent transboundary Nature Network in the Wadden Sea Region f. e. by amending the Wadden Sea Plan 2010;
- 
7. **Instruct** the Wadden Sea Board to facilitate exchange of national experiences and best practices in a joint process involving relevant parties by organising e.g. thematic workshops, in regard to the implementation of the EU Biodiversity Strategy for 2030 focussing on the trilateral Wadden Sea Conservation Area;
 8. **Recognise** that the long-term hydro-morphological development of the Wadden Sea plays a key role for the Wadden Sea ecosystem against the background of climate change, sea level rise, as well as adaptation measures and therefore **instruct** the Wadden Sea Board to engage in monitoring and research efforts for a deeper system understanding and in long-term forecasting that may stimulate increased nature conservation efforts which are needed to maintain natural functioning and resilience;
 9. **Request** the Wadden Sea Board to identify habitat types and species with a significant percentage of unfavorable conservation status or showing negative trends and develop options for planning tools, good restoration and recovery methods, and practice through the exchange of knowledge and experience;
 10. **Instruct** the Wadden Sea Board to develop projects reversing the negative trends respecting the Guiding Principle and the Outstanding Universal Value, thus contributing to the EU Biodiversity Strategy for 2030;
 11. **Instruct** the Wadden Sea Board to promote the inclusion of cumulative aspects in decision making by taking into account the Guiding Principle and the Outstanding Universal Value;
 12. **Strengthen** joint efforts to protect populations of endangered species for whose survival the Trilateral Wadden Sea Cooperation has a special responsibility, f.e. in offering key habitats on their migrations or these species occur almost exclusively here while realising that not all species benefit sufficiently by habitat protection alone;
 13. **Promote** and **support** exchange on animal species conservation issues related to spatial and temporal use, habitat quality, and food availability, especially for birds, but also for fish, seals, and harbor porpoises, also in the context of climate change impacts;
 14. **Adopt** the updated Seal Management Plan 2023-2027 for harbour and grey seal and **support** its implementation as a means for contributing to the protection of the species under the Convention on Migratory Species (Bonn Convention);
 15. **Instruct** the Wadden Sea Board to foster the Trilateral SWIMWAY Vision focussing on the extended supra-regional interconnections relevant for fish species, through contributing to the further implementation of the Trilateral SWIMWAY Vision Action Programme (2018-2024) by supporting knowledge exchange, monitoring, and identifying fields for collaboration while supporting conservation action;
 16. **Instruct** the Wadden Sea Board to further the practical implementation of the Trilateral Management and Action Plan Alien Species (MAPAS, 2018) with focus on the installation of the information and the exchange platform as well as early countermeasures and pilot projects, where appropriate, and further the development of knowledge on the relationship between climate change and alien species.

ENHANCE SUSTAINABILITY OF HUMAN USES AND FOSTER TRANSFORMATIVE CHANGE

The Ministers

17. **Encourage** and **call on** the fisheries sector to continue on their path to make the fishery more sustainable while respecting the nature conservation objectives in the Wadden Sea;
18. **Urge** the Wadden Sea Board to enter a dialogue process with competent authorities for fisheries, sector representatives, and environmental NGOs at trilateral level to advance the implementation of the trilaterally agreed Framework for Sustainable Fisheries (2014) for the Wadden Sea World Heritage Site in a collaborative approach by stimulating and facilitating the exchange of information, knowledge, best practices, and management experiences about impacts of fisheries and by developing, where adequate, pilot studies and concrete measures;
19. **Acknowledge** the longlasting cooperation between the tourism sector and nature conservation towards sustainable tourism in the Wadden Sea region and **welcome** the Action Plan (2022) on implementing the Wadden Sea World Heritage Sustainable Tourism Strategy that consciously respect the sensitivity and limited carrying capacity of the Wadden Sea World Heritage Site and which must take place in collaboration with the tourism sector in a way that strengthens the sector's ownership and enhances their responsibility; **instruct** the Wadden Sea Board to review the Sustainable Tourism Strategy (2014) and adapt the Action Plan, if appropriate, in overseeing its further implementation;
20. **Recognise** the efforts of Wadden Sea port operators to make port operations more sustainable and to create further incentives like publicly visible awards based on a credible, commonly agreed external certification systems, as well as accommodate ships with climate-neutral types of propulsion referring to the ports' commitment to climate neutrality;
21. **Acknowledge** and **welcome** the "Sustainable shipping and ports initiative for a well-protected Wadden Sea", signed by a broad range of stakeholders, encouraging their further collaborations and dialogue at trilateral level to further the sustainability of the Wadden Sea ports and the protection of the Wadden Sea World Heritage Site;
22. **Appeal** to port operators, water, and shipping authorities in their long-term planning for the further development of ports and fairways to take into account the natural limits, esp. the conditions induced by existing site-specific hydro-morphological situations and their natural dynamics in the Wadden Sea and **instruct** the Wadden Sea Board to follow this development, where possible, via knowledge exchange and/or specific projects;
23. **Urge** the Wadden Sea Board to involve the competent national authorities and, where applicable, to ensure the further implementation of the Operational Plans for the Wadden Sea Particularly Sensitive Sea Area (PSSA, 2014);
24. **Urge** for an evaluation and review of existing safety measures to the PSSA Wadden Sea with the responsible shipping authorities and relevant stakeholders. Lessons learned from previous maritime emergencies have been and should be consistently drawn and implemented. If the evaluation points out, discuss other possible safety measures including Associated Protective Measures with added value;
25. **Request** the Wadden Sea Board to facilitate exchange and collaboration with the energy sector, competent authorities, including also relevant stakeholders, regarding high voltage power grid connections from offshore wind farms with the intention to avoid, mitigate, and compensate for negative impacts on the Wadden Sea World Heritage Site, with the intention to develop a coordinated spatial strategy beyond 2030, striving to support the long-term expansion targets for offshore wind energy, making it more nature friendly in line with conservation objectives;
26. **Urge** the Wadden Sea Board to explore the multi usage of space and how different interests, such as ecological, shipping, energy and economic interests can be combined and specifically to explore, in collaboration with the shipping authorities, the double usage of fairways for both shipping as well as for cables and pipelines with the purpose of mitigating negative ecological impact on some of the most vulnerable and unique elements of the World Heritage Site between islands and shore;
27. **Urge** the Wadden Sea Board to evaluate possible effects of emerging forms of energy production while applying the precautionary principle;
28. **Reconfirm** the existing trilateral agreement that prohibits the construction of wind turbines, oil and gas exploration, and exploitation and construction of new installations for oil and gas within the boundaries of the Wadden Sea World Heritage Site;
29. **Agree** to end all forms of exploitation of oil and gas fields as early as possible and not to grant any new upcoming permits and authorisations for oil and gas activities within the Wadden Sea World Heritage Site;
30. **Request** the Wadden Sea Board to exchange on future plans and best practice of transportation infrastructures for emerging forms of energy potentially affecting the Wadden Sea World Heritage Site to support the Wadden Sea countries in their planning processes;
31. **Request** the Wadden Sea Board to enhance and facilitate regular professional exchange on coastal flood defence and protection with the responsible authorities, agencies, and research institutions in this field, i. a. to promote the integration of environmentally friendly and Nature-based Solutions, according to the IUCN definition, in coastal flood defence and protection in line with the further implementation of the trilateral Climate Change Adaptation Strategy (2014);
32. **Consider** the national implementation and cross-border coordination of the EU Water Framework Directive (River Basin Management), the EU Marine Strategy Framework Directive, and the OSPAR North-East Atlantic Environment Strategy 2030 (NEAES) as essential contributions to a good environmental status and effective protection of the Wadden Sea marine ecosystem and biodiversity against adverse effects, esp. by marine litter including microplastics, persistent pollutants, and underwater noise and **mandate** the Wadden Sea Board to encourage and support targeted flanking trilateral initiatives with added value;

33. **Welcome** and **appreciate** the “[Trilateral Vision on Dark Sky over the Wadden Sea](#)”, highly appreciating the broad stakeholder commitment, and **encourage** and **support** trilaterally coordinated project initiatives and measures to reduce light emissions with negative impacts on plant and animal life, especially on birds and insects;
34. **Welcome** the designation of dark sky parks as an instrument to raise public awareness on the issue of natural darkness and enabling the natural experience of a pristine night sky over the Wadden Sea World Heritage Site;
35. **Instruct** the Wadden Sea Board to stimulate the development and implementation of a strategy on reducing light pollution for the Wadden Sea;
36. **Instruct** the Wadden Sea Board to take into account the connectivity and interdependence between the Wadden Sea, the coastal mainland, and the offshore zone when developing trilateral strategies or common approaches to monitoring and management issues, also taking into account the cumulative effects due to increasing pressures from more intensive use of adjacent areas, including the assumption of potentially increasing fishing pressure in parts of the Wadden Sea World Heritage Site due the expansion of competing uses in the offshore zone;
37. **Encourage** the Wadden Sea Board to give due consideration to the concerns of the World Heritage Site and bring them into the respective planning procedures at trilateral and North Sea level.



MITIGATE AND ADAPT TO CLIMATE CHANGE

The Ministers

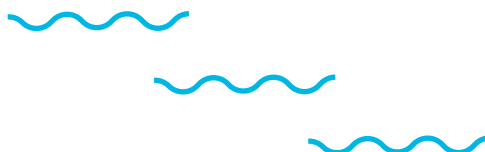
38. **Recognise** and **support** decisions and initiatives aimed at reducing the Wadden Sea Region's greenhouse gas emissions in order to contribute to the overall EU greenhouse gas reduction targets, in particular in the decarbonisation of the energy sector, the traffic sector, and the tourism sector, and also **strive** to take on a pioneering role in this respect as part of their own responsibility as site management operators;
39. **Mandate** the Wadden Sea Board to investigate the role of the ecosystem service value of carbon sequestration by typical Wadden Sea habitats like seagrass beds and salt marshes and their contribution to the EU greenhouse gas reduction targets whilst preserving the Outstanding Universal Value;
40. **Instruct** the Wadden Sea Board to continue implementing the trilateral Climate Change Adaptation Strategy (2014), updating the priorities contained therein, where needed, under consideration of the EU Strategy on Adaptation to Climate Change and the EU Biodiversity Strategy for 2030 to tackle jointly the climate and biodiversity crisis;
41. Further **promote** investigations and **stimulate** appropriate initiatives how Nature-Based Solutions for climate change adaptation can integrate coastal protection and water management with nature conservation goals, while considering a broader geographical and socio-economic context; e.g. by stimulating new approaches and to analyse impacts of future variations in the fresh water influx to the Wadden Sea and develop options for mitigating negative ecological impacts;
42. **Instruct** the Wadden Sea Board to investigate which human pressures on the Wadden Sea ecosystem should be reduced in order to boost adaptive capacity, improve resilience, reduce vulnerability to climate change, and thus safeguard the Outstanding Universal Value while taking into account potentially unavoidable ecosystem changes;
43. **Instruct** the Wadden Sea Board to investigate options to enhance the level of science based, adequate adaptive management to systematically safeguard the Outstanding Universal Value of the Wadden Sea, mapping best practices while applying and in regard to the precautionary principle, cumulative effects and the ecosystem approach.



MANAGE AND COMMUNICATE EFFECTIVELY

The Ministers

44. **Request** the Wadden Sea Board to support research-related issues in joint trilateral research calls based on the Trilateral Research Priorities as outlined by the Trilateral Programming Committee on Wadden Sea Research with a focus on impacts on the Outstanding Universal Value and its key values as well as their adaptive capacity in view of challenges such as climate change and increasing human uses that cause cumulative effects, taking into account the recommendations of the 15th International Scientific Wadden Sea Symposium;
45. **Instruct** the Wadden Sea Board to continue supporting the work of the Trilateral Programming Committee on Wadden Sea Research and related scientific cooperation, stimulate trilateral science-policy interaction, emphasising an interdisciplinary approach, furthering the exchange between countries and organisations, and exploring the application of new methods and research techniques to optimise effective monitoring and assessment of the state of the Wadden Sea World Heritage Site;
46. **Recognise** that only through adequate monitoring, addressing the critical research questions and sharing knowledge the necessary foundations can be laid to meet the challenges, to identify the consequences, especially with regard to the specific values of the Outstanding Universal Value, and to take the necessary management measures;
47. **Request** the Wadden Sea Board to ensure adequate monitoring and assessment within the framework of the Trilateral Monitoring and Assessment Programme (TMAP Strategy 2014) for all relevant ecosystem parameters and ecosystem stressors, integrating geographical information systems, new techniques, and recording methods;
48. **Instruct** the Wadden Sea Board to investigate relevant socio-economic parameters to include and adjust the Trilateral Monitoring and Assessment Programme to recognise environmental challenges, esp. relating to the key topics as identified in the single integrated management planning process, thereby strengthening interdisciplinary approaches and enabling comprehensive analysis;
49. **Agree** to increase the value and the visibility of the Trilateral Monitoring and Assessment Programme to scientific and other users and to a wider range of stakeholders and the public, including the availability of data and presentation of information resulting from those data;
50. **Instruct** the Wadden Sea Board to produce updates of the online Wadden Sea Quality Status Report that reflect important ecological and socio-economic topics, also in the light of climate change, and to deliver a comprehensive synthesis report in time for the next Trilateral Governmental Conference;
51. **Adopt** the single integrated management plan for the Wadden Sea World Heritage Site as developed in accordance with the request from the UNESCO World Heritage Committee (WHC-14/38. Com/16) in conformity with the requirements of § 111 of the Operational Guidelines for the Implementation of the World Heritage Convention;
52. **Instruct** the Wadden Sea Board to ensure and oversee the effective, coordinated implementation of the single integrated management plan for the Wadden Sea World Heritage Site and to report on the implementation status in time as part of the policy assessment reporting for the next Trilateral Governmental Conference;
53. **Instruct** the Wadden Sea Board to review and update the Wadden Sea Plan 2010, where necessary, in time for the next Trilateral Governmental Conference to strengthen its coordinating function as overarching trilateral framework for nature conservation with a particular focus on the implementation of the EU Directives on Habitats and Birds and the EU Biodiversity Strategy for 2030;
54. **Instruct** the Wadden Sea Board to review the existing trilateral sectoral visions, strategies and action plans in general ten years after their adoption, decide on the updates, and amend, where necessary, sharpening the objectives and application orientation of the measures contained therein, e. g. according to the SMART principle (Specific Measurable Achievable Relevant Time-bound);
55. **Reconfirm** the 2010 Governance Arrangements and instruct the Wadden Sea Board to review and, if necessary, change the composition, membership and terms of reference of thematic committees and working groups of the Trilateral Wadden Sea Cooperation with the aim of strengthening and making the collaboration more effective, also with the strategic partners, competent authorities, and agencies;
56. **Instruct** the Wadden Sea Board to revise the Trilateral Communication Strategy (2012) and to update it with the aim to adequately manage the Wadden Sea World Heritage brand for nature conservation and to further enhance the use of modern media.



INTENSIFY COLLABORATION AND STRENGTHEN ENGAGEMENT BY WORKING WITH PARTNERS

The Ministers

57. **Confirm** the role of the Wadden Sea Forum and the Wadden Sea Team of green Non-Governmental Organisations as key stakeholders for the Trilateral Wadden Sea Cooperation and Advisors to the Wadden Sea Board;
58. **Continue** to support the work of the Wadden Sea Forum as an independent trilateral stakeholder forum and as a dialogue platform for the involvement and engagement of stakeholders from the Wadden Sea Region to work on a sustainable and climate friendly development;
59. **Continue** to support the work of the Wadden Sea Team of green Non-Governmental Organisations on nature conservation and the integrity of the Wadden Sea World Heritage Site based on their specific engagement;
60. **Continue** and **expand** the trilateral strategic multi-stakeholder Partnership in support of the Wadden Sea World Heritage Site with the Partnership Hub (the management and organisational unit of the Trilateral Wadden Sea World Heritage Partnership), to facilitate and strengthen the sense of ownership and responsibility across societal and economic sectors and networks for the preservation of the Outstanding Universal Value and the enhancement of sustainability in the Wadden Sea Region;
61. **Welcome** and further **encourage** all strategic partners to engage and collaborate in transnational, cross-sectoral and knowledge-based initiatives, measures and projects within the Partnership Hub;
62. **Affirm** the intention of supporting engagement and collaboration of a range of partners, stakeholders, organisations, or companies to contribute to the protection and safeguarding of the Wadden Sea World Heritage Site and encourage transnational measures and projects whose purpose it is to complement activities of the Trilateral Wadden Sea Cooperation and as such **task** the Wadden Sea Board to oversee the further development of joint financial funding instruments;
63. **Welcome** and **support** the establishment of the Trilateral Wadden Sea World Heritage Partnership Centre in Wilhelmshaven to house the Common Wadden Sea Secretariat, the trilateral Partnership Hub, and the Wadden Sea Forum;
64. **Encourage** the stakeholders and competent authorities to continue working on cultural landscapes and history as related assets to nature conservation in the Wadden Sea Region;
65. **Continue** and **enhance** the education and outreach activities of the trilaterally agreed Strategy on Education for Sustainable Development and World Heritage Interpretation (2018) as a shared responsibility of the signatories by jointly implementing the Trilateral Education Work Programme and further supporting the International Wadden Sea School (IWSS);
66. **Continue** and **strengthen** the involvement of the younger generation through cross-border exchanges for pupils, students, and young professionals by i.a. developing the East Atlantic Flyway Youth Forum and initiating holding a second Youth Conference in time for the next Trilateral Governmental Conference and investigating the options and feasibility of a Trilateral Wadden Sea Volunteer Service.



CONTRIBUTE TO AND TAKE RESPONSIBILITY ON A GLOBAL SCALE

The Ministers

67. **Acknowledge** the interdependence of breeding, resting, stop-over, and wintering sites of the migratory birds along the East-Atlantic Flyway that make up a key feature of the Outstanding Universal Value of the Wadden Sea, aiming to safeguard a climate resilient flyway;
68. **Commit** to further strengthen the ties between the various initiatives working along the East Atlantic Flyway by expanding cooperation within the Wadden Sea Flyway Initiative to further intensify the engagement of partners, with the aim of further enhancing monitoring, capacity building, and conservation efforts, both in the West African and the Arctic region;
69. **Continue** to act jointly in the network of marine World Heritage Sites worldwide in the framework of the UNESCO World Heritage Marine Programme and feel honoured to host the 5th World Heritage Marine Managers Conference in 2023 in the Wadden Sea World Heritage Site;
70. **Aim** to contribute to the UN Decade of Ocean Science for Sustainable Development in demonstrating the work of the Trilateral Wadden Sea Cooperation in connection with the Trilateral Programming Committee on Wadden Sea Research and use the opportunity for exchange with other World Heritage Sites, via e.g. enhanced alignment of science developments;
71. **Intend** to continue the work within the frame of the Memoranda of Understanding with our existing international partners while considering further collaboration and support of other marine World Heritage Sites with similar features such as the Yellow Sea and along the East-Atlantic Flyway as contribution to global partnerships.



TRILATERAL WADDEN SEA COOPERATION 2022-2026

The Ministers

72. **Thank** Germany for having assumed the presidency of the Cooperation in the period from 2018-2022 and for hosting the 14th Trilateral Governmental Conference and the Trilateral Wadden Sea Governmental Council;
73. **Welcome** the presidency of the Kingdom of Denmark for the period from 2022-2026;
74. **Instruct** the Wadden Sea Board to review, in time for the next Trilateral Governmental Conference, the progress made on the items described above;
75. **Intend** to hold the 16th International Scientific Wadden Sea Symposium prior to the 15th Trilateral Wadden Sea Governmental Council at the invitation of the Netherlands;
76. **Intend** to hold the next Trilateral Governmental Conference on the Protection of the Wadden Sea and the 15th Trilateral Wadden Sea Governmental Council meeting in 2026, at the invitation of the government of Denmark.



SIGNATURES

Esbjerg, Denmark, 15 May 2023

FOR THE GOVERNMENT OF THE KINGDOM OF DENMARK



Magnus Heunicke, Minister of Environment

FOR THE GOVERNMENT OF THE KINGDOM OF THE NETHERLANDS



Christianne van der Wal, Minister for Nature and Nitrogen Policy

FOR THE GOVERNMENT OF THE FEDERAL REPUBLIC OF GERMANY



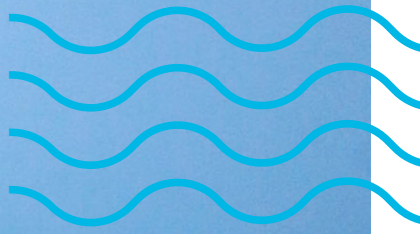
Steffi Lemke, Federal Minister for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection



Annex II. The SIMP Integrated Management Plan for ONE Wadden Sea World Heritage

THE SIMP

INTEGRATED MANAGEMENT PLAN
FOR ONE WADDEN SEA WORLD HERITAGE





The SIMP Integrated Management Plan for ONE Wadden Sea World Heritage is a publication of the Trilateral Wadden Sea Cooperation, represented by the Common Wadden Sea Secretariat (CWSS)
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FOREWORD



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BARBARA ENGELS

Federal Agency for Nature Conservation, Chair of Task Group World Heritage

"With the SIMP we now have a joint tool which responds extremely well to the "homework" given by the UNESCO World Heritage Committee. I believe that by implementing the SIMP, the TWSC can live up to the expectations of a transnational World Heritage Site."



© Jelle Witvoet

HENK DE VRIES

Director It Fryske Gea and Advisor to the Wadden Sea Board

"The SIMP provides good direction to protect the Wadden Sea World Heritage Site. It is an international umbrella for proper management on a national and local scale so that the Outstanding Universal Value can be preserved and strengthened."



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VOLKER BRENGELMANN

Head of Unit nature and species protection, Lower Saxon Ministry of Environment, Energy, Construction and Climate Protection and Member of the Wadden Sea Board

"World Heritage designation has a political appeal far beyond our Wadden Sea countries. With the SIMP, we affirm our common political responsibility and agree trilaterally on the way forward to preserve the Wadden Sea World Heritage Site for the intrinsic value of nature and for future generations."



© Vadehavet

JANNE LIBURD

Professor, Chair of the Wadden Sea National Park Board, Danish Wadden Sea National Park, and Member of the Wadden Sea Board

"The Danish Wadden Sea National Park welcomes the SIMP and appreciates the participatory processes, which contributed to the final plan. The SIMP is an important framework to enhance existing results and management across borders, sectors, and disciplines, and to ensure the future integrity of the World Heritage Site."



© Frank Peter

TOBIAS GOLDSCHMIDT

Minister for Energy Transition, Climate Protection, Environment and Nature (MEKUN) of Schleswig-Holstein

"The Wadden Sea World Heritage Site is of special significance to Schleswig-Holstein. Preserving it in the face of current challenges, such as climate change and biodiversity loss, is a transnational task. The SIMP lives up to this challenge."



© Jan Dube

STEFFEN GRUBER

Verein Jordsand

"We are very happy that the SIMP brought together the various strategies and plans to help focus further on the protection goals for the Wadden Sea. We hope and expect this will join all shareholders in this trilateral environment and will help us continue on the path together."



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MARRE WALTER

Director Management Authority Wadden Sea

"From the perspective of site management there is still improvement to be made for the Wadden Sea. Implementing the 'SIMP-ambition' in the various countries and maintaining the trilateral connection is the next step in World Heritage-worthy management."



© Karin Wesemüller

HOLGER WESEMÜLLER

Chair of the Advisory Board for Lower Saxon Wadden Sea National Park

"On behalf of the Advisory Board of Lower Saxon Wadden Sea National Park, I particularly welcome the cooperative, integrative approach of the SIMP. Partners and stakeholders can contribute substantially to safeguard the Wadden Sea's Outstanding Universal Value. In the face of the challenges ahead, we need to be more ambitious in this regard. An intensive dialogue can move us forward on the key issues."



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MAREN BAUER

Ministry for Energy Transition, Climate Protection, Environment and Nature of Schleswig-Holstein, Unit for National Park, Marine Protection

BRITTA DIEDERICHS

National Park Authority Schleswig-Holstein, Head of Unit for Protection and Management

"The cooperation in the development of the SIMP has shown how important exchange is, on a trilateral as well as on a regional level. From our perspective, joint action and learning from each other are central to the preservation of our common World Heritage Site. The SIMP contributes to achieving the trilaterally agreed targets for management, which is our task as site managers both at our office desks and in the field."



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PREBEN FRIIS-HAUGE

Committee Chair and Councillor, Varde Municipality, Member of the Regional Council, Syddanmark and Chair of the Wadden Sea Forum and Advisor to the Wadden Sea Board

"The WSF, as the only trilateral multi-stakeholder forum, offers 20 years' experience of stakeholder engagement in the Wadden Sea Region to support the implementation of the SIMP. The WSF appreciates the SIMP; the potential added value could be elaborated and improved if the non-governmental stakeholders are involved in the entire process, especially the implementation stage."



