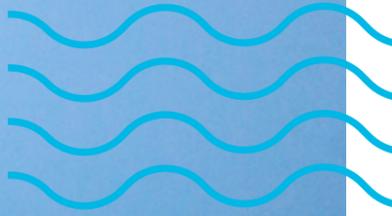


THE SIMP

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, 2015-2022 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 (r.)

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

BRITTA DIEDERICHS (l.)

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."



© private

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.”



© Annkatrin Weber

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.”



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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.”



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ISABEL HUNTER (DENMARK) PASCAL ERTZINGER (GERMANY) WANNES 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.”



© Jan Dube

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

2018-2022 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 governmental trilateral cooperation 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, 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 transboundary 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

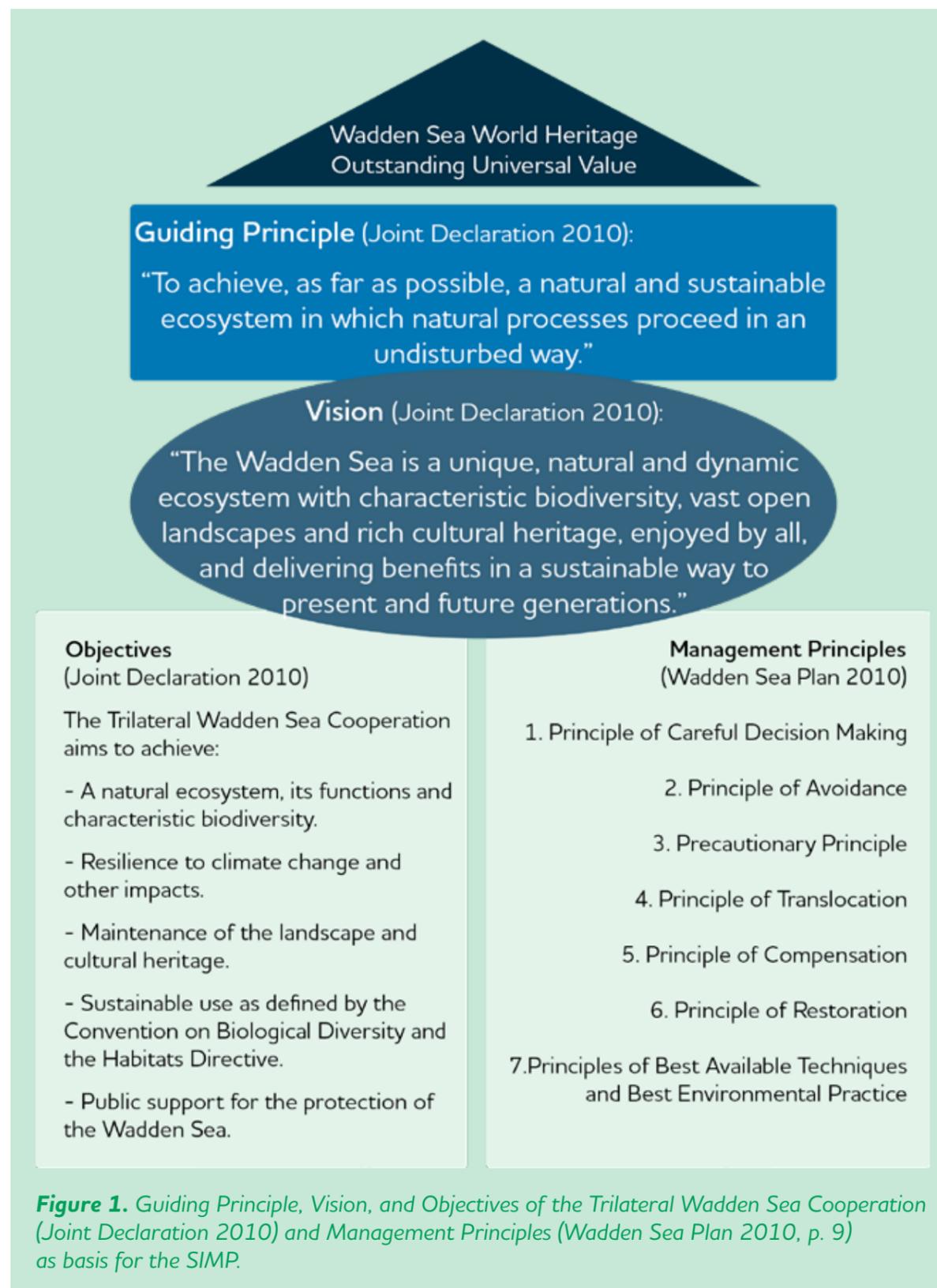
INTRODUCTION

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 governmental Trilateral 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 45 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:

- I. providing a clear overarching description of the management system at the regional, national, and trilateral level;
- II. addressing key topics presenting specific current and potential impacts to the Outstanding Universal Value which have been prioritised as pending management tasks;
- III. 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, 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).