ILKA WAGNER

Head of Unit Marine Nature Conservation, German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection and Member of the Wadden Sea Board

“The SIMP is the central instrument for the further development of a coordinated management of our common Wadden Sea World Heritage Site. The process of developing the SIMP was an important contribution to this goal.”



HANS-ULRICH RÖSNER

Head of the Wadden Sea Office WWF Germany, Wadden Sea Team of environmental NGOs and Advisor to the Wadden Sea Board

“The SIMP does not only summarise all the decisions, plans, and strategies for our joint World Heritage Site very well. It also demonstrates the conservation success we have jointly achieved for the Wadden Sea. At the same time, the SIMP is honest by not hiding the many challenges still ahead, with the key topics on fisheries, tourism, shipping and ports, energy, and coastal flood defence, seeking solutions.”



MARGRITA SOBOTTKA

Lower Saxon National Park Authority, Partnership Hub Administration Unit

“For me, the SIMP is the result of a long, sometimes laborious but nevertheless fruitful development process. Trilaterally, it has brought us even closer together. With it, we now have a valuable roadmap for our joint work.”



**ISABEL HUNTER (DENMARK)
PASCAL ERTZINGER (GERMANY)
WANNAS LE LY (THE NETHERLANDS)**

Trilateral Youth Conference 2022 participants

“We consider the SIMP future implementation an opportunity for youth to embed solutions from the bottom up. We want our voices and views as part of building together a future for the Wadden Sea World Heritage Site.”



JENS KERSTAN

Senator for Environment, Climate, Energy and Agriculture, Free and Hanseatic City of Hamburg

“The protection of the outstanding universal value of the UNESCO Wadden Sea World Heritage Site is a joint responsibility of Germany, the Netherlands and Denmark. The SIMP raises our proven cooperation to a new level and specifies common goals, challenges, and activities to protect this unique Wadden Sea ecosystem.”



NANOU BEEKMAN

Director Large Waters and Fisheries and Member of the Wadden Sea Board

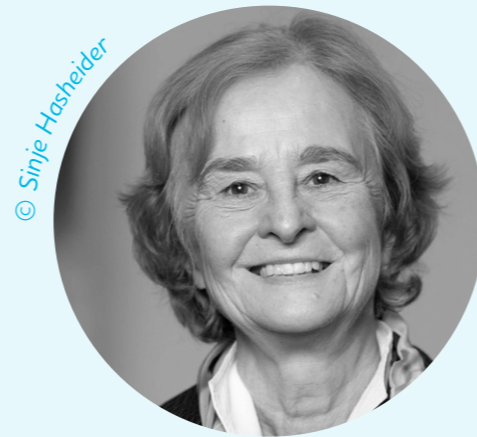
“The Outstanding Universal Value is under pressure from an increase in activities in the Wadden Sea World Heritage Site. The SIMP is one of the building blocks for restoring the balance between economy and ecology.”



STEFAN MOHRDIECK

District Administrator of Dithmarschen and Chair of the National Park Advisory Board Dithmarschen and Vicechair of the Wadden Sea Forum

“Stakeholders from the region play a central role in making the SIMP a success. Enhancing ownership and commitment of the people who live and work in the Wadden Sea Region is essential for its sustainable development.”



KARIN LOCHTE

Chair of the Wadden Sea Board

“The SIMP combines the many different management activities of the three Wadden Sea countries in one framework, giving a most helpful guideline for the protection of the Wadden Sea World Heritage Site. The task now is to implement the strategies outlined in the SIMP and I expect that this will open a new level of trilateral cooperation. As we have to deal with increasing pressures on the Wadden Sea from climate change and human use, the SIMP will be a good tool to tackle future challenges.”



PETER SÜDBECK

Head of the National Park Authority, Lower Saxon National Park Authority

“The SIMP now gives us a guiding framework on how to better coordinate and harmonise our tasks trilaterally as site managers. In the long term, I expect this to lead to more effective protection of the ONE Wadden Sea World Heritage Site that we share.”



COMMON WADDEN SEA SECRETARIAT / SOLEDAD LUNA

Programme Officer, The SIMP Integrated Management Plan for ONE Wadden Sea World Heritage

“Trilateral collaboration for protecting the Wadden Sea World Heritage Site is a challenge, but it is also our greatest strength! Through our collaboration, we have already achieved outstanding things. We at CWSS are convinced that through cooperation we can further raise our ambition to live up to our trilateral commitments, such as the SIMP.”

EXECUTIVE SUMMARY

The global importance of the Wadden Sea as the largest unbroken intertidal sand and mudflat ecosystem in the world, the longstanding conservation efforts of the Trilateral Governmental Cooperation (TGC) of the three Wadden Sea States, and the support from the Wadden Sea Region and its stakeholders are recognised by its World Heritage status. With the inscription of the Wadden Sea onto UNESCO's World Heritage List as a transboundary site, there came the request by the World Heritage Committee to develop a single integrated management plan with the purpose of further facilitating the continuous improvement of transboundary management coordination for the protection and maintenance of the Outstanding Universal Value (OUV).

The SIMP Integrated Management Plan for the ONE Wadden Sea World Heritage provides a clear overarching description of the nature conservation management structures in Denmark, Germany, and the Netherlands as well as at the trilateral level. It also describes the trilaterally applied management phases within a continuous cycle of adaptive management.

In the process of developing the SIMP, five topics were prioritised as of high importance for joint management to maintain the integrity of the Site. Prioritisation of the five key topics was based on recommendations from Wadden Sea's site managers', prioritisation by the Task Group World Heritage, and selection criteria presented in the Leeuwarden Declaration (2018). The criteria are: urgency, direct effect on the OUV, and the need to be addressed at a trilateral level. Additionally, the key topics are mentioned as key threats requiring ongoing attention in the Statement of Outstanding Universal Value adopted by the World Heritage Committee. Pending management tasks and activities are suggested for all key topics based upon proposals from site managers, experts, and policy makers'.

The SIMP also presents complementary activities to support management in the Wadden Sea and shows how the Trilateral Wadden Sea Cooperation (TWSC) is addressing the overarching

effects of climate change. The SIMP highlights the Wadden Sea World Heritage Site's global role and its link to global responsibilities. Cooperation with partners in the area and globally is instrumental in and supportive of long-term protection of the Wadden Sea.

The SIMP for the Wadden Sea is a political agreement within the Trilateral Wadden Sea Cooperation (TWSC), meaning it is a legally non-binding document of common political interest. Existing policy documents and legally binding instruments at the trilateral, regional, national, and local level are not altered or affected by the SIMP. The SIMP is complementary to the Wadden Sea Plan 2010.

The main target audiences of the SIMP are decision and policy makers and site managers working in nature conservation of the Wadden Sea area in the three countries. In the context of the SIMP, site managers are professionals with direct responsibilities for nature conservation and management of the Wadden Sea World Heritage Site. Further important target audiences are environmental NGOs and other strategic partners, the scientific community, administrations and stakeholders from socio-economic sectors (e.g., education, fisheries, tourism and shipping) addressed in the SIMP, and the local population.

Implementation of the SIMP aims to facilitate a strategic, proactive, and collaborative trans-boundary management approach to maintaining the OUV and address the various pressures identified.

Progress in implementing the SIMP will be reported to the Trilateral Governmental Conferences to allow refinement of its implementation. Additionally, it will be revised regularly (every 10-12 years) by the Wadden Sea Board, presenting the opportunity to adapt the SIMP based on the results of the trilateral monitoring and assessment programme as well as management requirements of the TWSC, including the selection of key topics, with the support and participation of all parties involved in implementing the plan. It is intended that the SIMP review will be aligned as much as possible with other processes.

Different trilateral groups and site managers from Denmark, Germany, and the Netherlands were involved in the process of developing the SIMP. It went through a consultation phase in the three countries before its adoption.

Main messages

- The management system of the Wadden Sea World Heritage Site is a combination of existing national protection and management systems and trilaterally coordinated management of the Cooperation Area. By providing a clear and up to date overview of existing administrative nature conservation structures and the relevant European Union law and international conventions, the SIMP aims to improve understanding of the Wadden Sea World Heritage Site management system.
- Climate change adaptation measures in the Wadden Sea are guided by the Trilateral Climate Change Adaptation Strategy (CCAS) towards a climate resilient Wadden Sea ecosystem. Mitigation measures aim to develop the Wadden Sea Region into a CO₂-neutral area. CO₂ reduction policies and plans at the national and regional levels include the transition to renewable energy. Future management activities require further operationalisation and update of the CCAS. In addition, improved communication of World Heritage values and climate change effects in relation to economic, social, and cultural values is essential as are trilateral knowledge exchange and interdisciplinary discussions.
- The SIMP key topics are related to human activities relying on ecosystem services and taking place inside of and adjacent to the World Heritage Site. The five key topics are: 1) Fisheries; 2) Tourism; 3) Shipping and Ports; 4) Renewable Energy and Energy from Oil and Gas; and, 5) Coastal Flood Defence and Protection.
- Whilst the protection of the OUV and limiting potential impacts is guaranteed by European and/or national regulations and agreements, the SIMP defines where the trilateral approach is of added value.
- The Statement of Outstanding Universal Value as adopted by the World Heritage Committee in 2014, notes that these topics may pose threats, to the integrity of the Wadden Sea World Heritage Site and therefore require continuous attention. At the same time, if practices in the key topics evolve towards more sustainability, these topics will support the area's conservation.
- The activities agreed upon for the prioritised five key topics are intended to be performed by the TWSC bodies in close collaboration with the relevant institutions and stakeholders. In the proposed implementation of the activities, existing nature conservation



standards and policies are to be maintained or improved to sustain the area's OUV for future generations. The implementation of the activities shall in no way lead to the lowering of existing nature conservation standards.

- In the key topic fisheries, the objective is to advance towards sustainable fisheries practices that have no negative impact on the Outstanding Universal Value of the Wadden Sea World Heritage Site. The activities should be performed by the TWSC bodies in collaboration with relevant institutions and stakeholders to, inter alia, stimulate exchange of knowledge, best practices, and management experience, as well as to initiate fisheries and fish research. In a collaborative approach, the activities aim to further the implementation of the Framework for Sustainable Fisheries (2014) and to feed into discussions on the implementation of the EU Biodiversity Strategy for 2030. That the existing nature conservation standards should be improved or maintained is a fundamental consideration in the activities. Awareness of Wadden Sea World Heritage Site values and vulnerability should continue to be improved, as should best practices and fish research.
- In the key topic tourism, the objective is to increase support for nature conservation from visitors, local entrepreneurs, destination marketing organisations, and other stakeholders by continuing to advance implementation of the Sustainable Tourism Strategy (Annex 1, Tønder Declaration 2014) and action plan. The activities are intended to be performed by the TWSC bodies in collaboration with relevant institutions and stakeholders to continue to improve awareness, to enhance the nature conservation aspect in sustainable tourism by adding the expertise of site managers, and to strengthen initiatives for cross-border cooperation for fostering nature conservation by, inter alia, addressing gaps in knowledge regarding tourism impacts on the OUV.
- In the key topic of shipping and ports, the objective is to further improve shipping safety, building on the comparatively high status

of prevention of accidents, preparedness, and emergency response, and to foster nature friendly and climate-neutral operations. The activities should be performed by the TWSC bodies in collaboration with relevant institutions and stakeholders to discuss the further implementation of the Operational Plans for the Wadden Sea Particularly Sensitive Sea Area (PSSA) (Annex 5, Tønder Declaration 2014); they should also continue to raise awareness and to stimulate trilateral exchange and dialogue to, inter alia, identify priorities to discuss with the related sectors and explore ways to implement and/or make use of best practices, existing technology, and international standards.

- In the key topic of renewable energy and energy from oil and gas, the objective is to intensify the application of common best practices to protect the Wadden Sea, to support a nature friendly energy transition, and to foster a level playing field with the highest applied environmental standards for all three countries in a collaborative approach with the energy sector. The activities are intended to be performed by the TWSC bodies in collaboration with relevant institutions and stakeholders to, inter alia, facilitate trilateral exchange and enhance and maintain dialogue and collaboration with agencies, energy companies and authorities as well as to investigate (potential) effects of new types of energy production, storage, and transmission.
- In the key topic of coastal flood defence and protection, the objective is to enhance the use of nature friendly measures and maintenance practices in a collaborative approach with the competent authorities, implementing and updating the Climate Change Adaptation Strategy (Annex 4, Tønder Declaration 2014). The activities should be performed by the TWSC bodies in collaboration with relevant institutions and stakeholders to, inter alia, enhance collaboration to introduce, where adequate and feasible using no-regret measures and nature-based solutions, stimulate trilateral exchange of best practices, formulate relevant research questions, and continue to improve awareness. It is vital to stimulate societal debate to raise

motivation for adapting to inevitable sea level rise in a nature- and climate-friendly manner.

- Trilateral exchange of knowledge and best practices for the benefit of nature conservation management and raising awareness/ advocacy are relevant for all five key topics. Trilateral knowledge exchange and advocacy activities need to be continuously improved to strengthen the Cooperation's joint arguments for nature conservation and to be able to adapt to thematic as well as technological and societal changes.
- Science and Research, Monitoring and Assessment, Knowledge Management, Education, Communication, and Collaboration and Partnerships are fundamental complementary activities to support management in the Wadden Sea. The SIMP comprises trilateral strategies, plans and initiatives, challenges, and outlook in these fields.
- The global dimension of the Wadden Sea is not only apparent in its status as a World Heritage Site, but also in the fact that it is highly interconnected with other sites. Collaboration in programmes like the Wadden Sea Flyway Initiative, international cooperation with other World Heritage Sites, and the UNESCO World Heritage Centre thematic programmes allow for mutual learning and developing solutions to enhance protection.
- The Wadden Sea World Heritage Site, as one of the largest protected areas in Europe, contributes to the EU Biodiversity Strategy for 2030, especially to the nature protection targets of protecting at least 30% of the EU's land and sea, with one third thereof for strict protection, but most importantly helps to build a coherent Trans-European Nature Network.
- The TWSC actively contributes to the implementation of the United Nations Agenda 2030 for Sustainable Development, with its globally accepted Sustainable Development Goals (SDGs).

CHAPTER 1

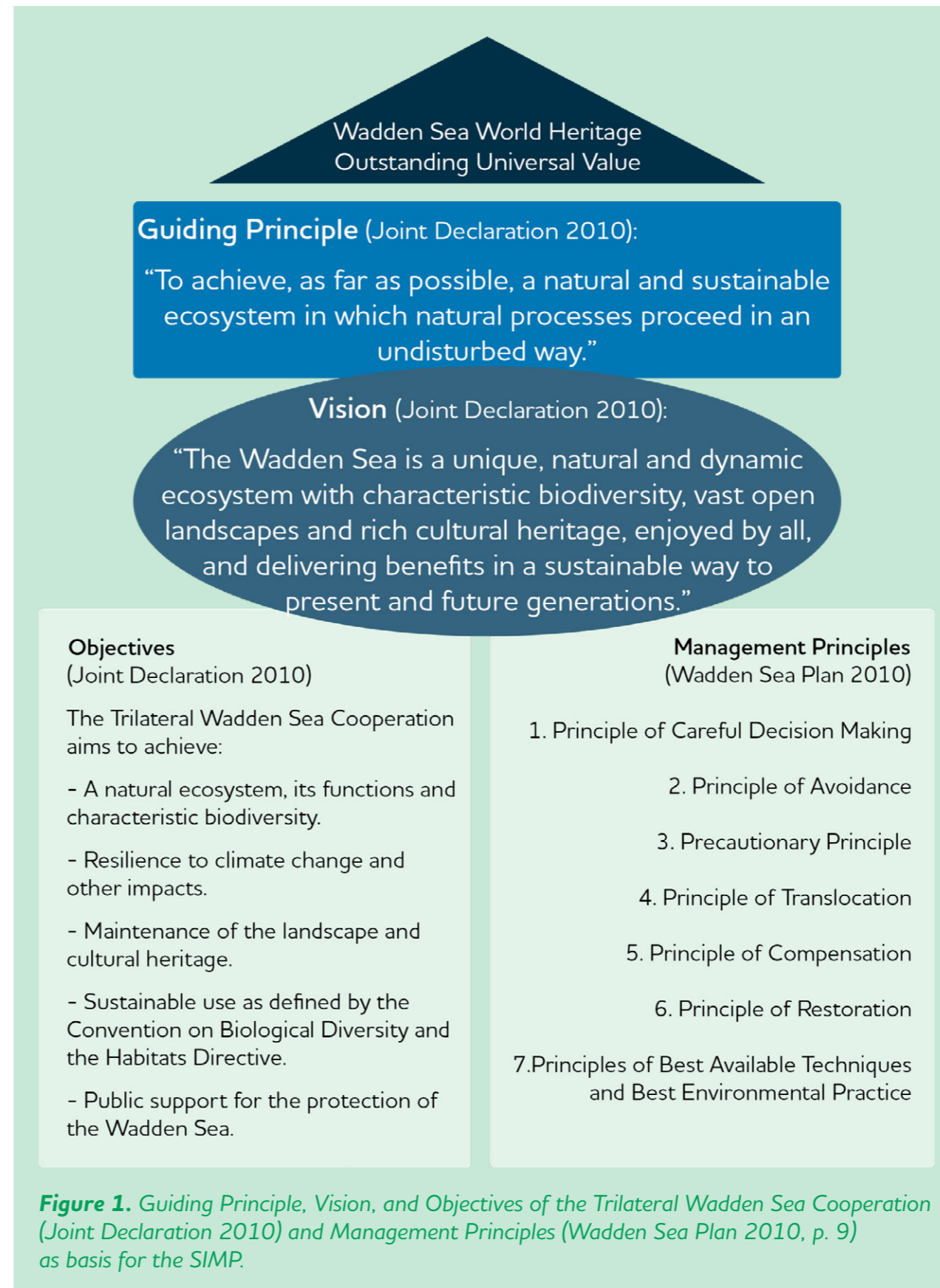
INTRODUCTION

1.1 Background

The Wadden Sea was inscribed onto UNESCO's World Heritage List in 2009 (and extended in 2014) in recognition of its Outstanding Universal Value (OUV). The global importance declared in the Statement of OUV¹ recognises that the Wadden Sea is the largest unbroken intertidal back-barrier sand and mudflat ecosystem in the world. Natural processes continue to thrive largely undisturbed, creating a variety of barrier islands, channels, flats, tidal creeks, saltmarshes, and other coastal and sedimentary features. The Wadden Sea is rich in species specially adapted to these environmental conditions. These conditions also make the Wadden Sea a vital spot for migratory birds in the East Atlantic Flyway, which plays a critical role in the conservation of African-Eurasian migratory waterbirds.

To ensure the protection of this unique ecosystem for the benefit of present and future generations of humankind, Denmark, Germany, and the Netherlands are committed to working together to build a comprehensive national and international nature conservation system. In this framework, the Trilateral Governmental Cooperation on the Protection of the Wadden Sea, in short Trilateral Wadden Sea Cooperation (TWSC), was established in 1978 as a tool for cooperation and coordination of nature conservation. This commitment, the Objective of the Cooperation, its Guiding principle, Vision, the areas of cooperation, as well as institutional and financial agreements are specified in the Joint Declaration on the Protection of the Wadden Sea: Working together to meet present and future challenges (1982, revised in 2010).

The development of The SIMP Integrated Management Plan for the ONE Wadden Sea World Heritage responds to the request from the World Heritage Committee in 2014 to "the State Parties of Denmark, Germany and the Netherlands to develop a single integrated management plan for the entire transboundary property in conformity with the requirements of Paragraph 111 of the Operational Guidelines for the implementation of the World Heritage Convention, and to consider the options to strengthen the effectiveness of implementation of coordinated management within the property"



The listing of the Wadden Sea as a World Heritage property, the utmost international acknowledgment for a natural area, shows great appreciation and is recognition of the long-standing trilateral cooperation, support from the region and its stakeholders, and conservation efforts.

The overriding and overarching objectives of the TWSC are framed by the Vision for the Wadden Sea and the Guiding Principle and are in line with the Outstanding Universal Value of the Wadden Sea World Heritage Site (Fig. 1). During over 40 years of trilateral cooperation, Denmark, Germany, and the Netherlands have independently and jointly built a comprehensive management system addressing some of the most urgent and important key aspects. In addition to the Wadden Sea Plan 2010, which is the commonly agreed policy and management plan, there are various trilateral, regional, and local strategies, management plans, plans of actions, and networks. In short, plenty has already been achieved and the work towards important milestones is under way, but there are still challenges to be faced.



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1.2 Purpose of the SIMP

Considering the wealth and diversity of management systems and instruments that are in place in the Wadden Sea World Heritage Site, the purpose of the SIMP, as agreed by the TWSC and stated in Annex 1 of the Leeuwarden Declaration (2018), is to **further facilitate the continuous improvement of management for the protection and maintenance of the Outstanding Universal Value** by:

1. providing a clear overarching description of the management system at the regional, national, and trilateral level;
2. addressing key topics presenting specific current and potential impacts to the Outstanding Universal Value which have been prioritised as pending management tasks;
3. present existing joint management activities across the property and showcase gaps which need enhanced joint efforts to maintain or enhance the area's Outstanding Universal Value.

1.3 Status of the SIMP

The SIMP for the Wadden Sea is a political agreement of the Trilateral Wadden Sea Cooperation (TWSC), meaning it is a legally non-binding document of common political interest.

Existing policy documents and legally binding instruments at the trilateral, regional, national, and local level are not altered or affected by the SIMP.

The SIMP does not change either the content or the function of existing national or trilateral plans; thus, it is complementary to the Wadden Sea Plan 2010 (further detail about the Plan is presented as the foundation of Chapter 3. Nature Conservation Management).

The SIMP acts as an umbrella for existing plans and policies and provides information on how these are implemented trilaterally for nature conservation management.



1.4 Scope of the SIMP

The focus of the SIMP is the Wadden Sea World Heritage Site and the conservation of its Outstanding Universal Value (OUV, explained in Ch. 2). The SIMP presents (Fig. 2) a clear overview of the nature conservation management structures in Denmark, Germany, and the Netherlands and at the trilateral level, describes how the work is done together. The existing management elements in the context of the management cycle are also presented (as defined in § 111 of the Operational Guidelines for the Implementation of the World Heritage Convention).

In the process of developing the SIMP (Fig. 3), five aspects have been prioritised as key topics for joint management. Referring to them as “key topics” does not mean that other topics (i.e., related to nature conservation) are less important. The SIMP key topics are related to human activities relying on ecosystem services and taking place inside of and adjacent to the World Heritage property.

The five key topics are: 1) Fisheries; 2) Tourism; 3) Shipping and Ports; 4) Renewable Energy

and Energy from Oil and Gas; and 5) Coastal Flood Defence and Protection. These key topics were identified in an iterative and participative process involving nature conservation institutions at different levels and considering the Wadden Sea’s site managers’ recommendations, the prioritisation by Task Group World Heritage, and the selection criteria of urgency, direct effect on the OUV and need to address at the trilateral level submitted in the Leeuwarden Declaration (2018).

Additionally, the Statement of OUV notes that these topics may pose key threats to the integrity of the Wadden Sea World Heritage Site and therefore need permanent attention. At the same time, if practices in the key topics evolve towards more sustainability this can support the area’s conservation. Furthermore, these topics are challenging since the work of the TWSC on these topics has to actively engage the competent authorities and integrate the range of competences of site managers in those key topics. Addressing these at a trilateral level leverages the existing opportunities. Science and Research, Monitoring and Assessment,

Knowledge Management, Education, Communication, and Collaboration and Partnerships are fundamental complementary activities to support management in the Wadden Sea; therefore, the SIMP compiles useful information for site managers in these fields. In the same way, the SIMP shows how the TWSC is addressing the overarching effects of climate change.

Additionally, the SIMP highlights the Wadden Sea World Heritage Site’s global role and its link to global responsibilities. Cooperation with partners worldwide is instrumental in and supportive of the long-term protection of the Wadden Sea.

The main target audience of the SIMP are decision and policy makers as well as the site managers working in nature conservation of the Wadden Sea Area in the three countries. The SIMP should inform decision and policy makers, and the site managers as well as improve coordination of management between the site managers. Further important target audiences are environmental NGOs and other partners, the scientific community, administrations, and colleagues from socio-economic sectors (e.g., fisheries, tourism and shipping) addressed in the SIMP, as well as the local population.

Box 1. Criteria for the selection of the key topics to be addressed Annex 1 of the Leeuwarden Declaration (2018)

1. Main and prior management issues at trilateral level (identified in particular from the Wadden Sea Plan, recent Ministerial Declarations, and existing strategies and action plans);
2. Urgency to enhance management effectiveness trilaterally;
3. Management and protection requirements with regard to maintain and protect the OUV (as reflected in the Statement of OUV, relevant Committee Decisions and in the Periodic Reporting).

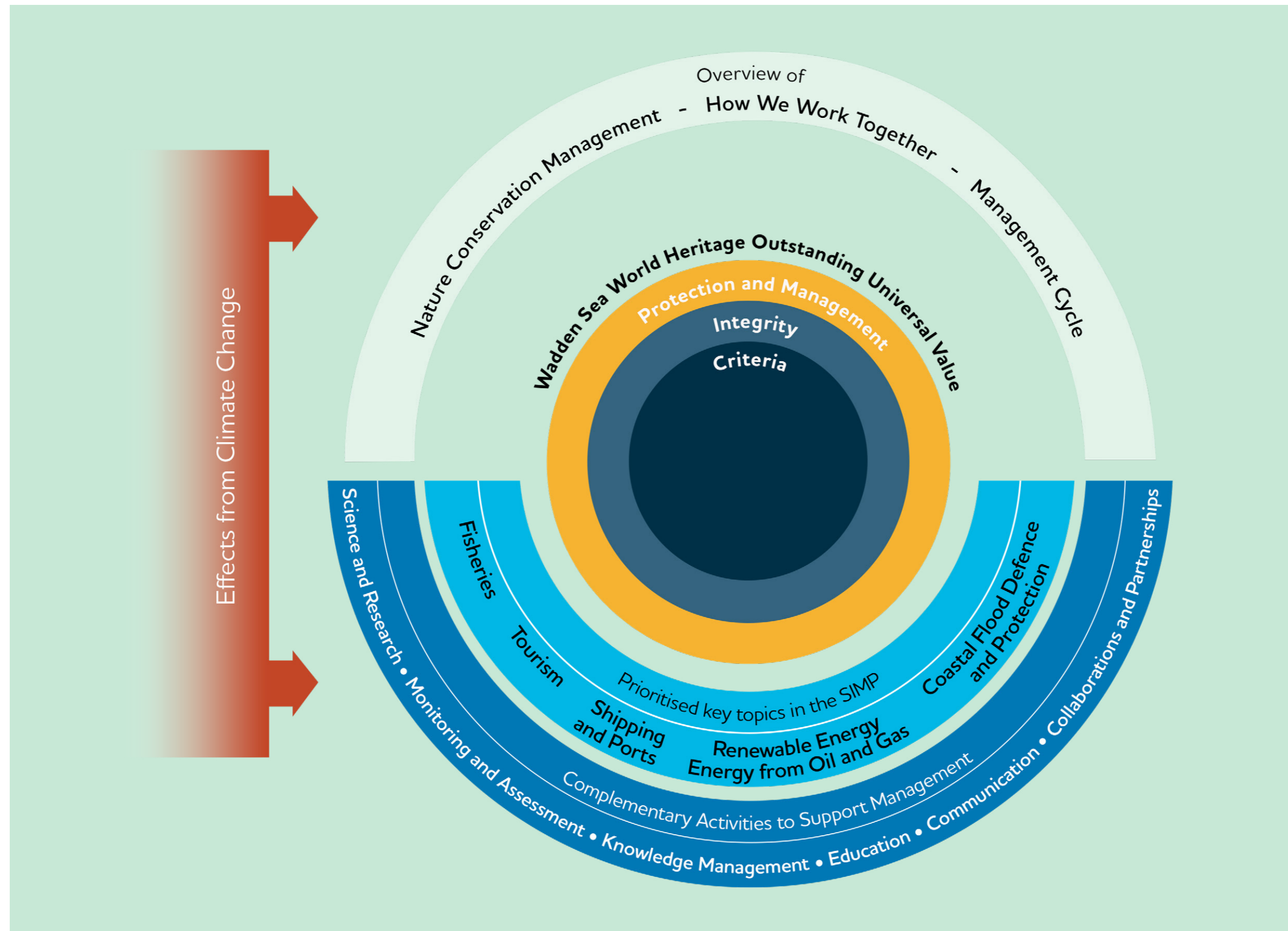


Figure 2. The scope of the SIMP has the Wadden Sea World Heritage Outstanding Universal Value at its core. The SIMP acts as an umbrella providing an overview of the management systems, tools, and collaboration. Five prioritised key topics are addressed considering how to improve information exchange and dissemination to better coordinate nature conservation management activities. To maintain the Wadden Sea World Heritage Site Outstanding Universal Value, the SIMP provides information about the complementary activities to support management. All of them consider the crosscutting effects of climate change.

1.5 Process of Developing the SIMP

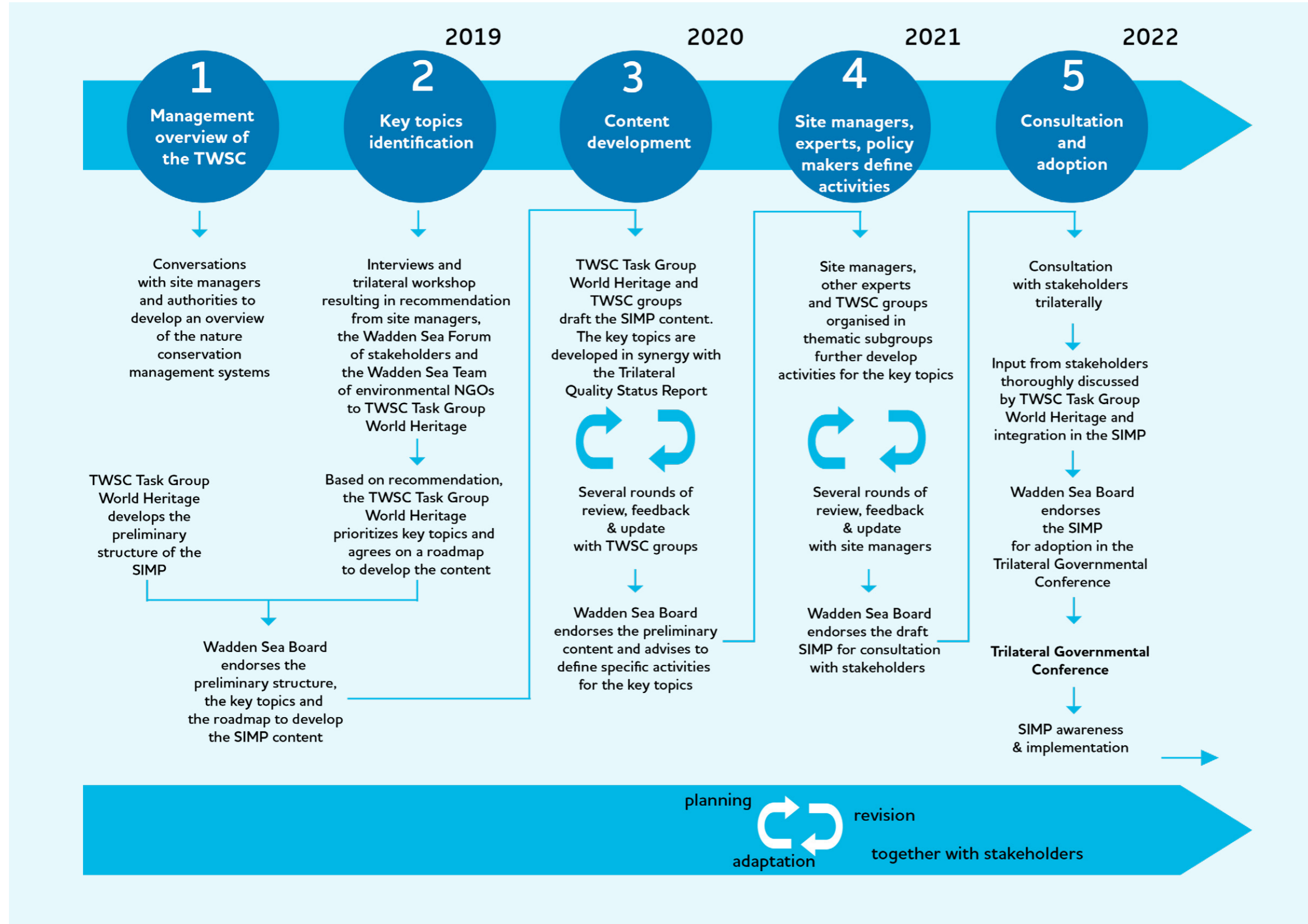


Figure 3. The five phases of the development of the SIMP 2019-2022 and the detail of each phase.

1.6 Added Value

There are several important added values in the SIMP. By providing a clear and updated overview of existing nature conservation structures, the SIMP aims to improve understanding of the Wadden Sea World Heritage Site management system.

The SIMP compiles the status and management approaches to managing the key topics affecting the property addressed in a comprehensible and accessible way, which can be easily communicated and used at the operative level. The SIMP links each key topic directly to the OUV, describes the common ground expressed in the Trilateral Wadden Sea Plan (WSP) and other trilateral tools, and shows how each country implements measures.

The SIMP contributes to the definition of feasible and innovative means to further the exchange of management approaches, experience, knowledge, and lessons learned at different levels of management

as well as between site managers, partners of the Wadden Sea Area, decision makers, multipliers, and volunteers.

Such an exchange supports the joint development or the review of trilateral initiatives. Exchange further allows connection of existing and future trilateral strategies and plans with regional and local strategies and plans, thus showing how the work is done together and highlighting the key aspects on which cooperation could be further strengthened. In this way, local, regional, and national actions are backed at the trilateral level and trilateral decisions are integrated into local, regional, and national strategies and plans.

Finally, in the framework of the SIMP, the TWSC (including site managers) agree on aspects where trilateral cooperation can contribute towards their tasks of protecting the OUV (see Ch. 5). The SIMP acknowledges existing differences in the legal responsibilities and competences of site managers in the three countries.

1.7 Review of the SIMP

The SIMP will be revised regularly by the Wadden Sea Board (WSB). Given the nature of the SIMP, progress reports in due time before the Trilateral Governmental Conferences and a review cycle of 10-12 years are foreseen. The regular reports will highlight progress made done trilaterally and by each country in implementing SIMP activities. The 10-12 year review presents the opportunity to adapt the SIMP to the management requirements of the TWSC, including selection of key topics, with the support and participation of all parties involved in implementing the plan. Regular evaluation processes under trilateral and national obligations (Wadden Sea Quality Status Report, UNESCO Periodic Reporting, Natura 2000 Reports, etc.) will feed into the SIMP review. It is intended that the SIMP review will be aligned as much as possible with other processes.



CHAPTER 2

THE OUTSTANDING UNIVERSAL VALUE OF THE WADDEN SEA

The OUV describes why a property is among the most remarkable places on Earth. Its conservation is of importance for the present and future generations of all humanity.

The World Heritage Committee considers a property as having Outstanding Universal Value (OUV) if the property meets at least one out of ten selection criteria and if it meets the requirements of integrity, as well as protection and management (Fig. 4). The World Heritage Committee adopts a Statement of the OUV when inscribing a property onto the World Heritage List; this describes how the criteria and the requirements of integrity and protection and management are met. The Statement of OUV for the Wadden Sea World Heritage can be found on the UNESCO website².

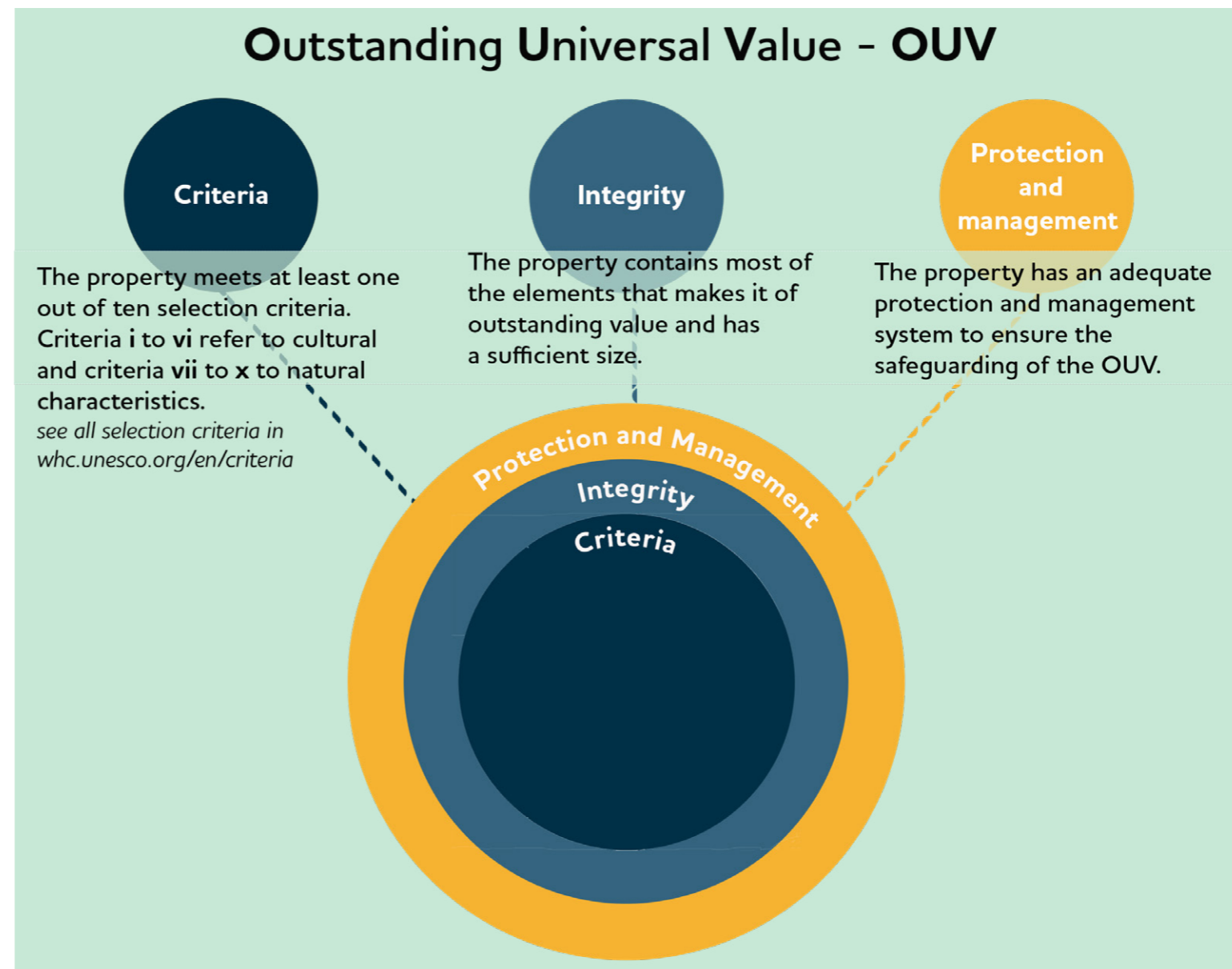


Figure 4. OUV consists of three conditions: selection criteria, integrity, and protection and management.

2.1 The OUV: Criteria and Key Values

The Wadden Sea World Heritage Site meets three out of four criteria for natural sites:

- ✓ (viii) Outstanding geological processes
- ✓ (ix) Ongoing ecological and biological processes
- ✓ (x) Vital habitats for in-situ biodiversity conservation

The fourth Criterion (vii) Exceptional natural phenomena and beauty has not been applied for.

Criteria viii, ix and x described in the Statement of OUV of the Wadden Sea World Heritage Site, are expressed through ten key values (Fig. 5) that show the elements that make the Wadden Sea of universal importance.

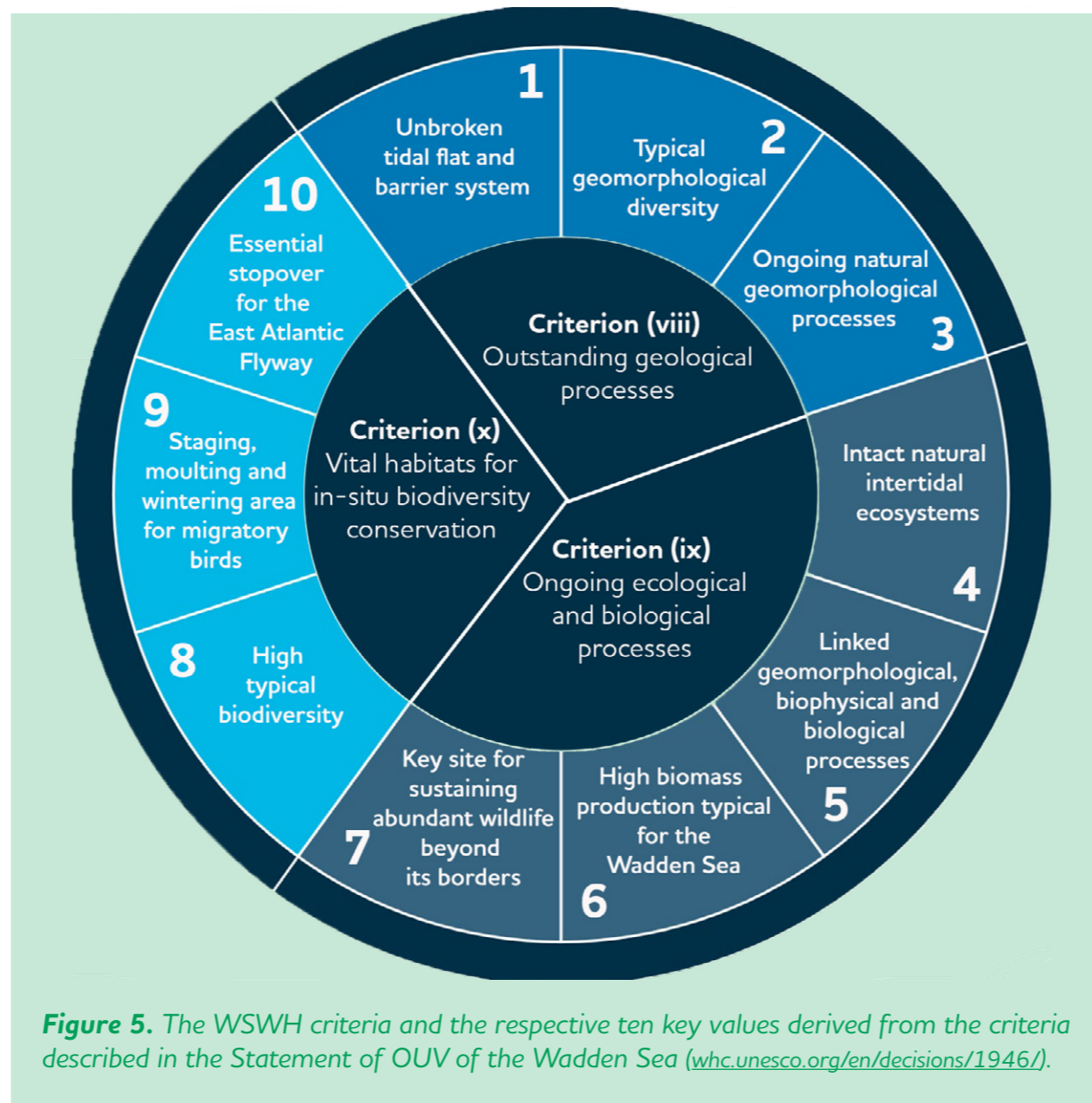


Figure 5. The WSWH criteria and the respective ten key values derived from the criteria described in the Statement of OUV of the Wadden Sea (whc.unesco.org/en/decisions/1946/).

2.2 The OUV: Integrity

Integrity is a measure of the wholeness and intactness of natural heritage and its attributes (§ 88, Operational Guidelines for the Implementation of the World Heritage Convention). Integrity is given by the elements included in the property that reflect its OUV, as well as to the appropriateness of the property's size to maintain the features and processes,

as well as its ability to cope with exposure to adverse effects, including those from outside the property.

In that respect, the Wadden Sea World Heritage Site, from Denmark through Germany to the Netherlands, includes all the Wadden Sea ecosystem components and features (species, habitats, processes)

that constitute a natural and dynamic Wadden Sea. The area is large enough to ensure that these exceptional aspects are included and maintained (see the Statement of OUV 2014).

The Wadden Sea World Heritage Site is subject to a comprehensive protection, management, and monitoring system. The Statement of OUV (2014)

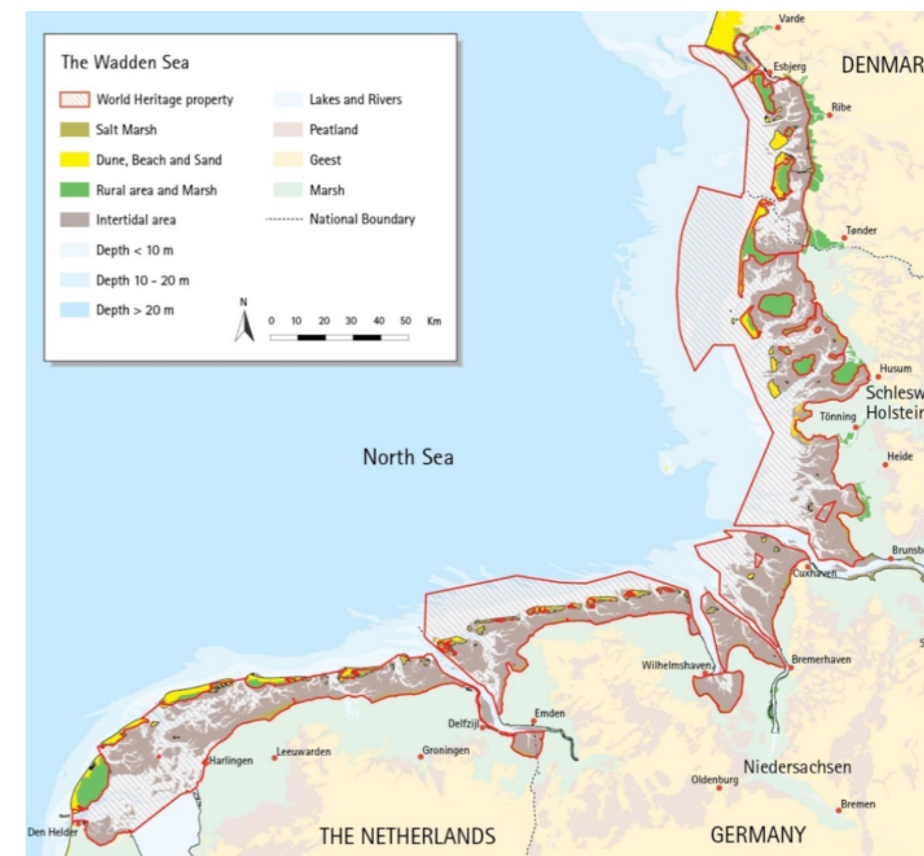
recognises that the key threats require ongoing attention to maintain the integrity of the property. Key threats include fisheries activities, developing and maintaining harbours, industrial facilities surrounding the property including oil and gas rigs and wind farms, maritime traffic, residential and tourism development, and impacts from climate change.

2.3 The OUV: Protection and Management Requirements

The Trilateral Wadden Sea Cooperation (TWSC) provides the overall framework and structure for integrated conservation and management of the Wadden Sea World Heritage Site as a whole, and coordination between all three States, including national, regional, and local levels. In fact, the Wadden Sea's highly effective conservation status

is the result of four decades of joint nature protection efforts of Denmark, Germany, and the Netherlands, where the Wadden Sea has been designated as national parks, nature reserves, and Natura 2000 sites. Each State Party has comprehensive legal protection measures in place. Working together in the TWSC, these countries ensure coordinated management of the area (see the Statement of OUV 2014).

Figure 6. The Wadden Sea World Heritage Site encompasses all the natural habitats, species, and processes that constitute the Wadden Sea ecosystem.



CHAPTER 3

NATURE CONSERVATION MANAGEMENT

At the beginning of the Trilateral Wadden Sea Cooperation in the late 70s, nature conservation management of the Wadden Sea was mainly a national matter. But, for the past 30 years, the European Union (EU) has made increasing efforts to protect European natural heritage. The present-day management system of the Wadden Sea World Heritage Site is almost entirely covered by EU law and international conventions, in addition to national regulations. The five most relevant EU Directives are described in Table 2.

In 1979 the EU Birds Directive (2009/147/EC) was adopted, which was the first EU regulation aimed at protecting the environment. Since then, nature protection has been a cornerstone of the EU. However, practical planning- and implementation steps need to be taken at national, regional, and local levels by the competent authorities.

The environmental laws comply with the principle of subsidiarity, leaving it as far as possible to the responsible authorities to set up their priorities and manage their programmes. Regarding the implementation of EU law into national legislation, differences in political and administrative structures in the three Wadden Sea countries present challenges in complying with the expressed political intentions of managing the Wadden Sea as a common entity. At the same time, these differences between the countries can also be utilised for strengthening nature management by aiming for the best possible effect of policy and measures for nature.