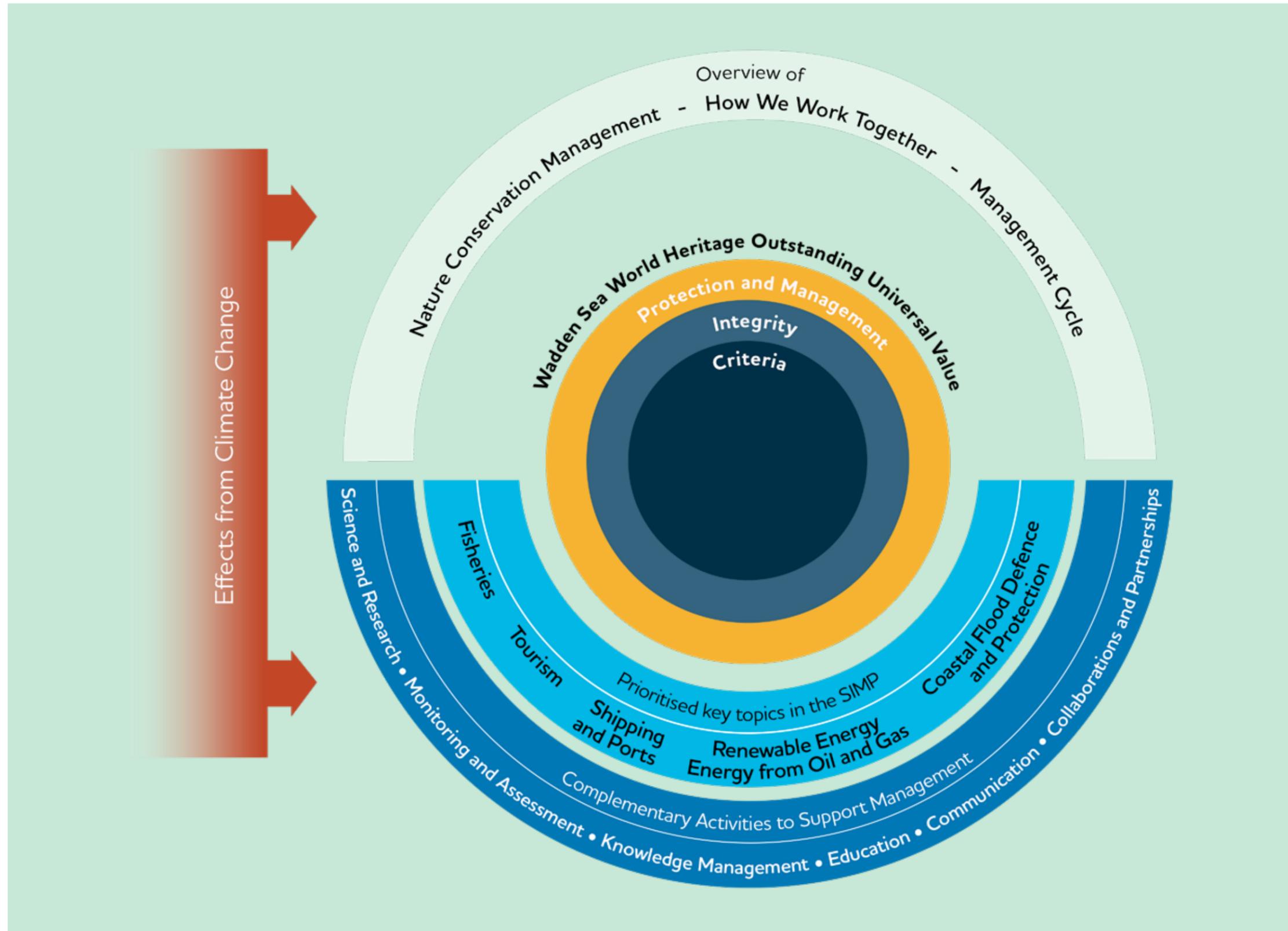


Figure 2. The scope of the SIMP has the Wadden Sea World Heritage Outstanding Universal Value at its core. The SIMP acts as an umbrella providing an overview of the management systems, tools, and collaboration. Five prioritised key topics are addressed considering how to improve information exchange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