In Denmark, since 1939, when the first game reserve was established in parts of the Danish Wadden Sea, the area has been subject to an increasing degree of protection until 1998, when the present level of protection was reached with the inclusion of provisions based on Natura

2000 (EU Birds and EU Habitats Directives (92/43/EEC). Thus, the implementation processes of EU legislation into national law and, subsequently, into binding management plans for the public authorities also consider trilateral strategies and plans (listed in Fig. 7), such as Declarations and most recently the SIMP, which can be characterized as a meta-strategy. In 1985, a major update of the Statutory Order on conservation of the Danish Wadden Sea was derived from the Copenhagen Declaration of 1982. The latest example is the inclusion of the SIMP in the Danish action plan for the EU Marine Strategy Framework Directive (MSFD: 2008/56/EC) along with more specific fields of action (fish, alien species, marine mammals, and birds) building upon some of the Trilateral Wadden Sea Cooperation (TWSC) strategies approved by the three countries.

In Germany, due to the federal system, the (political, adminis-

trative, and legal) structures differ from those in Denmark and the Netherlands. In Germany, nature conservation laws at federal as well as federal state level have long been in place. There are specific acts for the Wadden Sea National Parks of the federal states. EU Directives are usually implemented by integration into existing national laws and legal ordinances, so existing laws had to be supplemented with the EU regulations. The entire German Wadden Sea is designated as a protected area under the EU Habitats and/or Birds Directive and lies within the scope of the MSFD. The inner Wadden Sea is also subject to the scope of the EU Water Framework Directive (WFD: 2000/60/EC).

In the Netherlands, the EU Birds Directive and EU Habitats Directives were transposed through the Nature Conservation Law 1998. The Nature conservation Law 1998 has been replaced by the Law on

Nature Conservation (2015), which continues to implement both the EU Birds and EU Habitats Directives, as well as the WFD. The entire Dutch Wadden Sea has been designated as a protected area under these three EU Directives.

In summary, the management system of the Wadden Sea World Heritage Site is based on existing national protection and management systems (Annex, Figs. A3-5) supplemented by trilaterally coordinated management, including a number of trilateral plans, strategies, and action plans (see Fig. 7).

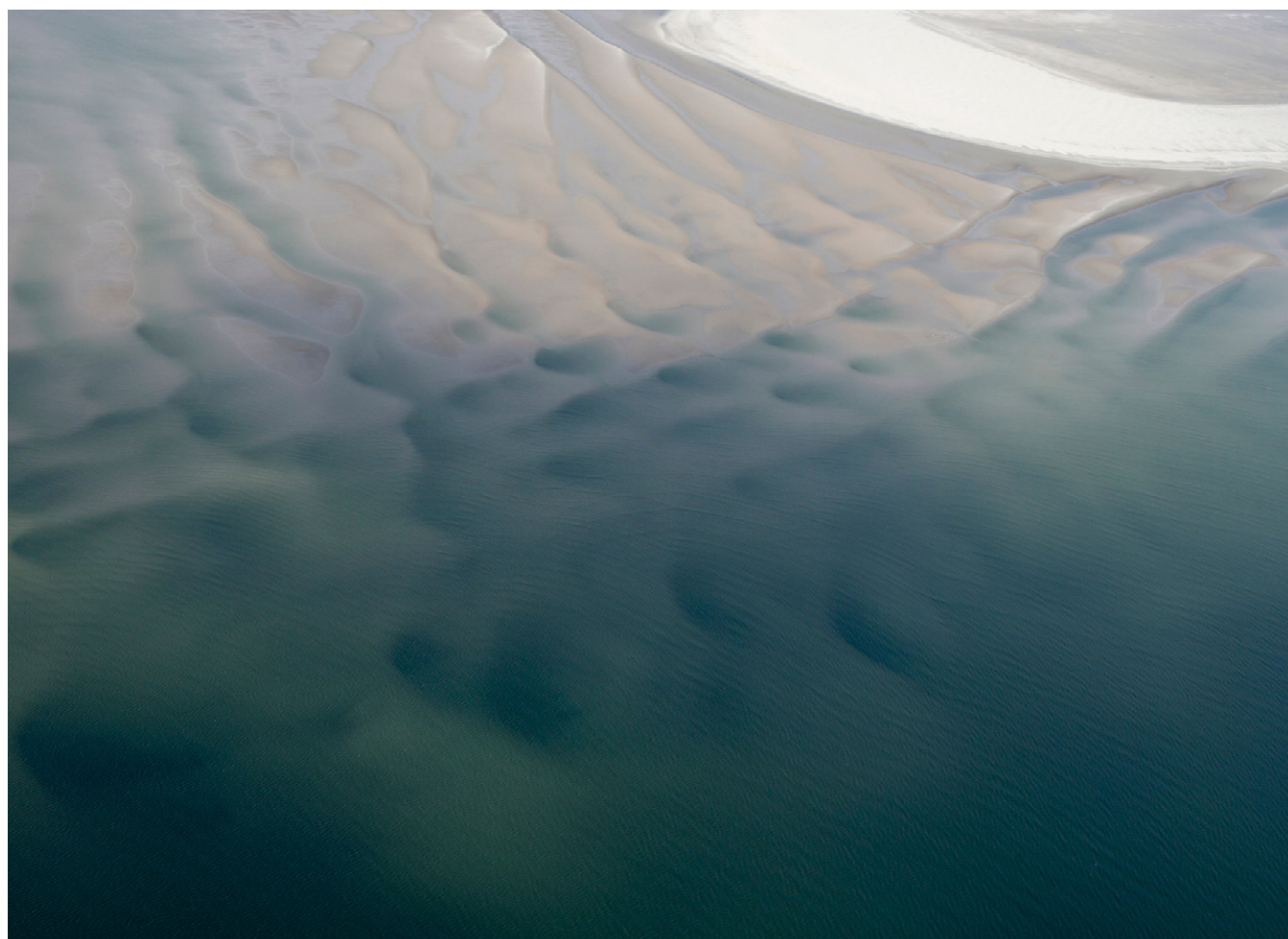
The Trilateral Wadden Sea Plan 2010 (WSP) constitutes the common framework for the protection and sustainable management of the Wadden Sea as an ecological entity and is the accepted coordinated management plan for the Wadden Sea World Heritage property, as stated in the Nomination dossier presented

to the World Heritage Committee (2013). The WSP presents the trilaterally agreed targets, policies, and measures for the Wadden Sea Cooperation Area as an ecological entity, as well as its landscape and cultural heritage, within the cultural entities. The targets agreed upon for landscape and culture, water and sediment, salt marshes, the tidal area, beaches and dunes, estuaries, the offshore area, the rural area, birds, marine mammals, and fish are the basis for the trilaterally and regionally existing topic specific visions, strategies, and plans. In Germany, the WSP serves as the Natura 2000 and national parks' management plan; where deemed necessary it is supplemented by further detailed management tools (such as for certain habitat types, sectoral plans, or management concepts).

The following sections (3.1 and 3.2) provide an overview of the management system at the trilateral and national levels. These serve to communicate and disseminate the trilateral management framework in an easy and clear way to national site managers, as well as to all stakeholders and the general public.

EU-Directive	Adoption	Status in The Netherlands	Status in Germany	Status in Denmark
Natura 2000 Directives (Birds Directive 2009/147/EC and Habitats Directive 92/43/EEC)	Birds: 1979 Habitats: 1992	Transposed in the Law on Nature Conservation. Natura 2000 plans are reviewed and updated periodically.	Transposed in: Federal Nature Conservation Act (Bundesnaturschutzgesetz BNatSchG). State Nature Conservation (Implementation) Acts (SH, HH, LS) (Landesnaturschutzgesetz/ Ausführungsgesetz zum BNatSchG). National Park Acts (SH, HH, LS). Specific conservation objectives for each N2000 site (SAC and SPA) are covered by the National Park Acts in LS and HH; SH has a separate document published by the Ministry for the Environment of SH. Wadden Sea Plan 2010 functions as the Habitats & Birds Directive management framework for the German part of the Wadden Sea, in LS concretised by the Management Planning for the SAC Wadden Sea.	Transposed in the Marine Protection Act, the Environment Protection Act, and the Nature Conservation Act, the Hunting and Game Management Act, the Danish Forest Management Act, and other laws.
Water Framework Directive 2000/60/EC	2000	Transposed in the Law on Nature Conservation, the Water Law, the National Water Policy Plan, the Regional Water Policy plans of the provinces.	Transposed in: Federal Water Resources Act (Wasserhaushaltsgesetz), State Water Law (Landeswassergesetz), Management plans for the river basins.	Transposed in the Water Planning Act.
Marine Strategy Framework Directive 2008/56/EC	2008	The Marine Strategy Framework Directive is not implemented in the Dutch Wadden Sea.	Transposed in: Federal Water Resources Act (Wasserhaushaltsgesetz), State Water Law (Landeswassergesetz), the management plan is the programme of measures 2016 (currently working on an update)	Transposed in the Danish Marine Strategy II and the Danish Marine Strategy Act.
Marine Spatial Planning Directive 2014/89/EU	2014	Transposed in the National Water Policy plan.	Transposed in: Spatial Planning Act (Raumordnungsgesetz, ROG), Lower Saxony Regional Planning Act (Niedersächsisches Raumordnungsgesetz, NROG), Schleswig-Holstein State Planning Act (Landesplanungsgesetz – LaplaG)	Transported in the Act on Maritime Physical Planning (ACT no. 615 of 08/06/2016) and Statutory Order no. 400 of 06/04/2020

Table 2. Overview of the most relevant European Union legislation and the national laws in which these are transposed and plans. Abbreviations: SH: Schleswig-Holstein; HH Hamburg; LS Lower Saxony; SAC Special Areas of Conservation; SPA Special Protection Areas.



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3.1 Trilateral Cooperation Structure

The Trilateral Wadden Sea Cooperation (TWSC) comprises two levels of decision making (Governance Arrangements, 2010):

I. The Trilateral Wadden Sea Governmental Council, composed of the responsible ministers of the participating governments to oversee the Cooperation, provides political leadership and strategic guidance, and assures international policy development, harmonisation, and decision-making between the three govern-

ments. Every three to four years, the three countries alternate presidency of the Cooperation. Presidencies are handed over during the Trilateral Governmental Conferences (TGC).

II. The Wadden Sea Board (WSB) is the governing body composed of delegations appointed by each participating government. Each delegation includes a representative from the lead ministry for the Cooperation, and three further members from decentralised governments, other related ministries, or experts. The WSB

oversees the operational and advisory bodies and secures relations with key stakeholders.

The WSB receives further support from advisors outside the governmental Cooperation, but with expertise and experience relevant to the Cooperation. Appointed advisors are the Wadden Sea Forum, representing stakeholders from the different sectors of society including municipalities and counties, and the Trilateral Wadden Sea Team of environmental NGOs.

The Common Wadden Sea Secretariat (CWSS) is responsible for supporting the WSB and the Council and for implementing the CWSS's workplan.

The operational bodies of the TWSC are four types of groups with specific functions and composition:

- 1.** Task Groups (TG) are appointed by the WSB to prepare expert topics for the Board and to undertake specific tasks, plans, or projects in line with Ministerial Declarations. TGs are usually time limited.
- 2.** Expert Groups (EG) are generally long-term or permanent technical groups. They have operational and advisory tasks.
- 3.** Network Groups (NG) are similar to EGs but with more of a networking platform character; stakeholder involvement is explicitly necessary and appreciated.
- 4.** (ad hoc) Working Groups (WG) are temporarily installed by TGs or the WSB for elaborating on certain aspects of issues targeted in the corresponding TG.

All trilateral groups are requested to generally foster exchange with other groups during the various processes (TWSC review process, 2019). The structure of the TWSC is reproduced in Figure A.1 in Annex 1. Members, supporting organisations, and advisors of the WSB are presented in Figure A.2 in Annex 1.

3.2 National Administration and Management Systems

Denmark

The Ministry of Environment and the Danish Environmental Protection Agency are responsible for writing national legislation and national management plans which are enforced by themselves and/or by other agencies and municipalities. Among their responsibilities are the implementation of Natura 2000, the Marine Strategy Framework- and Water Framework Directives, and, more specifically, the Nature Protection Act and its Statutory Order on the Wadden Sea Nature and Wildlife Reserve. Marine physical planning, also concerning the Wadden Sea, is under the responsibility of the Danish Maritime Authority.

The Danish Nature Agency (as the Environmental Protection Agency) is a unit under the Ministry of Environment and is responsible for the Nature and Wildlife Reserve management administration in the Wadden Sea area through a statutory order issued under the Nature Protection Law. The Nature Agency is also a considerable landowner in the area. The Varde, Fanø, Tønder, and Esbjerg Municipalities, within or adjacent to the Wadden Sea, together with the government, are responsible for the enforcement of the Nature Protection Act and the implementation and enforcement of Natura

2000. In an advisory function to the government agencies in the Wadden Sea area, an Advisory Board has been established, governed by the four municipalities and with representatives of a wide range of stakeholders of the Wadden Sea (Annex 1, Fig. A.3). The Danish National Parks have been established within a framework of common law as a state-owned foundation and, for each national park, a statutory order has been issued according to the law. Following this, a National Park Board is appointed by the Minister and is responsible for implementing a strategic plan for the National Park. The National Park secretariat has no management or authoritative tasks as such but does play a role in the governing concept of the World Heritage Site in the group of site managers, especially in communication, interpretation, and educational activities. Further, the National Park has an Advisory Board consisting of local community members.

Germany

The overall legal framework for nature conservation is the Federal Nature Conservation Act. Due to the federal system in Germany, implementation of the Act lies in the responsibility of the federal states of Hamburg, Lower Saxony, and Schleswig-Holstein. The Federal Nature Conservation Act includes provisions for the establishment of Nature

Reserves and National Parks, but also for procedural matters concerning impact assessments, in particular regarding Art. 6 of the Habitats Directive (Nomination Dossier, 2008). The Federal Nature Conservation Act is supplemented by federal state level legislation that may vary in detail. Hence, the Federal Nature Conservation Act and the nature conservation acts of the federal states together form the legal basis for nature conservation and management.

In particular, the National Park Acts of Hamburg, Lower Saxony, and Schleswig-Holstein, establishing the respective Wadden Sea National Parks within each of the three federal states, provide the legal basis for safeguarding protection and management of the Wadden Sea World Heritage Site. At the federal state level, the highest nature conservation authorities are the respective Ministries of Environment. The National Park Authority in each federal state is the competent nature conservation authority for the Wadden Sea area and is responsible for management and for enforcement of their respective National Park Acts (Annex 1, Fig. A.4). National Park Advisory Boards are important in terms of consultation, advice, and the involvement of local stakeholders. In Schleswig-Holstein and Lower Saxony, the respective advisory boards are composed of representatives from the regional and local governments

as well as regional stakeholders concerned with commercial, recreational, and environmental interests and of scientific institutions. The boards are consulted with and provide advice to the National Park Authorities, and give their consent on principal matters and long-term planning.

The Netherlands

In 2020, the Dutch Government installed a new governmental organisational structure for the Dutch Wadden Sea comprising three groups (Annex 1, Fig. A.5): the first is the Policy Board of the Wadden Sea Region, chaired by the Ministry of Infrastructure and Water Management; the second is the Wadden Sea Management Authority, chaired by the Ministry of Agriculture, Nature and Food Quality; and the third is the Stakeholder Council of the Wadden Sea Region, chaired by the King's Commissioner of the Province of Fryslân. The chair of the Stakeholder Council is also the vice-chair of the Policy Board, ensuring proper connection between stakeholders and policy level.

3.3 Site managers

In the context of the SIMP, site managers are professionals with direct responsibilities for nature conservation and management of the Wadden Sea World Heritage Site. Table 3 presents the composition of nature conservation site managers in the three countries.

Denmark

Municipalities of Esbjerg, Fanø, Varde, Tønder
Danish National Park Wadden Sea
Nature Agency*
Environmental Protection Agency*
Coastal Authority*
The Agency for Culture and Palaces

The main tasks of the Agencies and Authority part of the Ministry of Environment concern: nature protection; monitoring and recovery; implementation of Natura 2000. The Municipalities contribute with implementation of Natura 2000, are responsible for the environmental impact reports and initiatives for restoration. The National Park runs projects for nature conservation, communication, education, and awareness, and contributes to sustainable tourism initiatives.

The Agency for Culture and Palaces, part of the Ministry of Culture Denmark, represents the State Party to the World Heritage Convention.

*part of Ministry of Environment of Denmark.

Schleswig-Holstein

National Park Authority*
Ministry for Energy Transition, Climate Protection, Environment and Nature of Schleswig-Holstein (MEKUN)
Wardening NGOs contracted by the National Park Authority

The Schleswig-Holstein National Park Authority as site manager is responsible for monitoring, coordination of scientific studies and applied research, management activities, species protection, exceptions and exemptions from the National Park Act, fines.

It acts as stakeholder in planning and permission procedures, surveillance and wardening, communication, information and education, coordination of the UNESCO Biosphere Reserve and networks.

* part of the State Agency for Coastal Defence, National Park and Marine Conservation Schleswig-Holstein as a subordinate authority of the MEKUN.

Hamburg

National Park Authority*
Free and Hanseatic City of Hamburg, Ministry of Environment, Climate, Energy and Agriculture Department of Nature Conservation (BUKEA),
Wardening NGOs contracted by the National Park Authority

The Hamburg National Park Authority as site manager is responsible for the protection of nature, environmental observation, and research, as well as environmental education and promoting the experience of nature in the National Park.

* part of the Hamburg Ministry of Environment

Lower Saxony

National Park Authority* (NLPV)
Ministry for Environment, Energy, Building and Climate
Protection of Lower Saxony
Wardening NGOs contracted by the National Park Authority

The Lower Saxon National Park Authority as site manager is responsible for monitoring, scientific studies, and research coordination; surveillance and wardening; communication, information and education; maintenance, development and restoration; species protection; exceptions and exemptions; fines; acts as stakeholder in planning and permission procedures; coordinates the UNESCO Biosphere Reserve.

* competent authority, subordinate to the Ministry for Environment, Energy, Building and Climate Protection of Lower Saxony.

The Netherlands

Rijkswaterstaat, Natuurmonumenten, Staatsbosbeheer, Ministry of Agriculture, Nature and Food Quality, the three provinces (Groningen, Friesland, and Nord-Holland), Landschap Noord-Holland, Groninger Landschap, It Fryske Gea and private owners (each with their own management plans for the areas that they support in the Wadden Sea). The Ministry of Defence is also (partly) a manager of areas within the Wadden Sea Region. The municipalities have a management responsibility regarding destination plans and building permits.

The Wadden Sea Management Authority is working on integral site management of the Wadden Sea.

The main tasks of the site managers concern: physical site management; nature recovery; permitting procedures; monitoring; surveillance and enforcement; hospitality; practical research.

Table 3. Composition of site managers in the three Wadden Sea countries. In Germany, site management is organised at federal state level: Schleswig-Holstein, Hamburg, and Lower Saxony.

3.4 Management Cycle

The Operational Guidelines for the Implementation of the World Heritage Convention (§ 111) state that a management cycle of planning, implementation, monitoring, evaluation, and feedback is among the elements of effective management (Fig. 7). The existing TWSC management instruments are organised in the phases of the management cycle.

Planning

The Guiding Principle of the TWSC (see Fig. 1) since 1991, is the guideline for management planning at all levels (Esbjerg Declaration 1991). An essential element of the management system and the backbone of the planning phase in the management cycle is the Wadden Sea Plan 2010. The Wadden Sea Plan 2010 was adopted at the 8th Trilateral Governmental Conference in Stade in 1997 and updated in 2010 (Sylt Declaration 2010) to take into account the inscription of the Dutch-German Wadden Sea as a World Heritage Site, as well as new developments in EU Directives. The Ministerial Declarations issued on the occasions of the Trilateral Governmental Conferences (every four years) are political declarations, in which agreements are made between the governments, which are relevant for all areas of the cooperation, such as management, monitoring, and international cooperation. The declarations are

therefore an integral part of the total protection and management scheme of the property to which the governments have committed themselves and are politically binding for the appropriate authorities

in the three countries. At the national level, management and monitoring activities are guided by the requirements of the national management systems and relevant EU law.

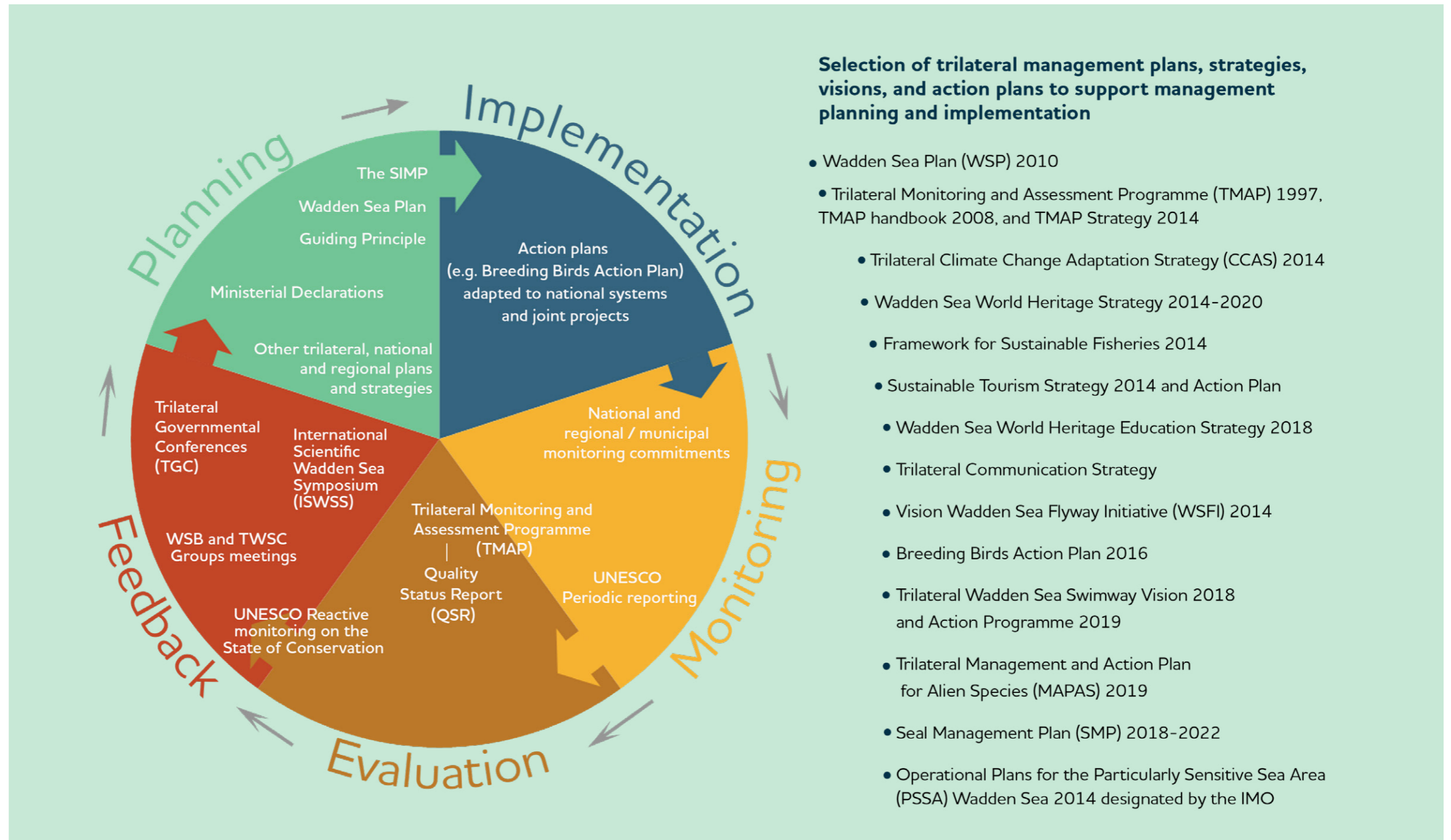


Figure 7. Phases of the management cycle required for an effective management system (as defined in § 111 of the Operational Guidelines for the implementation of the World Heritage Convention) adapted to the Wadden Sea World Heritage Site by including the elements in each phase. List of trilateral plans, strategies, and action plans to support management. All TWSC management plans, visions, strategies, and action plans can be found in www.waddensea-worldheritage.org.

Implementation

Trilateral visions, policies, and agreements are implemented in the three countries according to their laws, management structures, political frameworks, and cultures. Specific action plans and joint projects assist the implementation on the ground by specifying who, where, when, and how. Inversely, TWSC political decisions are fuelled by local and national approaches and requirements (see the example in Box 2).

example of successful transnational cooperation, which has demonstrated numerous solutions for dealing sustainably with coastal protection and erosion in the context of climate adaptation measures. The Wadden Sea Flyway Initiative (WSFI) collaborates with partners beyond the trilateral cooperation to jointly protect and manage important sites along the East Atlantic Flyway (see Ch. 6. Global Dimensions).