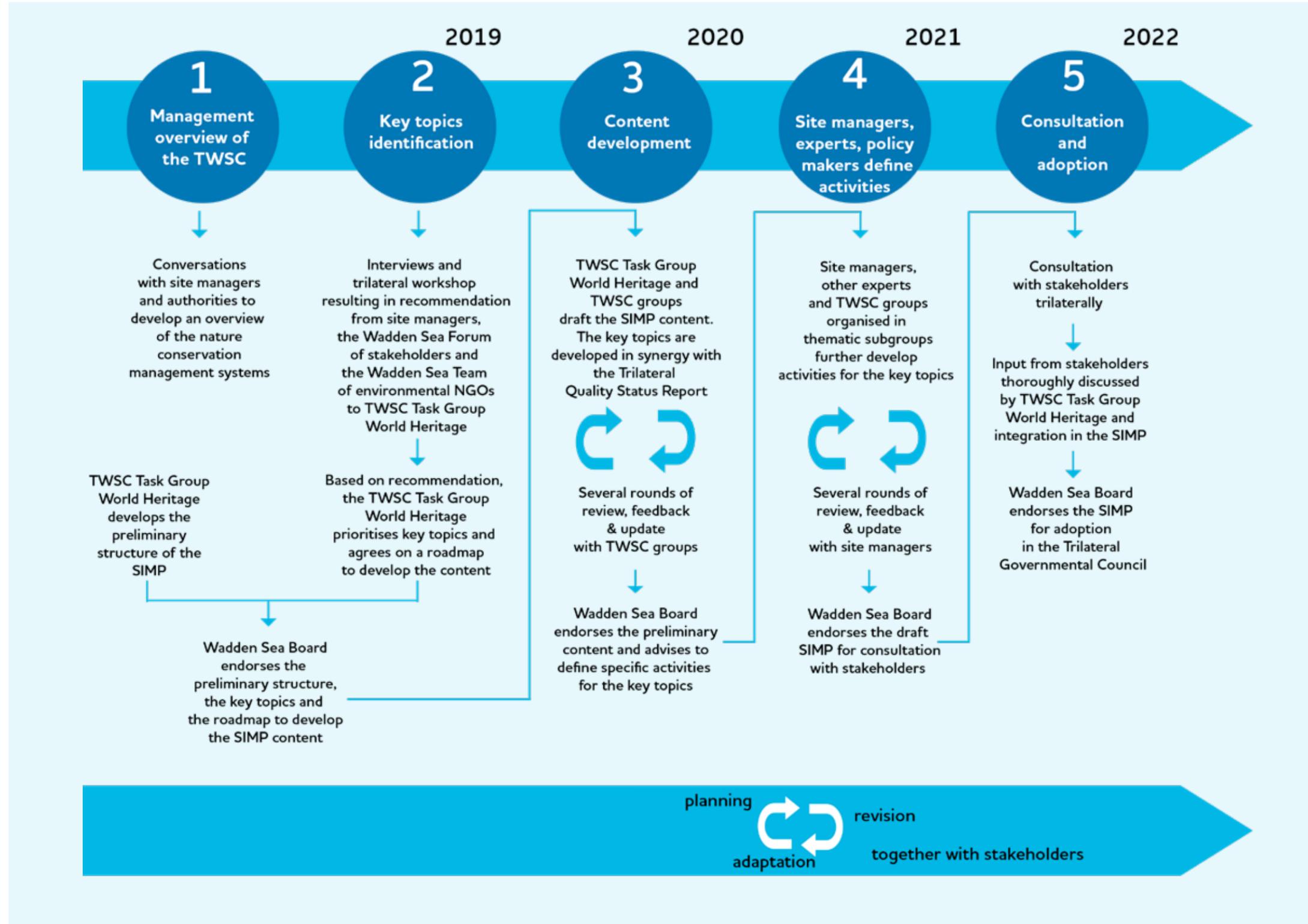


Figure 3. The five phases of the development of the SIMP 2019-2022 and the detail of each phase.

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.

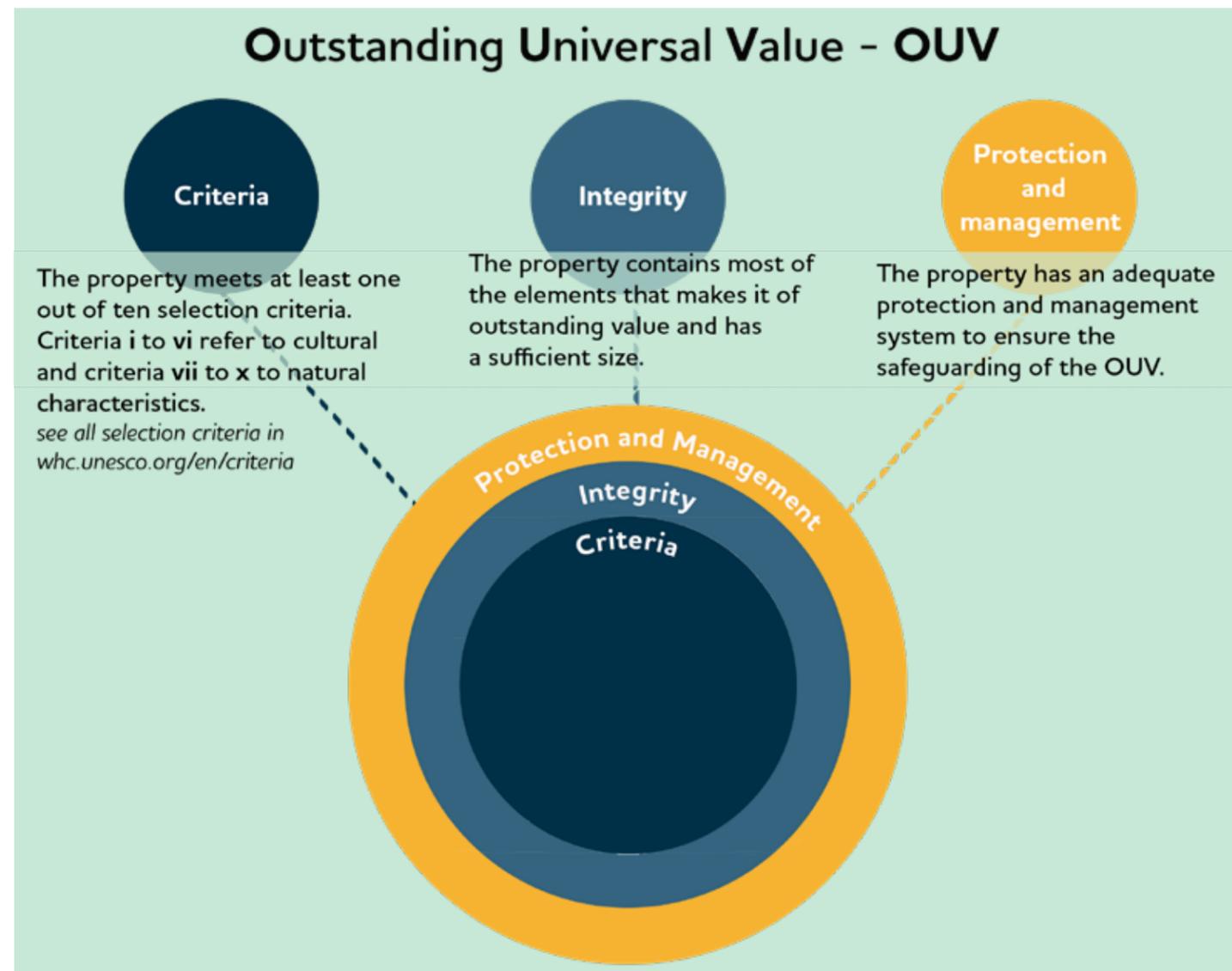


Figure 4. OUV consists of three conditions: selection criteria, integrity, and protection and management.

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.

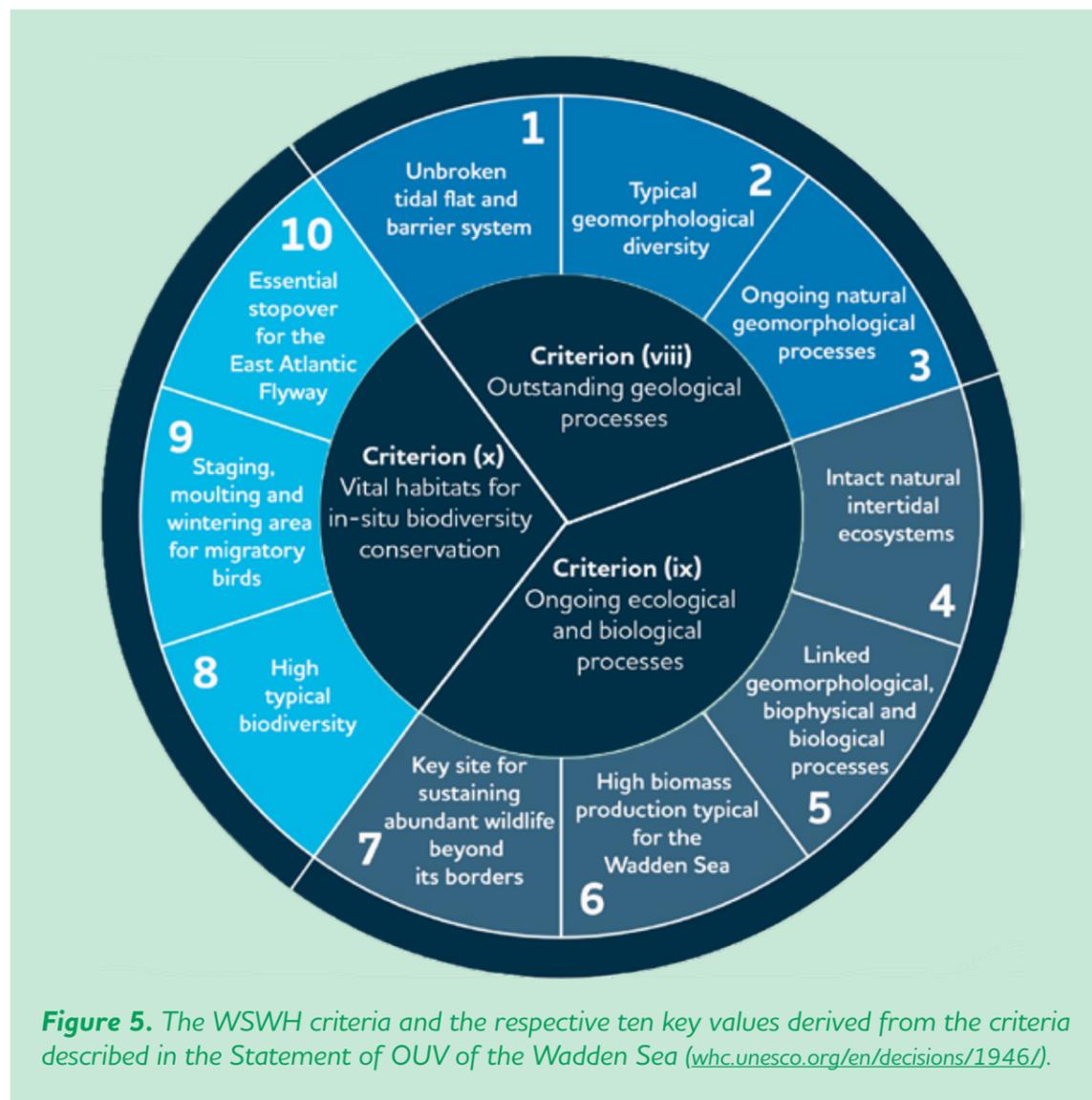


Figure 5. The WSWH criteria and the respective ten key values derived from the criteria described in the Statement of OUV of the Wadden Sea (whc.unesco.org/en/decisions/1946/).

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 over 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 40 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 1.