Box 2. Wadden Sea Seals Agreement

As an example, due to the Wadden Sea's significance for migration of marine fauna, the three Wadden Sea countries signed the Agreement on the Conservation of Seals in the Wadden Sea (WSSA) in 1991. The WSSA represents the first regional agreement concluded under the United Nations Convention on the Conservation of Migratory Species of Wild Animals (CMS), and the CWSS acts as the secretariat. The aim of this trilateral environmental agreement is to cooperate closely in achieving and maintaining a favourable conservation status for the harbour seal population of the Wadden Sea. The WSSA contains provisions, amongst others, on research and monitoring, protection of habitats and awareness resulting in a stable harbour seal population which recovered well from the two *Phocine distemper virus* (PDV) epidemics in 1988 and 2002. The underlying framework is the Seal Management Plan (SMP) which is regularly reviewed and adjusted to reflect new developments.

Examples of successful joint projects that promoted the development and current implementation of the Sustainable Tourism Strategy are Interreg projects PROWAD³, PROWAD LINK⁴, Wadden Agenda and Wadden Agenda 2.0⁵, and NAKUWA⁶. Interreg project "Building with Nature"⁷ is an

Monitoring

The Trilateral Monitoring and Assessment Programme (TMAP) is one of the cornerstones of the TWSC and a prerequisite for inscription onto the World Heritage List. The aims of the trilateral Wadden Sea monitoring, assessment, and research are to:

- provide a scientific assessment of the ecosystem status,
- assess the implementation status of the WSP Ecological Targets,
- use ecological monitoring and assessment to fulfil UNESCO obligations for the World Heritage Site.

Assessment results are presented in periodic Quality Status Reports (QSR) authored by TWSC experts and independent scientists.

Further, the World Heritage Convention (Art. 29) requests the State Parties to participate in regular periodic reporting on implementation of the World Heritage Convention. Reports are submitted every six years to the World Heritage Centre (§ 199, Operational Guidelines for the Implementation of the World Heritage Convention).

Additionally, as EU member states, the three countries are obliged to monitor the conservation status for all habitats and species (§ 11 of the Habitats Directive) of community interest (as listed in Annex I, II, IV and V) and bird species under the Birds Directive as well as the status of marine waters under the Water Framework and the Marine Strategy Framework Directives.

Evaluation

Since 1993, the TWSC between Denmark, Germany, and the Netherlands has periodically

produced QSRS describing and evaluating the current ecological status of the Wadden Sea. The QSRS identify changes in this status and their possible causes, classify issues of concern, and indicate possible measures for improvement, including evaluation of the likely effectiveness of these measures. They also indicate knowledge gaps. Between 1993 and 2022, six QSRS were produced. The QSRS are part of the TMAP. The latest QSR reports are published online⁸.

Additionally, the World Heritage Committee may request the State Parties to report on the state of conservation of the property through the reactive monitoring procedure (§ 169-176, Operational Guidelines for the Implementation of the World Heritage Convention). In the reactive monitoring procedure, the State Parties must submit specific reports and impact studies each time exceptional circumstances occur, or work is undertaken which may have an impact on the Outstanding Universal Value of the property or its state of conservation (§ 172-173). Replies to World Heritage Centre requests regarding information from sources other than the State Parties (§ 174) are done jointly by the three Wadden Sea countries.

Cyclically, the World Heritage Centre develops regional reports with the periodic reports⁹ submitted for each property.

These are presented to the World Heritage Committee for examination, adoption, and formulation of recommendations.

As most of the Wadden Sea World Heritage area is also designated as EU Natura 2000 sites, each EU member state reports every six years about the progress made on the implementation of the Habitats Directive, specifically on the status and trends of the habitat types and species (§ 17, Habitats Directive Reporting), as well as the Birds Directive, Water Framework Directive, and the Marine Strategy Framework Directive.

Feedback

Feedback as part of the management cycle takes place at all levels of the TWSC structure (Ch. 3.1. Trilateral cooperation structure, and Fig. A.1 in Annex 1).

Feedback from the task, expert, network, and working groups of the TWSC flows between the groups and to the Wadden Sea Board (WSB). TWSC groups meet three to four times per year to exchange information, coordinate monitoring, assess results, and provide advice on the scientific basis for management. The WSB meets at least two times per year.

The external advisors in the WSB for example, representing the Wadden Sea Forum of stakeholders and the Wadden Sea Team of environmental NGOs, meet at least once a year to exchange and coordinate with

their sector. They give advice and feedback to the WSB.

During the Wadden Sea Conferences (including the International Scientific Wadden Sea Symposium (ISWSS), the Youth Conference, the Wadden Sea Day, and additional thematic workshops), the research community, site managers, environmental NGOs, stakeholders, and the younger generation, give their views and advice on management and political decisions addressing the Trilateral Governmental Council.

The QSR recommendations represent scientific advice to the Trilateral Governmental Council about priority issues that need further attention.

The Trilateral Governmental Council, as the politically responsible body of the TWSC, meets generally every three to four years at the TGC, which serve to assess the implementation of the planning instruments in terms of policy and management and to prioritise the issues that need further attention. Trilateral Governmental Council meetings result in Ministerial Council Declarations and the adoption of annexed strategies and plans, which completes the management cycle.

Since the time of inscription, World Heritage Site status has been an integral part of all phases of the Wadden Sea management cycle.

CHAPTER

CLIMATE CHANGE VULNERABILITY AND ADAPTION

4.1 Climate Stressors in the Wadden Sea

Three key climate stressors impacting the Wadden Sea Outstanding Universal Value (OUV) in a time frame of 50 and 100 years were identified by applying the Climate Vulnerability Index (CVI) rapid assessment method: 1) temperature trend (air and/or water); 2) extreme temperature events; and 3) sea level rise (see the CVI report¹⁰). In a “business as usual” scenario, representing the most probable outcome of current greenhouse gas emissions policies worldwide, the OUV vulnerability was assessed as high, meaning there is potential for major loss or substantial alteration of the majority of the key values that convey the OUV. Enhanced sea level rise may seriously affect structure, functions, and the characteristic biodiversity of the Wadden Sea ecosystem. As substantiated in trilateral reports of the former working group on coastal protection and sea level rise in the Wadden Sea (2005¹¹ and 2010¹²), large sea level rise may lead to a signifi-

cant reduction in tidal flats and salt marshes as well as in safety of the inhabitants of the region. Furthermore, climate change may severely impact the present distribution and abundance of species. Sufficient freshwater availability during the growing season and as an input into the estuarine areas should not be overlooked. Also, additional climate stressors (like precipitation trend, storm surge, ocean acidification) may have an impact on the OUV.

4.2 Adaptation and Mitigation Agreements

Adaptation measures in the Wadden Sea are guided by the Trilateral Climate Change Adaptation Strategy (CCAS)¹³, which was adopted by the responsible ministers in awareness of these implications at the 12th Trilateral Governmental Conference on the Protection of the Wadden Sea in Tønder, Denmark in 2014. The aim of this strategy is to enhance and promote policies and measures necessary for increasing the natural resilience of the Wadden

Sea. A trilateral expert group evaluates the possible impacts of climate change and looks at possible strategies for adaptation in the Wadden Sea Region. In order to successfully counteract or minimise these impacts to the extent possible, and to restrict measures to what is necessary, seven strategic objectives and guiding principles are considered, such as the use of natural dynamics and flexibility, interconnectivity of habitats, as well as site-specific approaches, trilateral cooperation with long-term planning, and the participatory approach. The seven principles are being applied in a wide range of projects and policies in the trilateral Wadden Sea Area. The implementation of the strategy focuses on trilateral cooperation, not only in the application of responses, but also in the areas of policies and management, monitoring and evaluation, and communication and education. Particular attention is paid to sea level rise and increasing sea and air temperatures, also underlined by the CVI process results.

Responses to adapt to sea level rise build upon locally and regionally established scientific and technical support. These might have significant influence on the OUV as they will most likely lead to an increase in activities for coastal flood defence and protection, such as dyke strengthening and sand nourishment.

Limited responses for adaptation are currently known and ready to implement to adapt to increasing air and water temperatures or extreme temperature events; thus, improved knowledge is needed to develop additional management options.

Local and global climate mitigation measures are imperative for combating climate change impacts; for example, CO₂ reduction as outlined in the Paris Agreement on Climate Change of 2016 and specified in EU CO₂ reduction targets. Mitigation measures in the Wadden Sea aim at developing the Wadden Sea Region into a CO₂ neutral area, as already stated in the Sylt Declaration already in 2010. Thereby, the Trilateral Wadden Sea Cooperation (TWSC) agreed to “support the global and national efforts to mitigate causes of climate change at the regional level, by calling especially upon local and regional competent authorities and stakeholders”. CO₂ reduction policies and plans at the national and regional levels include the transition to renewable energy. The focus will





be on the support of mitigation measures and initiatives that contribute to decarbonisation while not challenging the safeguarding of the OUV and its key features.

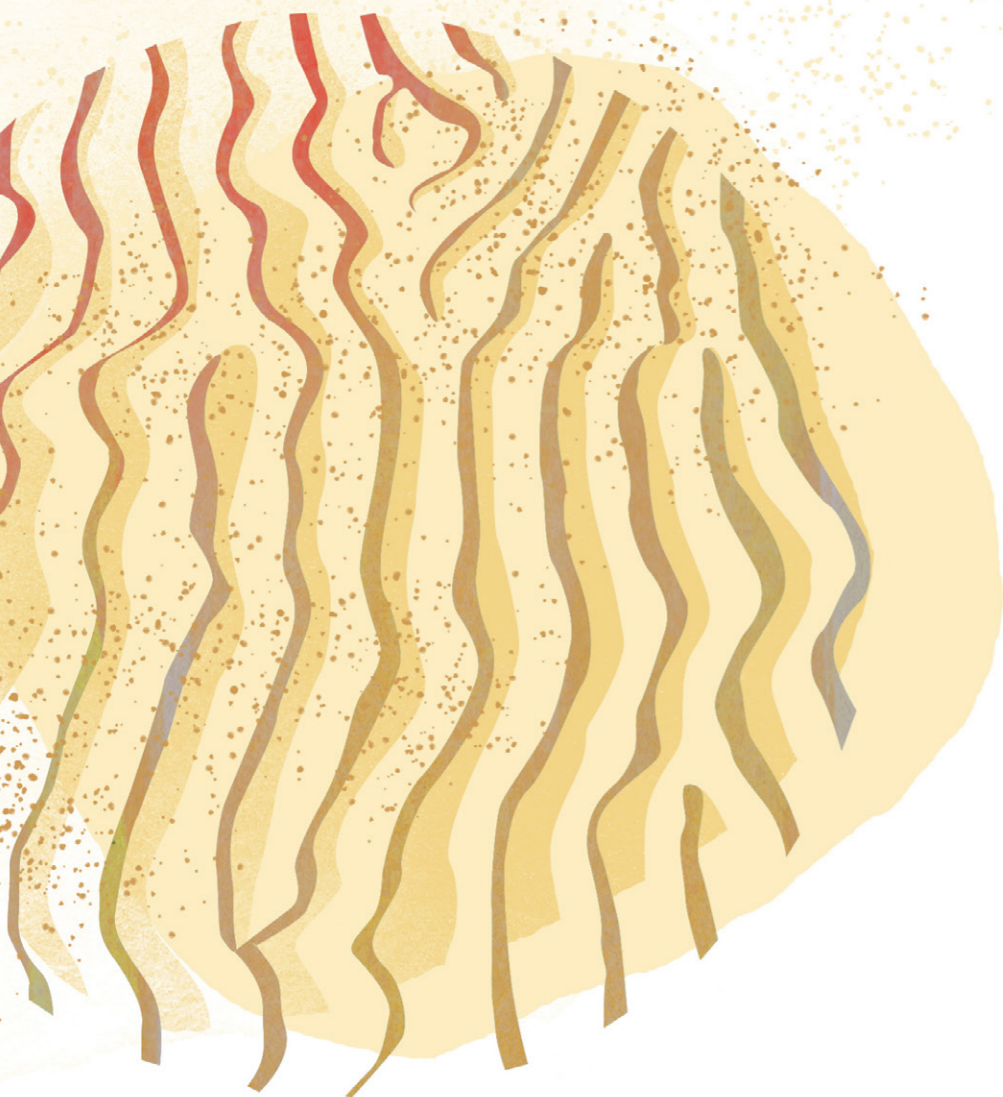
Potential conflicts as well as opportunities related to coastal flood defence and protection and renewable energy are addressed in Chapter 5.

4.3 Proposals for Management Activities

- Stimulate and maintain trilateral knowledge exchange and interdisciplinary discussions about, among others best practices for adapting to climate change; projects for restoring and re-dynamizing threatened habitats as an adaptation measure; methods to limit the damage or prevent negative impact of climate change on the OUV; the cumulative and combined effects of both climate change and human use to advise permitting procedures; water withdrawal and water management on the islands; improve knowledge about the potential effects of climate change on economic, social, and cultural aspects.
- Integrate and mainstream the Trilateral Climate Change Adaptation Strategy into all activity fields and make it more publicly known.
- Continue monitoring the Trilateral Climate Change Adaptation Strategy and embed the results in long-term trilateral climate change policies.
- Improve communication on OUV key values and climate change effects on the ability of the Wadden Sea to deliver ecosystem services in relation to economic, social, and cultural values.
- Strengthen support for initiatives aimed at reducing the Wadden Sea Region's CO₂ emissions in order to contribute to overall EU CO₂ reduction targets, in particular the decarbonization of the energy sector, traffic sector, and tourism sector, as well as striving to take on a pioneering role in this respect as part of their own responsibility as site management operators.
- Explore and emphasize the potential of typical Wadden Sea habitats as "blue carbon" ecosystems to contribute to natural CO₂ sequestration (e.g. saltmarshes, sediments), while taking into account anthropogenic pressures possibly impacting these processes. This may include nature-based solutions for coastal protection given their capacity to act in synergy with blue carbon, biodiversity safeguard, and coastal protection.

CHAPTER 5

TOWARDS SUSTAINABLE MANAGEMENT OF THE WADDEN SEA



The World Heritage Convention (1972) gives each State Party with duty of ensuring the protection, conservation, presentation, and transmission of the cultural and natural heritage to future generations. Since the beginning, the Trilateral Wadden Sea Cooperation (TWSC) has aimed to protect the Wadden Sea. In the Joint Declaration (2010), the governments of the Wadden Sea countries renewed their commitment to continue to manage the Wadden Sea as a single ecological entity for its natural, landscape, and cultural heritage values, for the benefit of present and future generations. As stated in the Wadden Sea Plan 2010, as the commonly agreed policy and management plan, human activities in ecosystems must be managed for all aspects: species; habitats; processes; and interactions.

The SIMP should be implemented as a strategic decision-making tool that facilitates a strategic, proactive and collaborative transboundary management approach to maintaining the Outstanding Universal Value (OUV) and addressing to the various pressures identified, including potential cumulative impacts.

Effective management of the Wadden Sea needs to assure nature conservation and an ecosystem approach that integrates management of existing

protected areas with other key activities affecting the property, including the most important economic activities, whilst safeguarding the OUV. Fisheries, tourism, shipping and ports, energy and coastal protection are some of the most important socio-economic factors in the region. These activities not only contribute to preserving jobs in the region, but also provide regional food security, protect the local populations from coastal flooding and erosion, play an important role in maritime trade and transport, and provide energy. Nevertheless, the Statement of OUV identifies these as key threats requiring ongoing attention.

Human uses within the Wadden Sea World Heritage Site and the surrounding area are regulated through existing protection regimes. However, stressors from the key topics (can) interact and combine over time, both with each other and with climate change effects, causing cumulative impacts on the marine environment. Assessment and management of cumulative effects require cross-sectoral and interdisciplinary consideration and exchange.

Participation of civil society in actions towards protection and sustainable use in the Wadden Sea Region is facilitated by the Wadden Sea Forum (WSF) and the Wadden Sea Team

(WST) of environmental NGOs. The Partnership Hub supports and facilitates engagement at trilateral level between civil society, different sectors, site management, science and research and policy through, among others, specific projects.

This chapter contains the objectives that set the level of ambition for each of the five key topics as well as a summary description of the main risks of the possibility of something happening and causing a negative impact on the OUV. The enabling environment for each of the five key topics is shown, including basic agreements and common strategies, which constitute a favourable and conducive framework for future action. Finally, activities directed to maintain and enhance the OUV of the Wadden Sea World Heritage, are outlined for all key topics based upon the proposals from site managers, experts, and policy makers. The described activities should be performed within the TWSC in collaboration with the competent authorities and relevant stakeholders. In the implementation of the activities, existing standards are to be maintained or, when necessary, improved upon to preserve and enhance the area's OUV. Implementation of the activities shall in no way lead to lowering of existing environmental standards.

Common to all five key topics' activities are:

- trilateral exchange of knowledge and best practices for the benefit of nature conservation management;
- raising awareness/advocacy.

These have been major elements of the TWSC for decades and continue to be important. Trilateral knowledge exchange contributes to bringing trilateral experience together to build common approaches and, thus, to strengthen the Cooperation's joint arguments for nature conservation. Exchange of best practices at the trilateral level helps speedy identification of the most beneficial practices for nature conservation. Consequent and consistent awareness raising and advocacy can influence activities and behaviours in favour of maintaining the Wadden Sea's OUV. Trilateral knowledge exchange and advocacy activities need to be continuously improved to adapt to thematic as well as technological and societal changes.

5.1 Key Topic Fisheries

Objective

Further advance towards sustainable fisheries practices that have no negative impact on the OUV of the Wadden Sea World Heritage Site. Principles such as impact assessments, best practice, closed areas, monitoring and control, stock assessment, best available knowledge, and learning by doing, could be effective tools. The aim is to strengthen the knowledge base and innovative techniques, taking into account that existing nature conservation standard should be maintained or improved.

Main risks

- Significant harm to habitats and species due to fishing and marine aquaculture activities including bycatch and overfishing, depletion across the food web, habitat destruction, negative effects of human induced non-indigenous species, litter pollution, underwater noise, and reduced recolonisation possibilities for reef-building species (e.g., Sabellaria worms) and other species.
- Damage to vulnerable ecosystems, habitats, food webs and species due to cumulative effects, including those from fishing activities in closed areas within the Wadden Sea World Heritage Site.
- Climate-driven increase of fishing pressure in the Wadden Sea due to intensification of area use, for example by expanding wind farms and other uses in the offshore areas, and biological changes driven by temperature increase, such as presence of new species, species spatial distribution and habitat use.

Enabling environment

- EU Common Fisheries Policy, national laws and regulations, as well as agreements with the fisheries sectors.
- Trilaterally agreed Framework for Sustainable Fisheries (Annex 3, Tønder Declaration 2014).
- Existing national and trilateral effective good examples from fisheries and aquaculture management in cooperation with the competent authorities, such as closed areas for fisheries, buying up fishing licences, use of sieve nets, de minimis regulation in crab fisheries, voluntary renunciation of dolly ropes.
- Certification schemes, such as Marine Stewardship Council (MSC), including a commitment to avoid vulnerable areas as soon as they have been identified.
- Studies on ecological impacts and projects on best practices, transdisciplinary research, and use of the results in management.

Activities

1 The TWSC to **stimulate and facilitate exchange of information, knowledge, best practices, management experience** about fields of action which are especially important for their potential impact on the Wadden Sea World Heritage Site; at the same time keeping an overview of other existing groups treating fisheries and aquaculture at the local, national, and regional levels. The outcome of such a thematic exchange may lead to **identification and development of, where adequate, pilot studies and specific measures** while including the relevant authorities as well as stakeholders such as the fisheries sector, environmental NGOs, and site managers.

Potential subjects for the dialogue process:

- A.** Fisheries management measures including co-management of fishing activities, the effects of implementing management measures, and regulations such as closed areas, spawning protection, and fish sanctuaries.
- B.** Scenarios and risk analysis of shifting fishing areas in the context of current and future EEZ use expansion.
- C.** Ecosystem-compatible fishing techniques (results of projects).
- D.** Permitting procedures, effective control mechanisms, and future developments in fisheries including opportunities

offered by digital methods.

- E.** Mitigation, handling and monitoring of bycatch of undersized target species (e.g. flatfish, brown shrimps) and non-target species (e.g. invertebrates, protected species, migratory fish, sharks, rays), improvement in manipulation procedures to release bycatch alive.
- F.** Recreational fisheries (status and significance, including ecological impact and best practices).

2 The TWSC, in dialogue with the competent authorities for fisheries, sector representatives and environmental NGOs at the trilateral level, **to further the implementation of the Framework for Sustainable Fisheries (2014). This should be done in a collaborative approach**, well-coordinated with other existing bodies and committees treating fisheries and aquaculture at the international, national, and regional levels.

3 The TWSC together with fishing schools to **continue to improve awareness** of Wadden Sea World Heritage Site values and vulnerability, scientific basis, location and objectives of closed areas, ecosystem-compatible and sustainable fishing techniques and fishing gear, waste prevention and the potential problems associated with marine litter (e.g., lost gear, dolly ropes), and the importance of fisheries

for local and sustainable food security. This can be accompanied by information to the wider public through visitor and information centres, as well as the work of the International Wadden Sea School (IWSS).

4 The TWSC, through the trilateral groups responsible for science and fisheries, to **initiate fisheries research projects**, including:

- A.** Encouraging the science sector, fisheries sector, and site managers to develop and test new methods and practices in areas with existing/current fisheries, for example further sustainable and ecosystem-compatible fishing techniques and practices with the aim of reducing bycatch and impacts on the seabed.
- B.** Research on the effects of closed areas.
- C.** Sharing the knowledge gained to foster implementation.

5 The TWSC, through the trilateral groups responsible for science and fish, to **initiate research on fish ecology** (e.g., population quantity and quality, ecosystem function, closed areas, nursery function for juvenile fish, endangered species, historic species and habitats occurrence, food webs) **to support the OUV and sustainable management.**

6 The TWSC to **produce a coordinated approach to con-**

tribute to reaching the objectives of the EU Biodiversity Strategy for 2030 according to nationally based interpretation of key elements thereof and in line with the Wilhelmshaven Declaration 2022.

7 The TWSC to **compile relevant information (gathered by the national competent fisheries authorities) on the most important types of fisheries taking place in the Wadden Sea and potential upcoming types of fisheries**, especially shrimp fisheries and blue mussel fisheries (and other forms of fishing with potential negative impacts on the ecosystem or species). This should be complemented by geographic and legislative information on closed areas within the World Heritage Site. **The information compiled, which could be managed at the Common Wadden Sea Secretariat (CWSS), will serve in particular as a basis for selecting topics and assessing the appropriateness of complementary approaches to be pursued for exchange at a trilateral level to advance the implementation of the Framework for Sustainable Fisheries.** The compiled information can also contribute to feeding into trilateral and national discussions on the implementation of the EU Biodiversity Strategy for 2030 to create an ecologically coherent network comprising of strictly protected areas.

5.2 Key Topic Tourism

Sustainable tourism in and around the Wadden Sea World Heritage Site includes a range of facets from services offered in the region (i.e., accommodation, public transport), nature experience, health and wellbeing activities, destination marketing, to certification and promotion of sustainable offers, communication, as well as management to avoid negative impacts and to promote conservation of the Wadden Sea ecosystem. In the SIMP, the agreed activities focus on the nature conservation aspect of the holistic view of sustainability, incorporating aspects to promote and preserve the cultural identity, authenticity, and quality of life of the people living in and around the Wadden Sea World Heritage Site.

Objective

Maintain and increase the support of visitors and local population, local entrepreneurs, destination marketing organisations, and other stakeholders in the tourism sector for nature conservation by continuing to advance implementation of the Sustainable Tourism Strategy and the respective action plan in the work fields: tourism operations and nature conservation; One World Heritage destination; transport; accommodation and gastronomy; environmental education and interpretation; and capacity building and raising standards in a collaborative approach.

Main risks

- Negative effects of existing tourism activities, especially those of high intensity, on the fauna, flora, and habitats of the Wadden Sea, including emissions and pollution.
- Damage to the environment caused by infrastructure for tourism in the Wadden Sea World Heritage Site and adjacent region.
- Disturbance caused by future trends in recreational activities and sports.
- Pressure on the ecosystem due to future growth in the number of guests and/or associated spatial demand.

Enabling environment

- Existing trilateral Sustainable Tourism Strategy (Annex 1, Tønder Declaration 2014) and action plan, as the tool for implementing the Strategy at the trilateral level, developed by the TWSC together with stakeholders and environmental NGOs.
- The trilateral network group, including stakeholders and environmental NGOs has collaborated on the implementation of the Strategy for several years and coordinates the regular action plan update.
- Tourism partners in the three countries supporting environmental education and awareness raising in relation to the Wadden Sea.
- Sharing existing national experience and best practices.
- Visitor centres and other information and education facilities, rangers and environmental NGOs promoting nature friendly visitor behaviour.
- Existing projects that support international collaboration and exchange.
- The trilateral Partnership Hub as a structure to enhance networking and better achieving joint intersectoral agreements on common projects and activities.

Activities

1 The TWSC to **continue to improve awareness** of the Wadden Sea World Heritage Site environment, suitable behaviour at the sites, and motivation to maintain or improve environmental quality **by providing consistent information for the sites** through visitor centres, ranger services, and partnership programmes.

2 Dependant on their specific competencies in the three countries, **continue or start to connect site managers to the Sustainable Tourism Strategy in order to add their expertise on nature conservation.**

If necessary, they could be asked to provide advice on the effectiveness of current national/local policies on sustainable tourism. Involvement of site managers is focussed on their experience in the field and their country-specific role in monitoring, visitor management, surveillance, and enforcement. **Desired results could be, where adequate or needed, the improvement of visitor management or zoning schemes, taking into account that the existing nature conservation standard should be maintained or improved.**

3 The TWSC, through the responsible trilateral group, to **strengthen initiatives for cross-border cooperation for fostering the nature conservation** aspect of sustainability in tourism by:

- Addressing gaps in knowledge regarding the impacts of tourism on the OUV, for example through research projects.
- Analysing existing national monitoring data in terms of effects from tourism and considering cumulative effects (obligation in the Habitats Directive in the case of projects or plans seeking permission).
- Encouraging and supporting local communities and tourism stakeholders to assess the local/regional impact of tourism on the OUV as well as on further ecological, socio-cultural, and economic values, for example by using the "Wadden Sea Tourism Radar"¹⁴.
- Developing appropriate trilateral tools to support visitor understanding of suitable and required behaviour in the natural environment and towards wildlife, while making the experience of nature possible.

E. Improving Wadden Sea World Heritage brand visibility, emphasising that it promotes nature conservation via responsible tourism practices and according to the Sustainable Tourism Strategy and action plan.

F. Enhancing coordination of the various supra-regional and regional projects and activities.

G. Exchanging information about training and education initiatives.

H. Strengthening and expanding communication and collaboration with the authorities, agencies, and small and medium sized enterprises (SME) responsible for tourist activities.

I. Strengthening interdisciplinary dialogue and research between natural and social sciences about values in nature conservation, protected area management, and sustainable development.

5.3 Key Topic Shipping and Ports

Objective

Further improve shipping safety, building on the comparatively high status of prevention of accidents, preparedness, and emergency response, and foster nature friendly and climate-neutral operations, including the maintenance of ports with reduced pressures on the environment, and enhance awareness, education, and cooperation in a collaborative approach at the trilateral level.

Main risks

- Ship accidents resulting in the release of pollutants.
- Pollution from ongoing shipping operations, including gas emissions, discharge of scrubber washwater, the use of dispersants in emergency response operations, and the introduction of alien species, especially by ballast water and biofouling.
- Disturbance due to underwater noise from ships and physical impacts from collisions with marine mammals and displacement due to visual disturbance.
- Interference with natural dynamic processes, for example due to dredging and disposal of sediment or by port expansion.
- Disturbance, accidents (collisions) and other negative impacts due to marine traffic, including water sports.

Enabling environment

- The Wadden Sea is a Particularly Sensitive Sea Area (PSSA).
- TWSC Operational Plans for the Wadden Sea PSSA aim to improve on prevention of accidents, operational pollution, awareness and education, preparedness and response, and cooperation.
- As contracting parties of the OSPAR Convention, the three Wadden Sea countries are required to apply Best Available Techniques (BAT) and Best Environmental Practice (BEP) including, where appropriate, clean technology, in their efforts to prevent and eliminate marine pollution.
- The TWSC together with the Wadden Sea Forum, relevant authorities, environmental NGOs, and other partners, to facilitate trilateral dialogue regarding climate- and nature-friendly shipping in the trilateral Wadden Sea.

Activities

1 The TWSC in cooperation with the competent national authorities, to **discuss further implementation of Operational Plans for the Wadden Sea PSSA** (Annex 5, Tønder Declaration 2014), including issues proposed by site managers, environmental NGOs and municipalities, and an assessment of the response capacity to shipping accidents in each country.

2 The TWSC to **stimulate and facilitate trilateral exchange and dialogue** between site managers and involving experts, institutions and industry working on for example bullet points A. to G. (below) with direct impact on the Wadden Sea World Heritage Site and its key values, this should take into consideration other ongoing initiatives and groups at the national and regional levels (e.g., Marine Strategy Framework Directive (MSFD) groups dealing with underwater noise, speed limits, definition of Good Environmental Descriptors for under water noise, OSPAR groups handling sediment movements regulations). **This trilateral exchange can result in the identification of priorities to address with related sectors, specific products relevant for site managers, or in technical papers providing advice, and subsequently in the implementation of measures:**

- A.** Introduction of speed limits to limit emissions, underwater noise, and disturbance, if not in place or if inadequate.
- B.** Create incentives and strengthen regulation for an environmentally friendly design and decarbonisation of the shipping sector in the Wadden Sea to avoid, for example greenhouse gas and noise emissions (noting initiatives and rules at the EU and international levels) by stimulating decarbonisation of ferries and coastal shipping.
- C.** Research to reduce the impacts of underwater noise on marine animals (especially on poorly researched species such as diving birds, fish, and invertebrates).
- D.** Develop nature friendly navigation guidelines for marine traffic in the Wadden Sea property, considering respective existing regulations.
- E.** Research, exchange on and support of nature friendly practices for dredging of shipping lanes and Wadden Sea ports and the related disposal (existing regulation, studies, good practices) where dredging and disposal is unavoidable.
- F.** Identification and research on potential effects of climate change on the OUV of the Wadden Sea as well as adap-

tive measures for shipping and ports.

- G.** Benefits of the Wadden Sea PSSA in the framework of the International Maritime Organisation (IMO), including Associated Protective Measures and the Operational Plans.

3 **Site managers to participate as nature conservation stakeholders in trilateral initiatives** involving shipping authorities, ship-owners, seafarer associations, harbour operators, the Wadden Sea Forum, and the Wadden Sea Team of environmental NGOs **to discuss specific priorities and explore ways to implement and/or make use of:**

- A.** Best practices (showcase exemplary cases of environmentally friendly practices in ships and ports, for example regarding the prevention and control of the spread of introduced species in recreational and commercial shipping-, environmentally friendly ports).
- B.** Effective ship traffic and container tracking systems and monitoring.
- C.** International standards regarding, for example safety, speed limits, and pollution.
- D.** Voluntary good management practices to highlight best-practice for a World Heritage Site.

4 The TWSC in communication with competent authorities, the site managers and stakeholders, to **raise awareness and education** among shipping and ports stakeholders; for example regarding Wadden Sea World Heritage values and vulnerability, best practices, existing regulations and standards regarding safety, speed limits/zoning, pollution, introduction of invasive species.

5.4 Key Topic Energy

Objective

Intensify the application of common best practices to protect the Wadden Sea, to support nature friendly energy transition, and to foster a level playing field with the highest applied environmental standards for all three countries in a collaborative approach with the energy sector.

Main risks

- Impairment of habitats (especially sea floor) and disturbance of natural processes within the Wadden Sea World Heritage due to cable and pipeline laying and operation.
- Disturbance of natural migratory routes as well as mainland areas for breeding, resting, and migratory birds, marine mammals, as well as increased risk of collisions with animals due to power stations construction near the Wadden Sea World Heritage Site and ongoing operations, including the risk of accidents causing the release of harmful substances.
- Future steep increase in number and density of power stations and transmission infrastructure, including increased maintenance and supply traffic to meet the raising energy transition targets will exacerbate risks (e.g., disturbance, habitat loss, collisions, noise) within the Wadden Sea World Heritage Site and in adjacent areas.
- Ground surface subsidence caused by gas exploitation and salt mining may affect habitats and species and, in the future, its effects could be exacerbated by sea level rise.
- Unknown effects of new types of energy production and transmission including hydrogen production, transport, as well as storage and potential carbon capture and storage, during their construction and operation in and near the Wadden Sea World Heritage Site, including the risk of accidents involving harmful substances.

Enabling environment

- Existing trilateral agreement (in the Trilateral Wadden Sea Plan (WSP) 2010 and World Heritage Nomination Dossier) prohibiting the construction of wind turbines, and installations for oil and gas, and not allowing oil and gas exploration and exploitation in the World Heritage property.
- Existing trilateral agreement supporting global and national efforts to mitigate causes of climate change at the regional level and to work towards a Wadden Sea Region as a CO₂-neutral area (Sylt Declaration 2010).

Activities

1 Site managers to **enhance and maintain dialogue and collaboration** with the agencies, energy companies and authorities responsible for spatial planning and technical design to:

- A. Learn in good time about future plans and projects related to energy transition near the Wadden Sea World Heritage Site and get involved early in the process of planning and design of projects.
- B. Use the window of opportunity of planning and designing new projects to advocate for the application of best practices for the reduction of impacts from, for example technical shut-down options in times of mass migration of birds or bats, emissions of light and noise, implementation of buffer zones, and functional safety distances.
- C. Compile lessons learned from the most advanced projects and from pilot projects and share this knowledge trilaterally.

2 The TWSC to facilitate **trilateral exchange in regular events** for site managers involving experts and/or institutions working on, for example the following points with direct impact on the Wadden Sea World Heritage Site and its key values. This trilateral **exchange can result in identification of priorities** to discuss with the agencies, energy companies, and authorities responsible for spatial planning and technical design, **or in technical papers providing advice on:**

- A. Cable and pipeline laying: optimisation of sensitive routing; laying techniques; cable design; maintenance; size of cables with a view to reducing their number; re-research on cumulative effects; application of Environmental Impact Assessment (EIA) and Strategic Impact Assessment (SEA) law; and avoidance and mitigation of impacts of the upcoming planning and building of new subsea cables and pipelines. This exchange could lead to the development of a common Mitigation Toolbox and enhanced transboundary coordination of integrated grids and interconnectors, further developing §29 from the Leeuwarden Declaration 2018.

- B. Potential impacts of large-scale solar platforms, floating solar plants in the offshore area on the marine ecosystem and other renewable energy installations in the Wadden Sea World Heritage Site: influence on key values of the Site, especially bird migration.
- C. Feasibility of alternative technologies to transport energy from offshore wind farms to the mainland or to places of energy consumption, especially hydrogen technology, including the assessment of potential impacts on the marine ecosystem and bird migration.
- D. Risk assessment of carbon capture, storage, and transport future technology.

3 The TWSC to **evaluate possible effects of emerging forms of energy production while applying the precautionary principle.**

4 The TWSC, through the trilateral groups responsible for energy and for research and in collaboration with the relevant groups and experts, to **formulate relevant research questions to investigate (potential) effects of new types of energy production, storage, and transmission** while considering nature conservation management and cumulative impacts (and when possible, develop trilateral research projects).

5.5 Key Topic Coastal Flood Defence and Protection

Objective

Enhance the use of nature-based measures and maintenance practices in a collaborative approach with the competent authorities, based on the Climate Change Adaptation Strategy, which aims at natural resilience to climate change effects and consists of seven basic elements: natural dynamics; interconnectivity; integration; flexibility; long-term approach; site specific approach; and participation. In addition, place emphasis on strengthening the potential of coastal habitats such as saltmarshes and seagrasses in contributing to coastal protection, biodiversity conservation, and carbon sequestration.

Main risks

- Alterations of natural dynamic processes and the biodiversity of the Wadden Sea Cooperation Area due to existing measures (for example, stabilisation of the coastline due to dykes, loss of tidal flats and alteration of sediment and salt supply, and erosion due to construction of groynes, revetments, and extraction of sand and clay, loss of connectivity due to existing structures and their maintenance).
- Increase in number and size of coastal flood defence and coastal protection measures to adapt to sea level rise may cause habitat and species loss.
- Sea level rise may cause difficulties with inland drainage, namely tide gates are being converted into pumping stations that hinder connectivity between the Wadden Sea and the mainland.

Enabling environment

- Existing Trilateral Climate Change Adaptation Strategy (CCAS) (Annex 4, Tønder Declaration 2014) with seven basic elements aiming to improved resilience of the Wadden Sea Region to climate change for the benefit of nature conservation and the safety of inhabitants and visitors.
- Existing permanent expert group which stimulates the implementation of Annex 4, Tønder Declaration 2014 and updates the priorities, supports initiatives for knowledge exchange, studies to assess effects of climate change as well as adaptation measures.
- Existing knowledge and experience that site managers have in combination with existing good cooperation with the coastal flood defence and protection agencies.

Activities

1 Site managers to **enhance and maintain communication and collaboration** with the agencies and authorities responsible for coastal flood defence and protection to:

- Where adequate and feasible use the window of opportunity to introduce nature-based solutions, with priority no-regret measures, especially when alterations or new coastal flood defence and protection structures are planned (see Box 3. Definitions).
- Where appropriate, consider the Wadden Sea World Heritage Site's OUV in the application of Environmental Impact Assessments, Strategic Impact Assessments, and regulations.
- Encourage cooperation of site managers with agencies and authorities responsible for coastal flood defence and protection in pilot projects.
- Stimulate societal debate and motivation for adapting to an inevitable sea level rise in a nature- and climate-friendly manner.

2 The TWSC, to stimulate and facilitate regular **trilateral exchange** between site managers to:

- Continue to strengthen and share best practices, experience, and knowledge about specific topics of interest (e.g., nature-based solutions for coastal flood protection and defence (no-regret measures), good practice examples for coherence and compensation measures, relocation of (summer-) dykes, restoration of natural dynamics in dunes (e.g., over wash).
- Formulate relevant research questions to investigate potential for nature-based solutions, as well as adaptation and compensation measures, to restore natural dynamics and, when possible, develop trilateral research projects. The upcoming (pilot) projects on the implementation of nature-based solutions for coastal protection in the Wadden Sea should be used to quantify ecological and socio-economic effects and to be able to transfer these to a larger coherent area.
- Continue to support and stimulate, where necessary, the agencies and authorities responsible for coastal flood defence and protection to implement more environ-

mentally friendly solutions contributing to safeguarding the OUV.

3 The TWSC through site managers and, where not being part of it, the responsible nature conservation authorities, to **continue to improve awareness** among authorities and agencies responsible for planning, construction, and maintenance of coastal flood defence and protection measures of the following: the Wadden Sea World Heritage Site's natural geological dynamic processes (sediment dynamics), the role of natural factors in coastal protection (islands, dunes, saltmarshes); the significance of

river and marsh water body connectivity for fish and ecological processes, the role of tidal processes for some coastal habitats. This shall be accompanied by:

- Information to the wider public through visitor and information centres, as well as the work of the International Wadden Sea School (IWSS).
- An outreach programme directed to coastal communities, those managing areas at risk of flooding until 2100, and other relevant actors in a collaborative approach with the competent authorities and based on the CCAS.

Box 3. Definitions

No-regret measures

Measures which are beneficial independently of which event or scenario actually occurs. In cases of considerable uncertainty like climate change and its impacts regarding direction, timing and magnitude (e.g. plausible sea level rise projections vary among 0.2 and 1.4 m) no-regret measures provide some flexibility to adapt policy and management in response to new information regarding actual and projected changes in drivers and impacts. No regret should also be applied concerning the natural values and the integrity of the Wadden Sea (CCAS, 2014).

Nature-based Solutions

Nature-based Solutions are actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits. (Resolution of the Fifth Session of the United Nations Environment Assembly (UNEA-5), March 2022).

CHAPTER 6

COMPLEMENTARY ACTIVITIES TO SUPPORT MANAGEMENT

6.1 Science and Research

Trilateral Wadden Sea Cooperation (TWSC), which has existed for over four decades, is based on science and research. To assess the status of implementation of the targets of the Wadden Sea Plan 2010, reliable scientific evidence is crucial. The Trilateral Monitoring and Assessment Programme (TMAP), which also underpins the criteria for inscription onto the UNESCO

World Heritage List, provides the necessary information in this regard. By regularly publishing Wadden Sea Quality Status Reports (QSR), in which more than 100 scientists (QSR 2017) from the three Wadden Sea countries are involved, the development of the Wadden Sea ecosystem is described, and trend analyses are reported (more detail in 6.2. Monitoring and Assessment).

Upon the invitation of the TWSC, the scientific community from the Netherlands, Germany and Denmark was invited to develop a Trilateral Research Agenda. This Agenda gives an overarching, comprehensive, and integrated view on the trilateral research needed in the Wadden Sea Region. It focuses on the three challenges of addressing human-nature interactions, coping with climate change and sea level rise, and working towards a sustainable coastal region. Specific research topics relevant for the management of the Wadden Sea Region are laid down in thematic lines touching upon: 1) climate, water, sediments, and subsurface; 2) ecology, biodiversity, and spatial processes; 3) cultural heritage, identity, and historical embedding; and 4) economy, society, and sustainable development. Further integral parts of the Trilateral Research Agenda are monitoring; organisation and funding and outreach; communication; and education. The Trilateral Research Agenda¹⁵ was welcomed at the last Trilateral Governmental Conference (Leeuwarden 2018).

To strengthen cooperation with the scientific community a Trilateral Programming Committee on Wadden Sea Research (TPC-WSR) was installed in order to establish a joint programme on research issues relevant to the Wadden Sea World Heritage Site, taking

into account the Trilateral Research Agenda. The members of this Committee represent science and policy-management of the three countries.



Challenges and Outlook

The TPC-WSR will serve as a focal point to foster science cooperation and applied research in the Wadden Sea World Heritage Site. Part of the assignments given to the TPC-WSR also includes exploration of funding possibilities.

The incorporation of upcoming management requests resulting from the SIMP process is encouraged for consideration in the agenda of the TPC-WSR and/or in the Joint Trilateral Programme on research issues relevant to the Wadden Sea World Heritage Site.

6.2 Monitoring and Assessment

The main technical purpose of monitoring the ecosystem and human activities is to collect data necessary for scientific evaluation of the status of the ecosystem and the intensity and impact of human use and its implications for the system. This scientific assessment is an important basis for formulating policies and measures. Scientific knowledge is a prerequisite for developing appropriate mon-

itoring, for the application of assessment criteria and for formulating policy goals to protect the ecosystem.

The Trilateral Monitoring and Assessment Programme (TMAP) covers the entire Wadden Sea Cooperation Area and spans a broad range, from physiological processes to population developments to changes in landscape and morphology. The TMAP was implemented based on a decision made during the Trilateral Governmental Conference in Stade (1997) and has been further developed to also respond to the needs of various national and international monitoring obligations; in particular those from the EU Habitats, Birds, Water, and Marine Strategy Framework Directives, as well as reporting since inscription of the World Heritage Site.

Due to the further development of reporting under these Directives, the TWSC aims to foster the adjustment of the TMAP to today's obligations (for example, climate change and its impact) and to guarantee a future-proof approach with the necessary synergies with existing monitoring programmes. Focus is also on increasing the visibility and outreach of the TMAP and the advantage as a sound basis for reporting through the QSR Reports (TMAP strategy, 2014).

The QSR Thematic Reports are written by scientists in consul-

tation with relevant TWSC groups and edited by an Editorial Board in cooperation with the Common Wadden Sea Secretariat (CWSS). The QSR Thematic Reports are updated at regular intervals based on data availability, trilateral events, or emerging issues.

A QSR Synthesis will combine the findings from the Thematic Reports and will be issued prior to the Trilateral Governmental Conference every four years, thus providing a condensed overview on the status of the ecosystem with relevant information for management and decision making.



Challenges and Outlook

In the coming years, new requirements may apply for the TMAP. These requirements may be influenced by, or have an influence on, (new) trilateral policies and plans (like the SIMP). Among other these could be:

- Impacts of climate change (see the Trilateral Climate Change Adaptation Strategy, CCAS).
- Invasive Alien Species (see the Trilateral Management and Action Plan for Alien Species, MAPAS).
- Tourism management (Sustainable Tourism Strategy).
- Other trilateral strategies (such as the Wadden Sea Flyway Initiative) providing input for the TMAP parameters.

- EU Directives: Habitats Directive (habitat types with unknown status, especially sublittoral); Marine Strategy Framework Directive (Wadden Sea relevant descriptors such as Marine litter and new pollutants); Birds Directive; Water Framework Directive; and Alien Species Regulation.

With input from relevant research and monitoring projects, proposals for new or amended parameters and methodologies will be weighed and coordinated trilaterally. This must adhere to the greatest possible conformity with national monitoring programmes, requirements, and schemes where the three countries address EU and other monitoring obligations.

6.3 Knowledge Management

The TWSC is a globally outstanding example for the knowledge and experiences it holds when it comes to policy, management, research, and monitoring of a large-scale mudflat and barrier islands ecosystem. Making this knowledge available to site managers and stakeholders is a high priority for the TWSC. Management of the Wadden Sea, as a single ecosystem shared by three countries, requires knowledge of the entire system. A milestone to collect and make this

knowledge available started with the Wadden Sea network of engaged scientists in the 1960s. This resulted in the first scientific Wadden Sea symposium in 1975 where scientists called for better protection of the Wadden Sea and a trilaterally coordinated effort. Today, the scientific symposia, which take place about every four years, play a crucial role in the TWSC, by enhancing exchange

between scientists, site managers, and stakeholders, and giving advice to the Trilateral Governmental Conferences.

Since its establishment in 1987, the CWSS has developed into a trilateral “knowledge management hub”, providing access to data, publications and reports relevant for trilateral policy, management, research, and monitoring.

The annual Wadden Sea Day, dealing with management and research topics, supports exchange between site managers and provides the most recent knowledge across the three countries.

Trilateral working groups at expert and manager levels meet regularly to compile, assess, and provide recommendations for the three governments.

They connect local and national management with trilateral management and policies.

At an international level, an ongoing exchange of knowledge and experience is carried out with site managers from other Marine World Heritage Sites or mud-flat ecosystems sites to enhance understanding of natural systems and how to manage them.



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Challenges and Outlook

The main challenge today is how knowledge creation and exchange can be organised trilaterally and passed to future generations. Furthermore, how diverse target audiences can be actively involved across various topics and governance structures.

New forms of cross-sector collaborations could be developed to foster knowledge exchange trilaterally (such as “communities of practice”, which are organised groups of people that collaborate regularly to share information, improve skills, and work on advancing knowledge on a specific topic of common interest). In addition, enhanced use of appropriate technologies could be considered to support effective and positive experiences during exchange and collaboration (such as knowledge bases, expert systems, information technology cooperative work, and data exchange).

6.4 Interpretation and Education for Sustainable Development

Visitor information, environmental education, and opportunities to experience nature have evolved throughout the Wadden Sea Region over several decades; they are provided by various organisations and

networks (public, private, NGOs) with over 65 information facilities (from small information points to large visitor centres).

Education, information, interpretation, and awareness building are obligations that ensue from the World Heritage Convention and inscription onto the World Heritage List. In order to protect and maintain it, the Outstanding Universal Value (OUV) of the Wadden Sea must be known, understood, and respected. Thus, interpretation of the Wadden Sea World Heritage Site is essential for broad acceptance of and support for long-term protection of the Wadden Sea.

The Wadden Sea Strategy on Education for Sustainable Development and World Heritage Interpretation¹⁶, adopted in 2018, provides a transboundary framework for environmental education and interpretation in the entire Wadden Sea World Heritage Site. It builds on local, regional, and national concepts and activities with the aim of promoting the Wadden Sea’s OUV in a transboundary and interdisciplinary approach. It also addresses qualification and training at a national level, enabling multipliers to integrate the trilateral and global context into their daily work. At the trilateral level, the trilateral group responsible for education oversees the implementation of the strategy with the coordination of joint activities provided by

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the International Wadden Sea School (IWSS)¹⁷ (founded by the TWSC and nature NGOs in 2003) in cooperation with the CWSS.

At the national level, activities are coordinated by the respective national site managers and stakeholders according to individual national strategies and concepts.

The strategy links and contributes to the implementation of other important strategies for the Wadden Sea, namely the Sustainable Tourism Strategy¹⁸. It also contributes to the UNESCO Programmes for “World Heritage Education” and “Education for Sustainable Development”.



Challenges and Outlook

Engaging the diverse multipliers in cross border cooperation and enhancing their trilateral and World Heritage perspective remains an ongoing process and is an integrated part of education and information.

The provision of trilateral information, education, and interpretation resources will enhance the quality of information and support consistent communication of the OUV across the regions. Visitor centres, visitor information systems and educational resources, as well as guided tours, class trips, and seminars are provided at the national level and in networks.

6.5 Communication

Communication is vital to make the Wadden Sea World Heritage Site known, understood, respected, and appreciated, and to support the protection of the site and maintain its OUV. The TWSC follows a joint Communication Strategy that includes World Heritage designation.

The key audiences of communication activities are politicians, nature conservation agencies, national parks, scientists, research institutions, environmental NGOs, national park partners, the local population, and tourism marketing organisations. Beyond the TWSC, the audiences are the broader public and media.