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 characterised 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

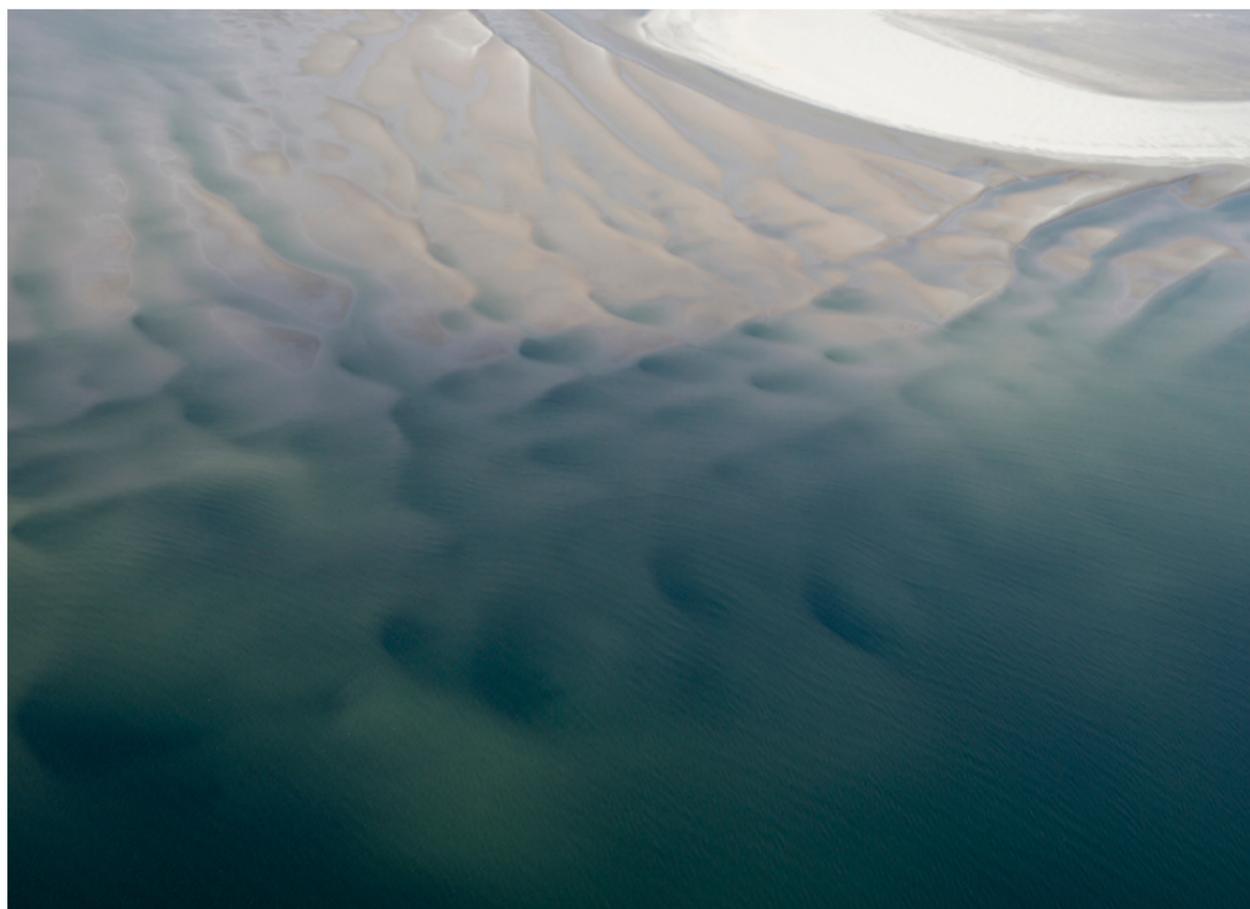
to the World Heritage Committee (2013). The WSP presents the trilaterally agreed targets, policies, and measures for the Wadden Sea Cooperation Area as an ecological entity, as well as its landscape and cultural heritage, within the cultural entities. The targets agreed upon for landscape and culture, water and sediment, saltmarshes, 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 1.

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 CWSS's workplan.

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

- I.** 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.
- II.** Expert Groups (EG) are generally long-term or permanent technical groups. They have operational and advisory tasks.
- III.** Network Groups (NG) are similar to EGs but with more of a networking platform character; stakeholder involvement is explicitly necessary and appreciated.
- IV.** (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 2 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 with in 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 2. 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.