The strategy defines four different approaches to be applied to the various target audiences according to their needs: scientific; popular science; general public including young people and child oriented. The strategy includes key messages about the Wadden Sea World Heritage Site, as well as other topics related to the TWSC. The key messages serve as input to partners, stakeholders, and others while communicating about the Wadden Sea World Heritage Site.

The CWSS coordinates trilateral communication activities between its partners, for example the publication and updating of general information on the Wadden Sea World Heritage Site (website, leaflet, video, etc.). At the national level, the communication strategy is implemented by site managers and stakeholders and is integrated into individual communication strategies and concepts.

The approach to treating the Wadden Sea World Heritage Site as a brand, and the development of a brand management toolkit, is quite unique. The Wadden Sea World Heritage Brand Paper and Brand Activation Guide are the tools that underpin this approach and aim to go beyond graphic design guidance by creating a sense of place to continuously strengthen ownership.

The Communication Strategy, as well as all brand related tools (including the design manual) are accessible to all via the website www.waddensea-worldheritage.org. Stakeholders can also use the Brandspace platform¹⁹ to obtain information on the Wadden Sea World Heritage Site brand and logo use. The platform also gives access to marketing material (texts, videos, photos) to use in their Wadden Sea World Heritage Site communication efforts.



Challenges and Outlook

World Heritage communication and co-branding at national and trilateral levels must have consistency. The communication of the TWSC concept and objectives to internal partners and the public can be challenging. The global dimension of the Wadden Sea World Heritage Site and the shared ownership to safeguard its OUV for present and future generations is an essence in the communication of multipliers at trilateral, national, regional, and local level.

In the future, the aim is to create a pronounced profile of the TWSC and World Heritage communication principles and provide internal partners with a TWSC communication strategy which can be easily applied.

6.6 Collaborations and Partnerships

Local and regional supporters have been of crucial importance in the protection of the Wadden Sea since its beginning more than 100 years ago, whether as individuals, NGOs or enterprises. The involvement of civil society at all different levels continues to be a great strength for the protection and sustainable development of the Wadden Sea Region. There are numerous site-specific partnership initiatives at local and regional levels, involving local businesses and communities,

which offer high-quality products and services from the region which operate in an environmentally friendly manner. Local partners support protection and help to raise awareness for nature conservation and sustainable development among guests and locals.

The inscription of the Wadden Sea onto the World Heritage List offered a further step and a unique opportunity to pool and strengthen existing skills and experience under one umbrella to ensure the protection and preservation of the

Wadden Sea, whilst continuing to foster sustainable regional development within the entire Wadden Sea Region. Along this common path, the Trilateral Partnership was founded in 2019 in support of the UNESCO Wadden Sea World Heritage Site, based upon the above mentioned existing proven structures and networks with a long history of achievements and contributions. The strategic partners (including the Wadden Sea Forum, the Wadden Sea Team of environmental NGOs, the trilateral group responsible for sustainable tourism, the

trilateral science community, and the Wadden Sea Board chair representing the TWSC) were the first signatories of the Memorandum of Understanding sealing a mutual commitment to enhance the Wadden Sea World Heritage Site.

The management and organisation of the Trilateral Partnership is supported by the Trilateral Partnership Hub. The Partnership Hub facilitates the strategic partners collaboration in effective and trusting relationships, while sharing information, knowledge, and experience.

The Partnership Hub is intended to initiate and help with the planning of specific trilateral projects, common actions, and assist with applications for funding.



Challenges and Outlook

The Partnership Hub aims to broader engagement for the Wadden Sea World Heritage Site beyond the governmental sector and to unlock potential and resources for delivering the goals and intended activities of the Trilateral Partnership, as described in the Memorandum of Understanding. It will build and intensify pathways for collaboration towards implementation of the (Trilateral Partnership's) vision; this will thus help to extend the network of strategic partners in line with the decisions of the TWSC and balanced intentions of the strategic partners, while further considering the important role of civil society.

All these forms of collaboration within the TWSC, as well as with business communities in the field of engagement with the World Heritage brand, marketing, and sponsorship, have and will be in line with the so-called 'five C's' recognised by the World Heritage Committee: Credibility, Conservation, Capacity Building, Communication, and Community.



CHAPTER 7

GLOBAL DIMENSIONS

7.1 Global Interconnections

The global importance of the Wadden Sea is not only apparent in its status as a World Heritage property, but also by the fact that it is highly interconnected with other sites. In the statement of Outstanding Universal Value (OUV) it is explicitly mentioned that the Wadden Sea ecosystem sustains wildlife populations well beyond its borders and biodiversity on a worldwide scale is reliant on the Wadden Sea.

Many of the challenges for the Wadden Sea's management are equally faced by other protected areas all over the planet, such as the protection of migratory birds and fish, dealing with impacts of climate change on ecosystems, or reduction of marine litter. This calls for close collaboration with partners beyond the Wadden Sea, since what may happen outside the Wadden Sea (for example in the Arctic or in Africa) may have consequences for management in the Wadden Sea (such as with the protection of birds) and vice versa. The preservation of the Wadden

Sea's World Heritage key values is greatly influenced by the successful management of the interconnected sites. This underlines the importance of supporting the protection of other sites along the flyways.

Following the request of the World Heritage Committee on

the occasion of the inscription in 2009, the Wadden Sea Flyway Initiative (WSFI) was launched in 2012 to foster collaboration along the African Eurasian Flyways. The WSFI established a network of partners working at important sites along the entire East Atlantic Flyway, from the Arctic region to the West African

coast and beyond, with the Wadden Sea as an essential site used by different populations of waterbirds through the seasons.

Partners in more than thirty countries are working together to protect and manage their shared bird populations by cooperating in monitoring and capacity building activities. In the coming years, the WSFI is aiming for autonomous bird management in the African partner countries, to combat the impact of climate change for a resilient flyway and to enhance the long-lasting cooperation with Arctic countries. Successful cooperation has been established with west-African countries in particular, with the World Heritage Site National Park Banc d'Arguin in Mauritania (Memorandum of Understanding 2014), and also with Bijagós Archipelago in Guinea Bissau with regards to the protection of intertidal ecosystems.

For the fish community of the Wadden Sea, interconnections on a regional scale are relevant as well. Many marine and estuarine fish species depend on the Wadden Sea at some point in their life cycle. Swimways in the Wadden Sea are less known and researched than flyways but are of proven relevance for fish migration between marine and freshwater habitats. The three countries are working on an Swimway Vision and Action Programme for the implementation of the Wadden Sea Plan 2010 fish targets.

7.2 International Cooperation

Putting the Wadden Sea on the global scene also offers new pathways for international cooperation, mutual learning, and developing solutions for the preservation of the Wadden Sea in a rapidly changing world. Cooperation with other World Heritage properties also helps to raise the profile of the Wadden Sea internationally and within the World Heritage Convention.

With its vast knowledge, the Wadden Sea World Heritage Site is contributing to support nomination efforts of future World Heritage properties. An exchange with Yellow Sea countries has existed for many years. Both localities are tidal mudflat ecosystems of global importance for being among other, stopover sites for migratory birds.

The Trilateral Wadden Sea Cooperation (TWSC) cooperates with the Republic of Korea (Memorandum of Understanding 2009) regarding the exchange of management experiences and approaches, monitoring, research, education, and communication. Over the years this collaboration has involved in total over 2,100 people at both sites. The TWSC also supported the Republic of Korea in the preparation of the World Heritage nomination dossier for the Korean Tidal Flats. The World Heritage Committee at its 44th meeting in 2021 decided to add the Getbol,



Figure 8.
The East Atlantic Flyway Globus.





Korean Tidal Flats to the World Heritage List under criterion (x).

Knowledge exchange will be the main topic of collaboration with Yellow Sea countries, and aims to share scientific knowledge for management, strengthen the capacity for communication and education, and provide many valuable examples for practitioners which they can apply at their sites. A collaboration between the globally significant flyway sites, such as the African-Eurasian Flyway and East Asian-Australasian Flyway, can promote a mutual exchange in improving flyway management and research in mud-flat ecosystems worldwide.

The management of Swimways across and beyond the Wadden Sea is also of increasing importance in the area of international cooperation.

The UNESCO World Heritage Centre, which serves as the global Secretariat to the World Heritage Convention, not only manages all official processes around the Convention, but also runs thematic programmes to help State Parties and World Heritage properties to implement the Convention.

Since its inscription onto the World Heritage List the Wadden Sea has been an active contributor to the UNESCO World Heritage Marine Programme. This is a

network of site managers from all 50 Marine World Heritage properties across 37 nations. Tapping into the vast expertise contained within the network helps to accelerate achieving sustainable marine protected areas. Expertise is shared from across the network through site-to-site field visits, communication, and tri-annual global managers conferences.

The Wadden Sea also cooperates with the UNESCO World Heritage and Sustainable Tourism Programme. This Thematic Programme underlines the shared responsibility of stakeholders for conservation of cultural and natural heritage of Outstanding Universal Value (OUV)

and for sustainable development through appropriate tourism management.

As requested by the World Heritage Committee in 2009, a Strategy for Sustainable Tourism in the Wadden Sea World Heritage Destination was adopted in the Wadden Sea in 2014. Through regular exchange with the World Heritage Centre and stakeholders from other World Heritage properties, the Wadden Sea benefits from the networks when implementing or further developing the Sustainable Tourism Strategy and action plan. The Wadden Sea is acknowledged worldwide as a useful example of transnational collaboration, pooling resources, and engaging tourism stakeholders in the protection of the OUV for mutual benefit.

Engaging in international cooperation creates opportunities for sharing knowledge and experience in the management of World Heritage properties. Managers, environmental NGOs, and other stakeholders active in the Wadden Sea World Heritage Site have used these opportunities for mutual learning in areas such as protected areas tourism, monitoring, and education.

7.3 Contributions to the EU Biodiversity Strategy for 2030

The Wadden Sea World Heritage Site, as one of the largest protected areas in Europe,

contributes to the EU Biodiversity Strategy for 2030²⁰ and, most importantly, helps to build a coherent Trans-European Nature Network. The SIMP and the comprehensive management system of the Wadden Sea World Heritage Site (including the Wadden Sea Plan 2010 as joint management plan) can serve as a model for effective protected areas management.

Additionally, the management of the Wadden Sea World Heritage Site contributes to the nature restoration targets of “ensuring at least 30% of EU protected species and habitats are in favourable conservation status or have positive trends by 2030” and to “restore marine ecosystems”.

The Wadden Sea World Heritage Site, supported by the SIMP, also adds to the EU Biodiversity Strategy’s transformative change targets, such as “building on an integrated and whole-of society approach”, “ensuring the full and timely implementation of the EU nature directives” and “improving knowledge and research”. Targets such as “tackle invasive alien species” are explicitly addressed in the TWSC’s own strategic approaches. It is expected that the Wadden Sea World Heritage Site will also contribute to the “Post-2020 Global Biodiversity Framework”.

EU funding will continue to play an important role in advancing and enabling trilateral projects.

7.4 Contributions to the Sustainable Development Goals of UN Agenda 2030

The TWSC actively contributes to the implementation of Agenda 2030 for Sustainable Development, with its globally accepted Sustainable Development Goals (SDGs). Not only does the Wadden Sea deliver important contributions to SDG 14 “Life under water” and SDG 15 “Life on land”, but it also strengthens the natural resilience and adaptive capacity to climate-related effects (SDG 13). Furthermore, the trilateral cooperation’s actions and plans to protect and restore water resources and water-related ecosystems contribute to SDG 6 and support the area’s sustainable economy and leverages local culture (SDGs 8 and 12). Education for sustainable development and the International Wadden Sea School, accessible in all languages of the cooperation, addresses SDG 4. SDG 17 “Partnerships for the Goals” is contributed to by the “Trilateral Partnership in support of the Wadden Sea World Heritage” (Fig. 10).

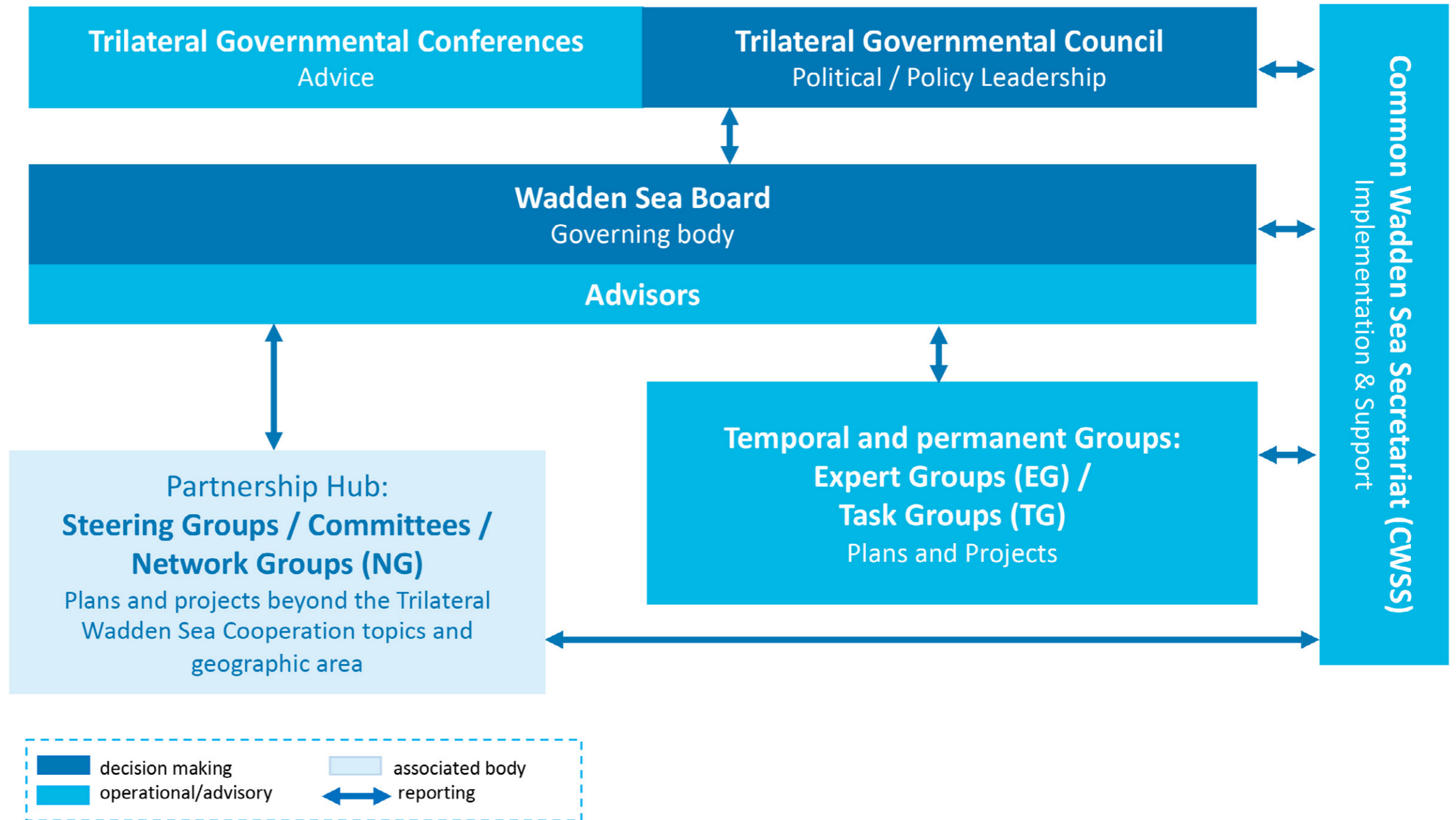
Figure 9.
The TWSC addresses SDGs
4, 6, 8, 12, 13, 14, 15 and 17.





ANNEX

Figure A.1.
Organisational structure of
the Trilateral Wadden Sea
Cooperation (TWSC).



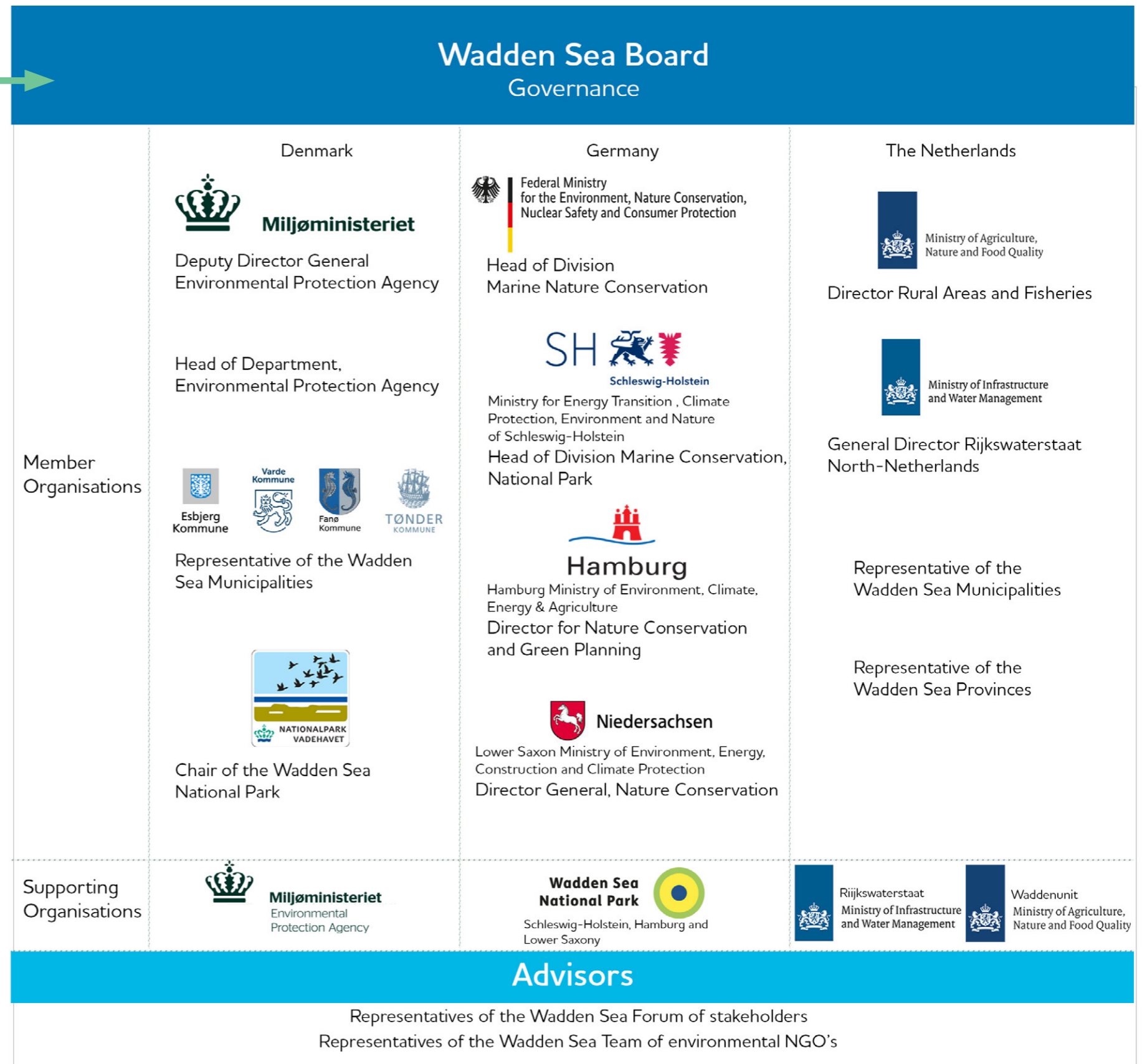
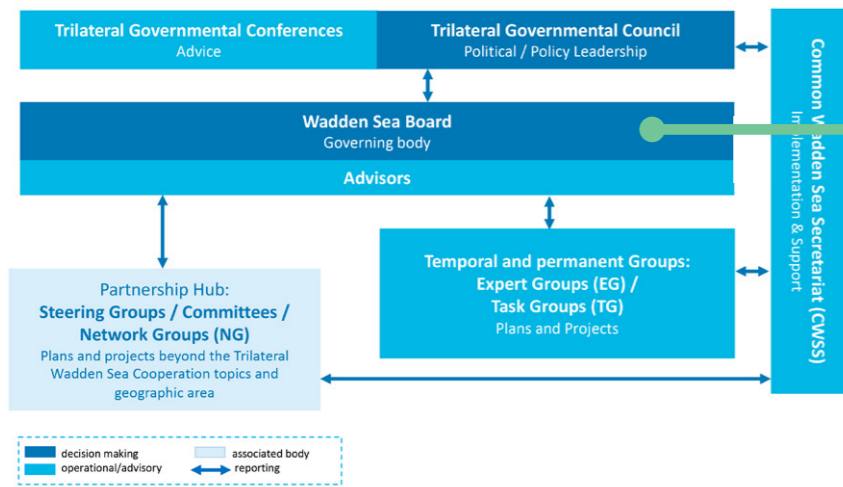


Figure A.2. Members, supporting organisations and advisors of the Wadden Sea Board. The supporting organisations are intricately involved in the task/expert/working groups of the TWSC and represent the link between policy and management.

Figure A.3.
The Danish administration and management system for nature conservation management of the Wadden Sea. See further information in Section 3.2 National Administration and Management Systems.

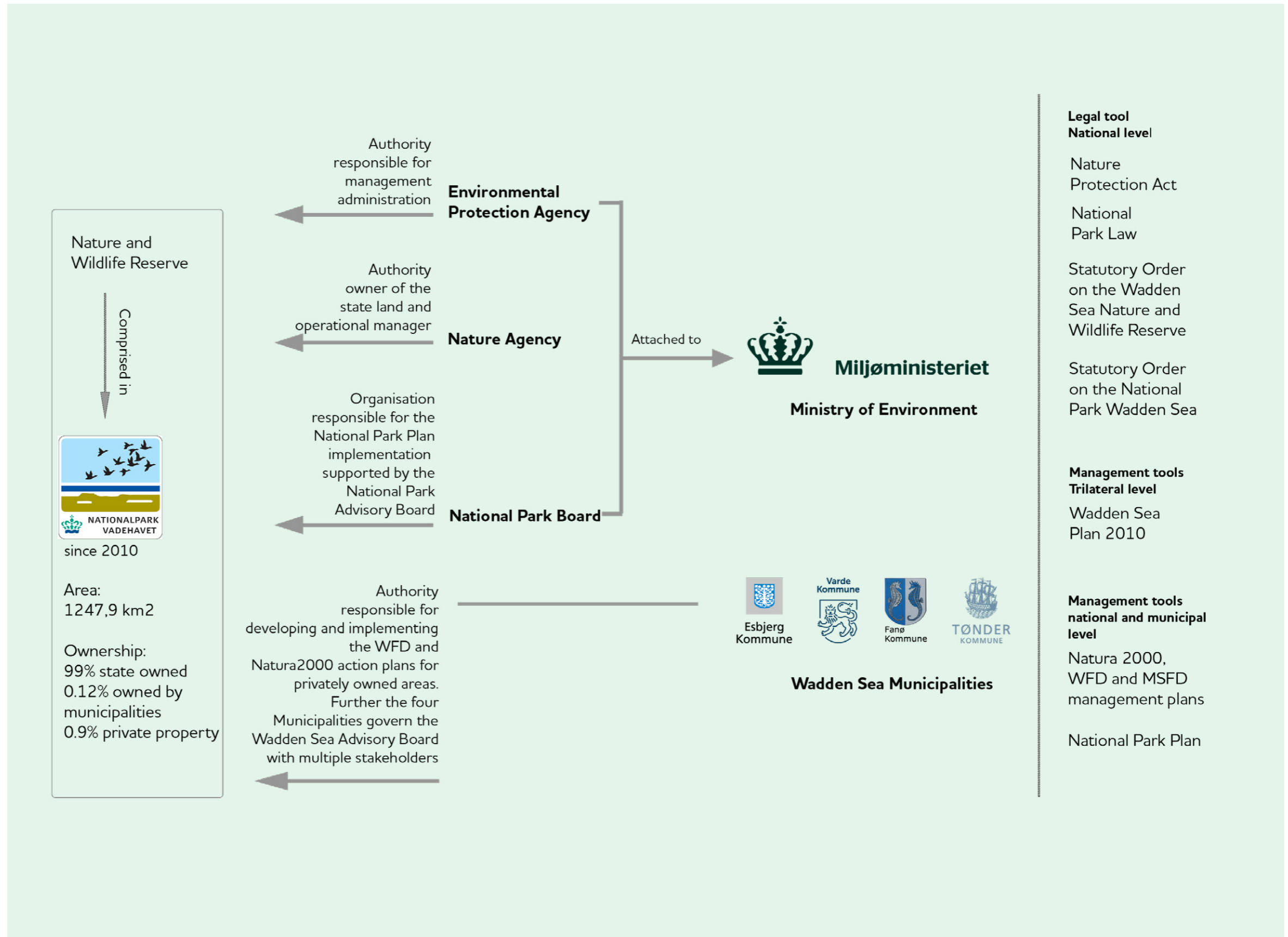


Figure A.4. General management system of the Wadden Sea Cooperation Area/Nature Conservation Area is organised at the Federal State level as outlined in the Federal Nature Conservation Act. State National Park Authorities are the competent authority for the management and protection of each National Park. Each National Park Authority is part of or is attached to the respective State Ministry of Environment. Sites outside the National Parks are also managed by local authorities. Management is strongly supported by advisory boards and environmental NGOs and other partners from the civil society, including a network of “National Park-Partners”.

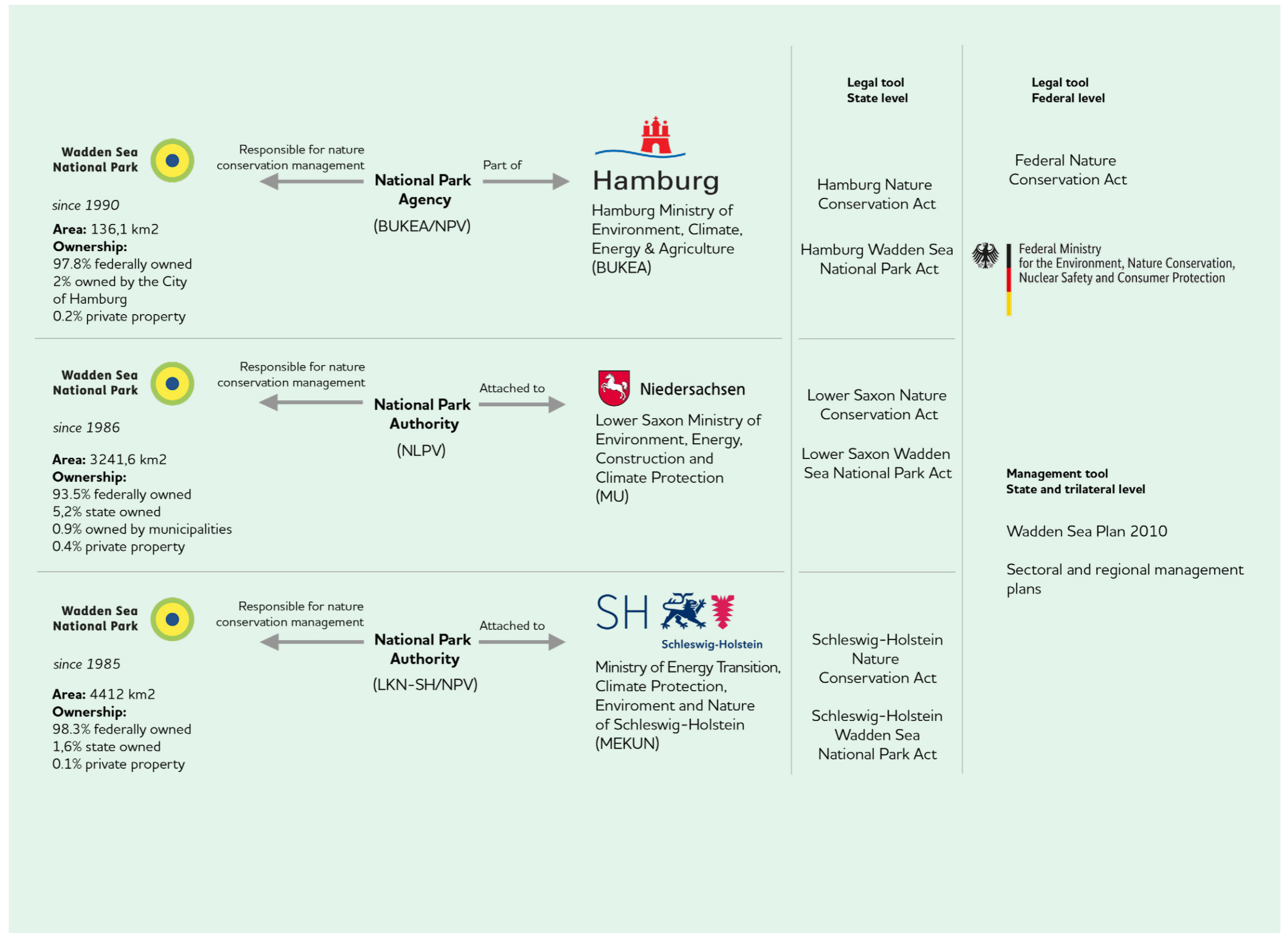
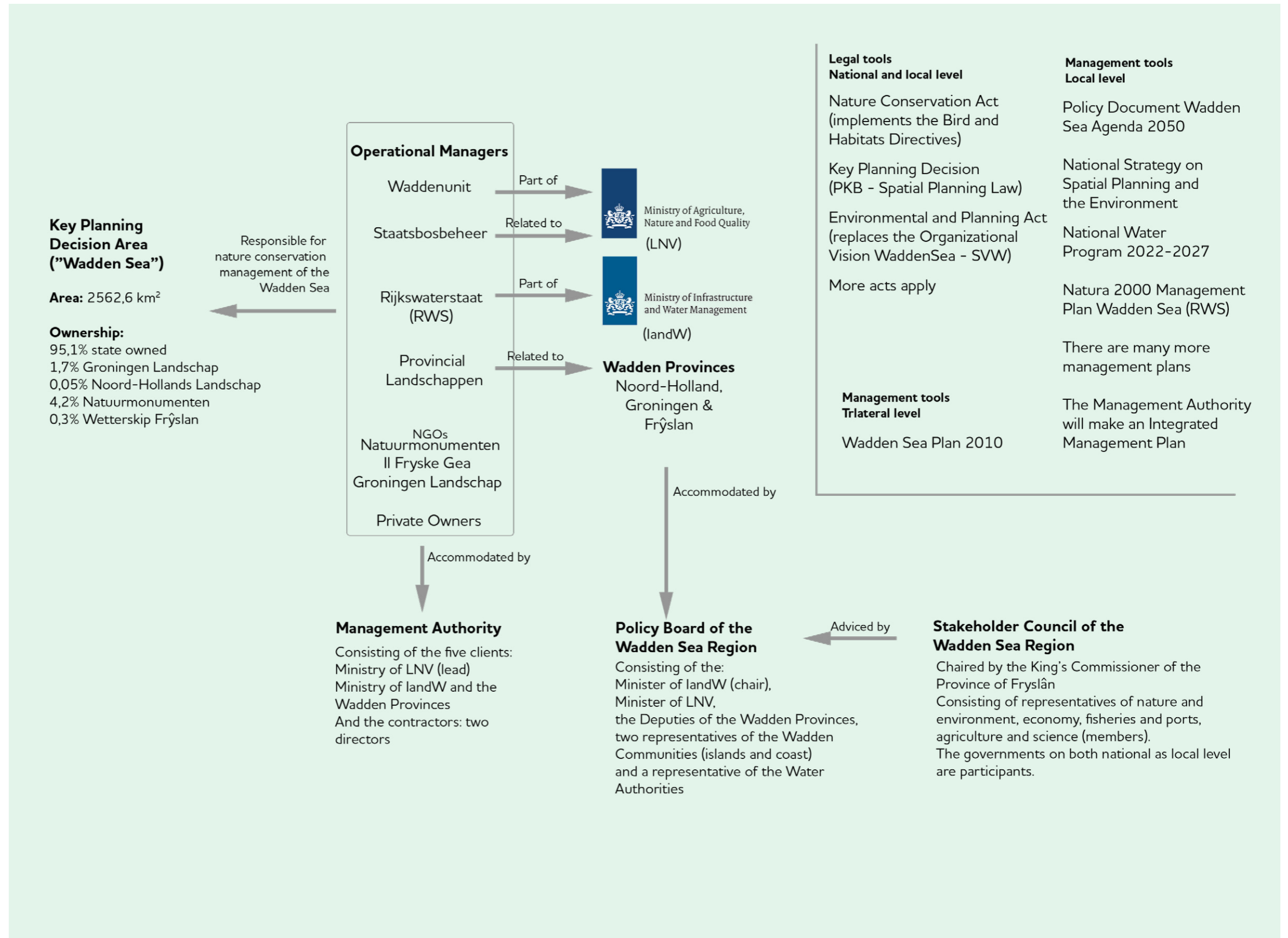


Figure A.5.
 The Management system of the Wadden Sea in the Netherlands (established in 2020) is comprised of the Management Authority responsible for the management of nature, fish and water, the Policy Board and the Stakeholder Council. NGOs, private owners, and organisations attached to the Ministries of LNV, landW and the Wadden Provinces are responsible for planning and management implementation at the operational level.





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ENDNOTES

- ¹ whc.unesco.org/en/decisions/1946/
- ² whc.unesco.org/en/decisions/1946/
- ³ www.waddensea-worldheritage.org/prowad
- ⁴ northsearegion.eu/prowad-link/
- ⁵ www.ostfriesland.travel/service/watten-agenda-nl and www.watten-agenda.de/
- ⁶ www.interreg5a.eu/blog/projekt/nakuwa/
- ⁷ northsearegion.eu/building-with-nature/
- ⁸ qsr.waddensea-worldheritage.org/
- ⁹ whc.unesco.org/en/periodicreporting/
- ¹⁰ www.waddensea-worldheritage.org/resources/2020-cvi-report
- ¹¹ www.waddensea-worldheritage.org/resources/ecosystem-21-coastal-protection-and-sea-level-rise
- ¹² www.waddensea-worldheritage.org/resources/ecosystem-28-coastal-protection-and-sea-level-rise
- ¹³ www.waddensea-worldheritage.org/CCAS
- ¹⁴ The Wadden Sea Tourism Radar was developed in the framework of the Interreg Vb PROWAD Link to identify, prevent and avert negative and unsustainable developments www.waddensea-worldheritage.org/resources/wadden-sea-tourism-radar
- ¹⁵ www.waddensea-worldheritage.org/resources/trilateral-research-agenda
- ¹⁶ www.waddensea-worldheritage.org/resources/education-strategy
- ¹⁷ www.iwss.org/
- ¹⁸ www.waddensea-worldheritage.org/resources/sustainable-tourism-wadden-sea-world-heritage-destination
- ¹⁹ waddensea.brandspace.online
- ²⁰ eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0380&from=EN



unesco
World Heritage Site



WADDEN SEA
WORLD HERITAGE



Common
Wadden Sea
Secretariat

Annex III. National Strategies for Climate Adaptation in the Wadden Sea Region

Climate adaption plans and policies in Denmark

Due to its topography, with thousands of kilometres of coastline and countless islands, Denmark is particularly vulnerable when seawater and groundwater rise due to climate change.

Since the mid-2000s, Denmark has therefore adapted several climate adaptation policies and plans to mitigate and adapt to the effects of climate change, including sea level rise particularly relevant to the Wadden Sea. They include:

- **Climate Adaptation Plan 2008:** This plan was one of Denmark's first broad initiatives to address climate change. It focused on various areas, including securing water supply, protecting nature, adapting buildings, and protecting against flooding and storms.
- **Climate Proofing Denmark - A National Climate Change Adaptation Strategy:** This 2013 strategy outlined how Denmark could climate-proof itself by adapting to climate changes. It emphasized cross-sectoral collaboration, knowledge sharing, and utilizing green growth potentials. <https://en.klimatilpasning.dk/>
- **Municipal Climate Change Adaptation Plans:** Since 2013, all 98 municipalities in Denmark have been required to produce municipal climate change adaptation plans. These plans include measures to address local climate risks, such as increased rainfall, rising sea levels, and more frequent and severe storms. <https://www.klimatilpasning.dk/kommuner/klimatilpasning-i-kommunerne/>
- **Danish Climate Act 2020:** This act is an ambitious piece of legislation aiming for climate neutrality by 2050. It also requires a strategy for climate adaptation and resilience. <https://mim.dk/media/236250/regeringens-udspil-til-klimatilpasningsplan-1.pdf>
- **Denmark's National Strategy for Climate Adaptation:** The national strategy provides a framework for how society can adapt to the changing climate. It includes a focus on integrating climate considerations into municipal planning. https://www.klimatilpasning.dk/media/5322/klimatilpasningsstrategi_03032008.pdf
- **Climate Adaptation Portal:** The Danish Environmental Protection Agency has developed a portal to provide municipalities and citizens with information, tools, and examples of climate adaptation solutions. <https://en.klimatilpasning.dk/>

Most recently, the government has initiated the National Climate Adaptation Plan, taking effect in 2024. This fully financed plan targets securing coasts, cities, homes, and

infrastructure against the consequences of climate change, and is aimed at municipalities and landowners. The plan contains, among others, state involvement in exposed areas by the sea, solution to the challenges of high groundwater levels, a coastal protection pool, protection of Denmark's west coast (including the Wadden Sea), and a new civil service advisory committee.

Further, Denmark will be conducting a full hydrographic survey of the Danish Wadden Sea, including tidal areas, to assess developments in sea level rise as a basis for climate-adaption measures, etc.

Climate adaption plans and policies in Germany

Germany is fulfilling its responsibility for strict climate protection in line with the goals of the Paris Agreement through specific regulations and measures. The current German Climate Protection Act enshrines the goal of greenhouse gas neutrality by 2045, with emissions set to fall by 65 per cent by 2030 compared to 1990. The German government is driving climate protection forward with the Climate Action Programme 2030²⁹ and the Immediate Climate Action Programme 2022³⁰.

In November 2023, the Federal Parliament passed the first nationwide Climate Adaptation Act. With this law, the Federal Government is providing a binding framework for climate adaptation at the federal, state, and local levels. This should make it possible to coordinate climate adaptation activities at all levels and advance them across all fields of action. The aim is for climate adaptation concepts to be developed at federal levels in the future in order to take the necessary steps for comprehensive climate precautions in Germany in a targeted manner with a systematic analysis of those affected and planning of measures.

In addition, the Federal Government is currently revising its "German Strategy for Adaptation to Climate Change"³¹ (DAS) from 2008. It presents possible climate impacts and adaptation options in 16 different fields of action, including coast and sea. The aim of the DAS is to reduce climate risks in natural, social, and economic systems, increase the adaptability of these systems, and utilise potential opportunities.

The Schleswig-Holstein Wadden Sea Strategy 2100

The Wadden Sea Strategy 2100³² examines what impacts are to be expected in the Wadden Sea of Schleswig-Holstein due to climate change and presents options for action. The strategy has been developed by experts from the coastal protection and national park authority of the state of Schleswig-Holstein with the participation of representatives from the municipal level

²⁹ <https://www.bundesregierung.de/breg-en/issues/climate-action>

³⁰ <https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Priority-Issues/Climate-Action/immediate-climate-action-programme-for-2022.html>

³¹ <https://www.umweltbundesamt.de/en/topics/climate-energy/climate-impacts-adaptation/adaption-to-climate-change/adaptation-at-the-federal-level#further-development-of-the-das>

³² <https://www.schleswig-holstein.de/DE/fachinhalte/K/kuestenschutz/strategieWattenmeer2100.html>

and non-governmental organisations. It was adopted by the state government in 2015 and the first pilot projects have since been carried out.

Hamburg develops solutions to improve the resilience of cultural landscapes

Within the framework of the EU project RescueME³³, Hamburg Wadden Sea National Park has joined the development of inclusive and equitable resilience strategies and innovative solutions to protect Europe's natural and cultural heritage and cultural landscapes from climate change, disaster risks, and other events (e.g. pollution and excessive tourism). The project engages stakeholders, facilitates decision-making, and enhances the implementation of co-created and just resilience solutions to protect our common heritage.

Lower Saxony's strategy for adapting to the consequences of climate change 2021

The Lower Saxony Climate Act (NKlimaG) obliges the state government to develop a strategy for adapting to the consequences of climate change and to update it every five years. The first effects of climate change are already being felt in Lower Saxony: the average temperature has risen by 1.7°C compared to 1881. The Lower Saxony Climate Change Competence Centre (NIKO) has developed the "Lower Saxony Strategy for Adaptation to the Consequences of Climate Change"³⁴ based on the "Recommendation for a Lower Saxony Strategy for Adaptation to the Consequences of Climate Change" from 2012. The strategy covers 17 fields of action that will be affected by climate change and sets out the adaptation strategies that are required. Among them are nature conservation and coastal protection, both of relevance for the Lower Saxon Wadden Sea. Adaptation will be done with a long-term perspective for expected future developments. The consequences of climate change induced accelerated sea level rise scenarios (as reported by IPCC) have also been taken into account in Lower Saxony's coastal protection strategy via the General Plan for Coastal Protection.

Climate adaption plans and policies in the Netherlands

Climate adaptation policy³⁵ in the Netherlands is administered by the Climate National Adaptation Strategy (NAS) and by the Delta Programme. The government is in the process of adapting the NAS based on the Meteorological Institute's (KNMI) climate scenarios published in 2023. The Delta Programme (2023) provides the latest risk assessments and adaptation measures.

³³ <https://resilientculturallandscapes.eu/about/project>

³⁴ https://www.umwelt.niedersachsen.de/download/178371/Niedersaechsische_Strategie_zur_Anpassung_an_die_Folgen_des_Klimawandels_2021.pdf

³⁵ <https://klimaatadaptatienederland.nl/en/policy-programmes/>

Agenda for the Wadden Sea Region 2050

The Dutch Agenda for the Wadden Sea Region 2050³⁶ (2021) gives an overarching regional strategy for a safe, healthy, and resilient Wadden Sea Region in 2050. The Agenda is a guiding and strategic perspective on the development of the Wadden Sea Region shared by national and local governments as well as water authorities, environmental NGOs, ports, fishery, agriculture, and civil society. The main goal is to achieve “sustainable protection and development of the Wadden Sea as a natural area and maintaining the unique open landscape”. Challenges and strategies addressed in the Agenda include climate change and energy transition. The geographic scope is broader than the Dutch part of geographically defined World Heritage property, but fully includes it.

The Agenda was worked out into more detail in the implementation programme Wadden Area 2021-2026 (UP). The UP was approved by the Dutch Policy Board of the Wadden Sea Region in February 2023. Approval of the UP is the start of a multiyear and close cooperation with most of the stakeholders around the Dutch Wadden Sea Region. The UP consists of 30 initiatives which simultaneously work on sustainable protection and development of the Wadden Sea as a nature area, protection of the unique open landscape, and a safe, healthy, and resilient Wadden Sea Region. Short term actions focus on, among others, accessibility to the islands, coastal development, fisheries, and the effects of climate change. This is in line with the Dutch position that World Heritage areas offer space for both development and growth under the condition that the OUV of the World Heritage remains intact. A first progress report will be published in 2024.

³⁶ <https://agendavoorhetwaddengebied2050.waddenzee.nl/>

Annex IV. Decision 45 COM 7B.23

**World Heritage Committee
Extended 45th session (Riyadh, 2023)**

Decision: 45 COM 7B.23

Wadden Sea (Denmark, Germany, Netherlands) (N 1314ter)

The World Heritage Committee,

1. Having examined Document WHC/23/45.COM/7B.Add.2,
2. Recalling Decisions **33 COM 8B.4** and **38 COM 8B.13** adopted at its 33rd (Sevilla, 2009) and 38th (Doha, 2014) sessions respectively,
3. Welcomes the development of the 'Agenda for the Wadden Sea Region 2050' in 2021 and the adoption of the 'Single Integrated Management Plan' (SIMP) for the transboundary property in 2023 and strongly encourages the States Parties of Denmark, Germany and the Netherlands to adopt a precautionary and strategic approach to the management of the property, including to clarify longer-term projections based on the latest scientific climate change data for the Wadden Sea;
4. Reiterates its position that extractive activities are incompatible with World Heritage status, and considers that natural resource extraction below the property has the potential to adversely impact its Outstanding Universal Value (OUV);
5. Also welcomes the confirmation by the State Party of the Netherlands that no new gas extraction permits will be issued in the Wadden Sea, but notes with serious concern the approval of a new salt extraction project and the ongoing consideration of a proposed gas development at Ternaard, in the vicinity of the property, which would extend extractive activities below the property;
6. Notes with further concern that, in the Environmental Impact Assessment (EIA) process, the State Party of the Netherlands has not undertaken a comprehensive assessment of the potential impacts of the proposed Ternaard gas extraction project on the OUV of the property when, based on information available, it would appear that the project has direct negative impacts on the OUV of the property, and therefore urges the State Party not to approve the project;
7. Requests the State Party of the Netherlands not to approve further extractive projects, in line with the precautionary principle, to assess whether adaptation of the 'hand on tap' monitoring mechanism is required to account for uncertainties linked to climate change, and to consider limiting or halting existing salt extraction activities, as required, to effectively maintain and protect the OUV;
8. Also notes with serious concern the Wintershall Dea's oil development, which is currently being considered by the State Party of Germany, and appears to be located inside the property, as well as the GEMS gas development located close to the boundary of the property;
9. Also urges the State Party of Germany not to proceed with any proposed oil exploration inside the property and to conduct a detailed EIA, including an assessment of potential impacts on the OUV of the property, for any oil or gas

extraction project that may negatively impact the property, in accordance with the Guidance and Toolkit for Impact Assessments in a World Heritage Context;

10. Further notes with serious concern the scientific advice from the Independent Scientific Advisory Body (ISAB) established by the State Party of the Netherlands that, as a result of salt mining, there is a reasonable probability that future sediment accretion will be insufficient to offset sea level rise and that the potential for subsidence of the seabed will be prolonged once the mining operation is stopped, and also considers that subsidence of the seabed, especially in the light of projected sea level rise as a result of climate change, could reduce the extent of the tidal flats, which are one of the main attributes of the property's OUV, and therefore directly result in a significant negative impact on the property's OUV;
11. Further welcomes the decision by the State Party of the Netherlands to carry out additional studies on the proposed routing to connect the planned offshore wind power installation to the mainland, through impact assessments specifically focused on the property's OUV and including an assessment of the impacts of the potential hydrogen production north of the Wadden Sea and the pipelines to be constructed for delivering the substance to the mainland, and also requests the State Party to submit these assessments to the World Heritage Centre for review by IUCN prior to a final decision on the projects;
12. Notes the numerous existing and proposed wind energy projects in the vicinity of the property and encourages the States Parties to use the online Guidance for Wind Energy Projects in a World Heritage Context when planning and assessing their impacts and taking proactive measures for the protection and preservation of the property's OUV;
13. Further notes the multiple existing and/or proposed extraction and infrastructure developments within and around the property, and further requests the three States Parties to:
 - a) Provide to the World Heritage Centre and IUCN an overview of all existing and planned extractive activities within and around the property, with appropriate maps,
 - b) Conduct a joint Strategic Environmental Assessment to assess the cumulative impacts of these developments on the OUV of the property, in line with the key principles of the Guidance and Toolkit for Impact Assessments in a World Heritage Context, prior to continuing to permit individual projects on a case-by-case basis,
 - c) Authorise project proposals only if adequate assessments demonstrate that they will not have an adverse impact on the OUV of the property;
14. Finally requests the States Parties of Denmark, Germany and the Netherlands to submit to the World Heritage Centre, by **1 February 2024**, an updated joint report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 46th session.

**Format for the submission of state of conservation reports
by the States Parties (Annex 13 of the Operational Guidelines)**

Name of World Heritage property (State(s) Party(ies)) (Identification number)

1. Executive Summary of the report

[Note: each of the sections described below should be summarized. The maximum length of the executive summary is 1 page.]

2. Response to the Decision of the World Heritage Committee

[Note: The State(s) Party(ies) is/are requested to address the most recent Decision of the World Heritage Committee for this property, paragraph by paragraph.]

If the property is inscribed on the List of World Heritage in Danger

Please also provide detailed information on the following:

a) Progress achieved in implementing the corrective measures adopted by the World Heritage Committee

[Note: please address each corrective measure individually, providing factual information, including exact dates, figures, etc.]

If needed, please describe the success factors or difficulties in implementing each of the corrective measures identified

b) Is the timeframe for implementing the corrective measures suitable? If not, please propose an alternative timeframe and an explanation why this alternative timeframe is required.

c) Progress achieved towards the Desired state of conservation for the removal of the property from the List of World Heritage in Danger (DSOCR)

3. Other current conservation issues identified by the State(s) Party(ies) which may have an impact on the property's Outstanding Universal Value *[Note: this includes conservation issues which are not mentioned in the Decision of the World Heritage Committee or in any information request from the World Heritage Centre]*

4. In conformity with Paragraph 172 of the Operational Guidelines, describe any potential major restorations, alterations and/or new construction(s) intended within the property, the buffer zone(s) and/or corridors or other areas, where such developments may affect the Outstanding Universal Value of the property, including authenticity and integrity.

5. Public access to the state of conservation report

[Note: this report will be uploaded for public access on the World Heritage Centre's State of conservation Information System (<http://whc.unesco.org/en/soc>). Should your State Party request that the full report should not be uploaded, only the 1-page executive summary provided in point (1.) above will be uploaded for public access].

6. Signature of the Authority