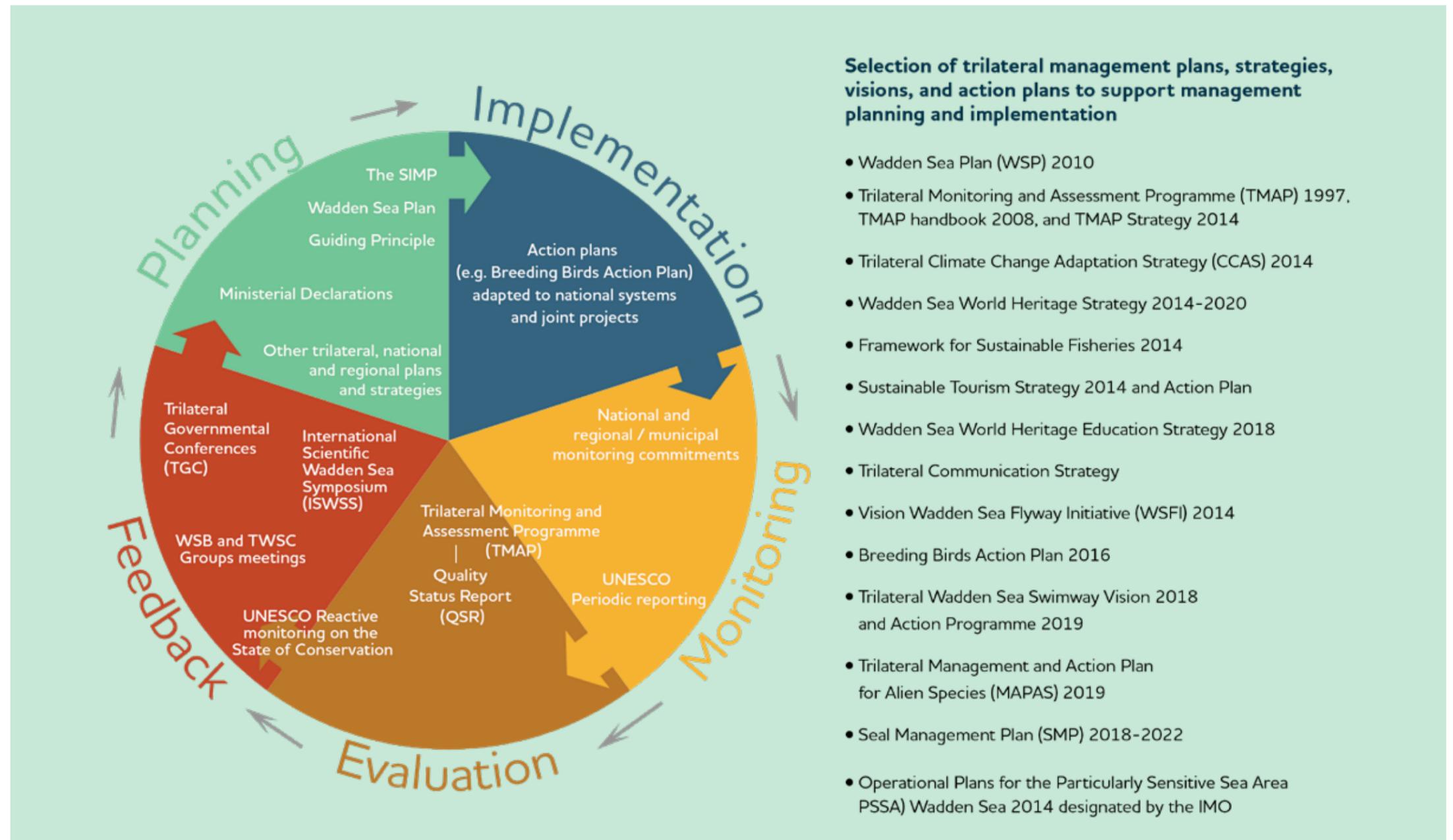


Figure 7. Phases of the management cycle required for an effective management system (as defined in § 111 of the Operational Guidelines for the implementation of the World Heritage Convention) adapted to the Wadden Sea World Heritage Site by including the elements in each phase. List of trilateral plans, 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. The 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 Thematic 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 two 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 4

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 saltmarshes 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.

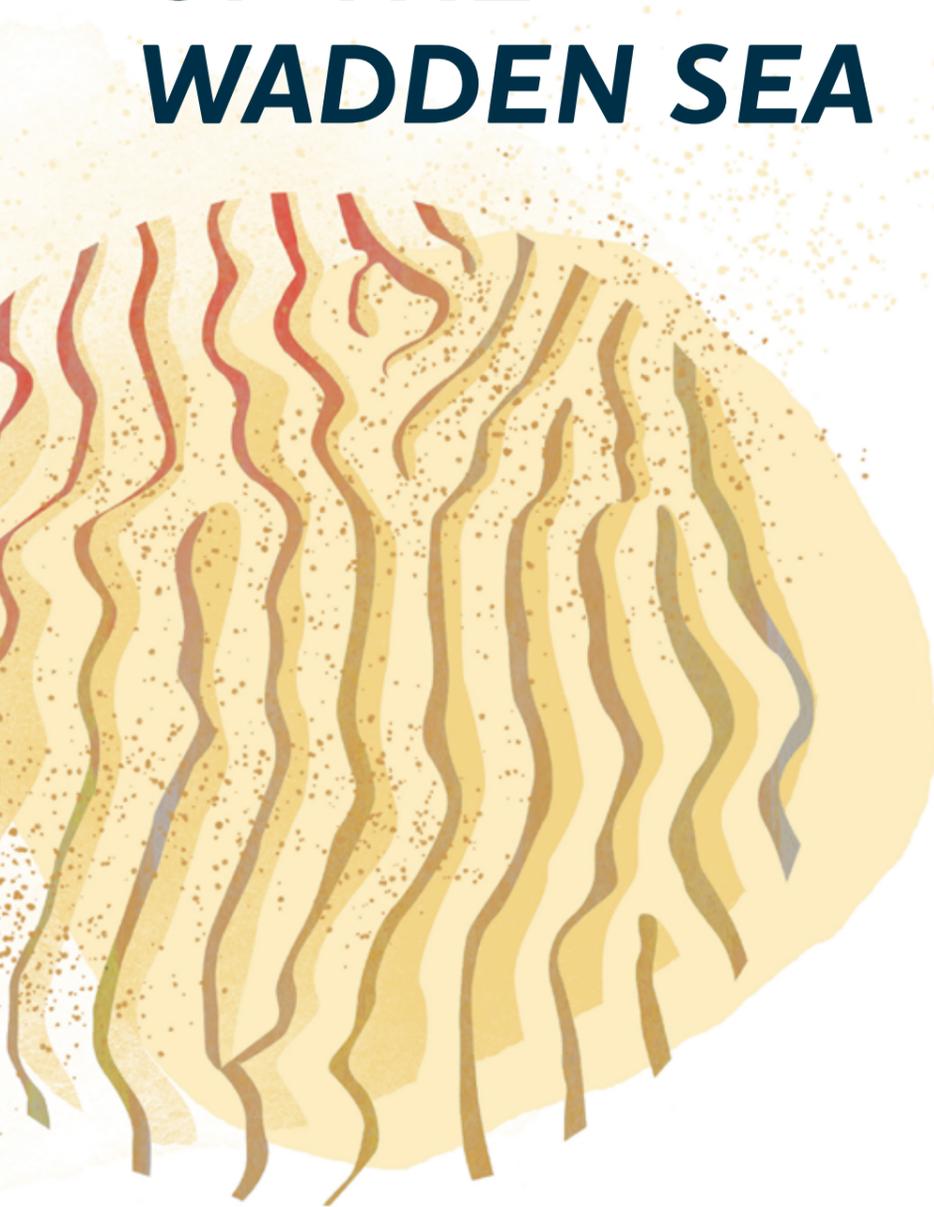
Potential conflicts as well as opportunities related to coastal flood defence and protection and renewable energy are addressed in Chapter 5.

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-dynamising 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 decarbonisation 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 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. 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 the 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 2023.

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:

- A.** Addressing gaps in knowledge regarding the impacts of tourism on the OUV, for example through research projects.
- B.** 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).
- C.** 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.
- D.** 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:**

- Introduction of speed limits to limit emissions, underwater noise, and disturbance, if not in place or if inadequate.
- 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.
- Research to reduce the impacts of underwater noise on marine animals (especially on poorly researched species such as diving birds, fish, and invertebrates).
- Develop nature-friendly navigation guidelines for marine traffic in the Wadden Sea property, considering respective existing regulations.
- 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.
- 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:**

- 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).
- Effective ship traffic and container tracking systems and monitoring.
- International standards regarding, for example safety, speed limits, and pollution.
- 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, and 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 Site 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 Environmental 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

The 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 Denmark, Germany, and the Netherlands 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 Thematic 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 combines 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 submitting advice to the Trilateral Governmental Conferences.

Since its establishment in 1987, 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 mudflat 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 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.

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 online branding toolbox¹⁹ 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 mudflat 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).

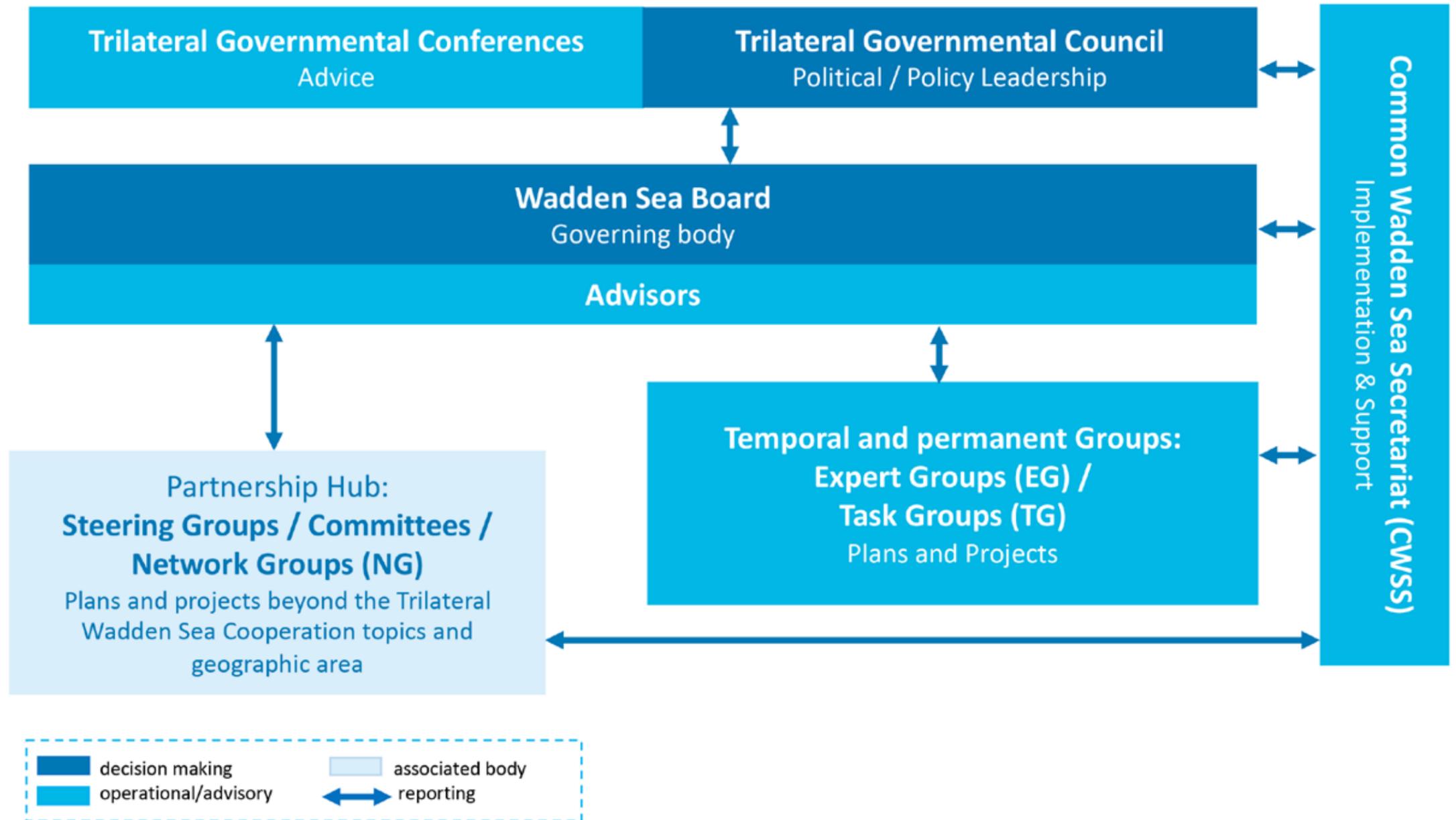
Figure 9.
The TWSC addresses SDGs
4, 6, 8, 12, 13, 14, 15 and 17.





ANNEX

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



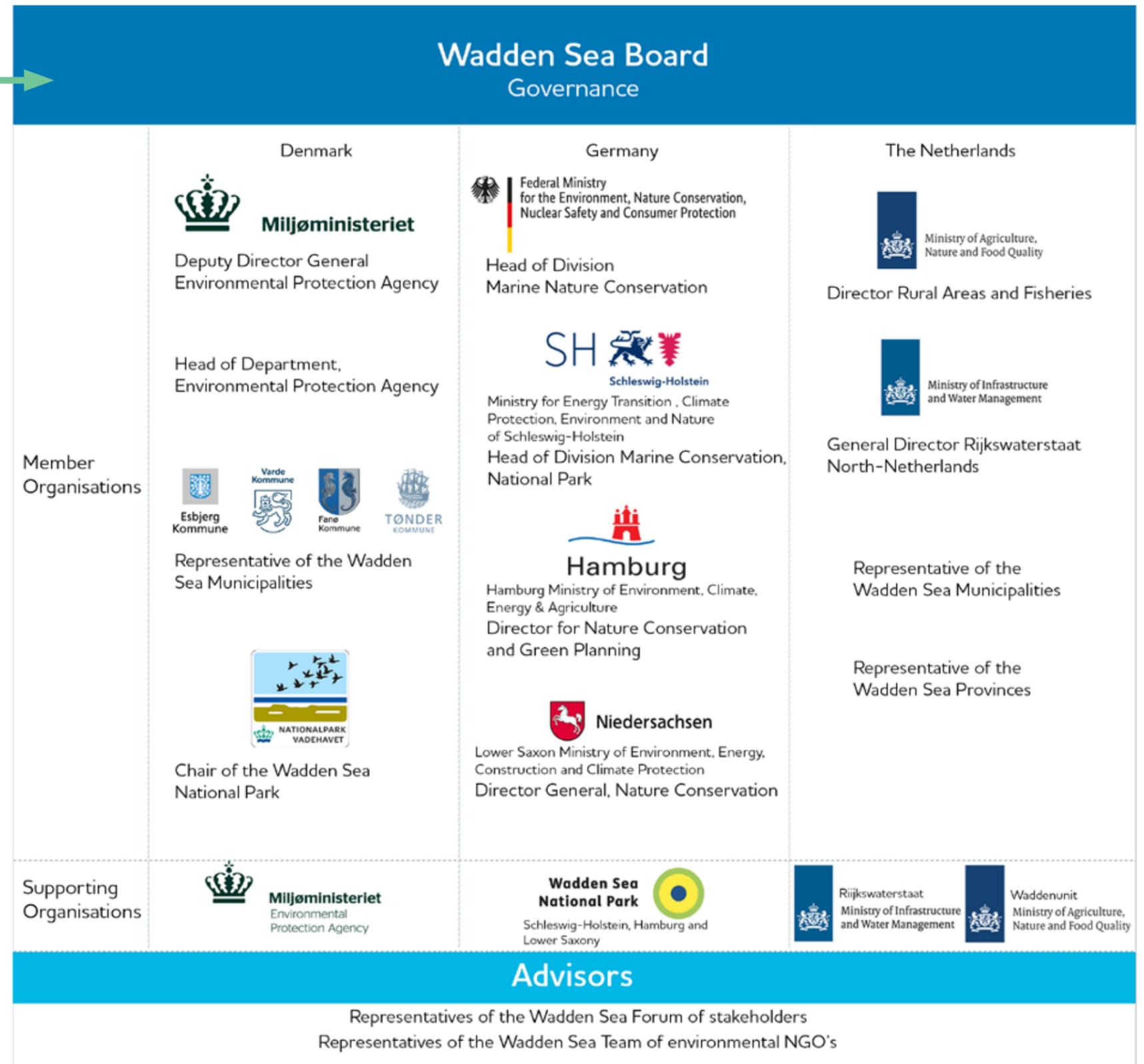


Figure A.2. Members, supporting organisations and advisors of the Wadden Sea Board. The supporting organisations are intricately involved in the task/expert/network working groups of the TWSC and represent the link between policy and management.

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.

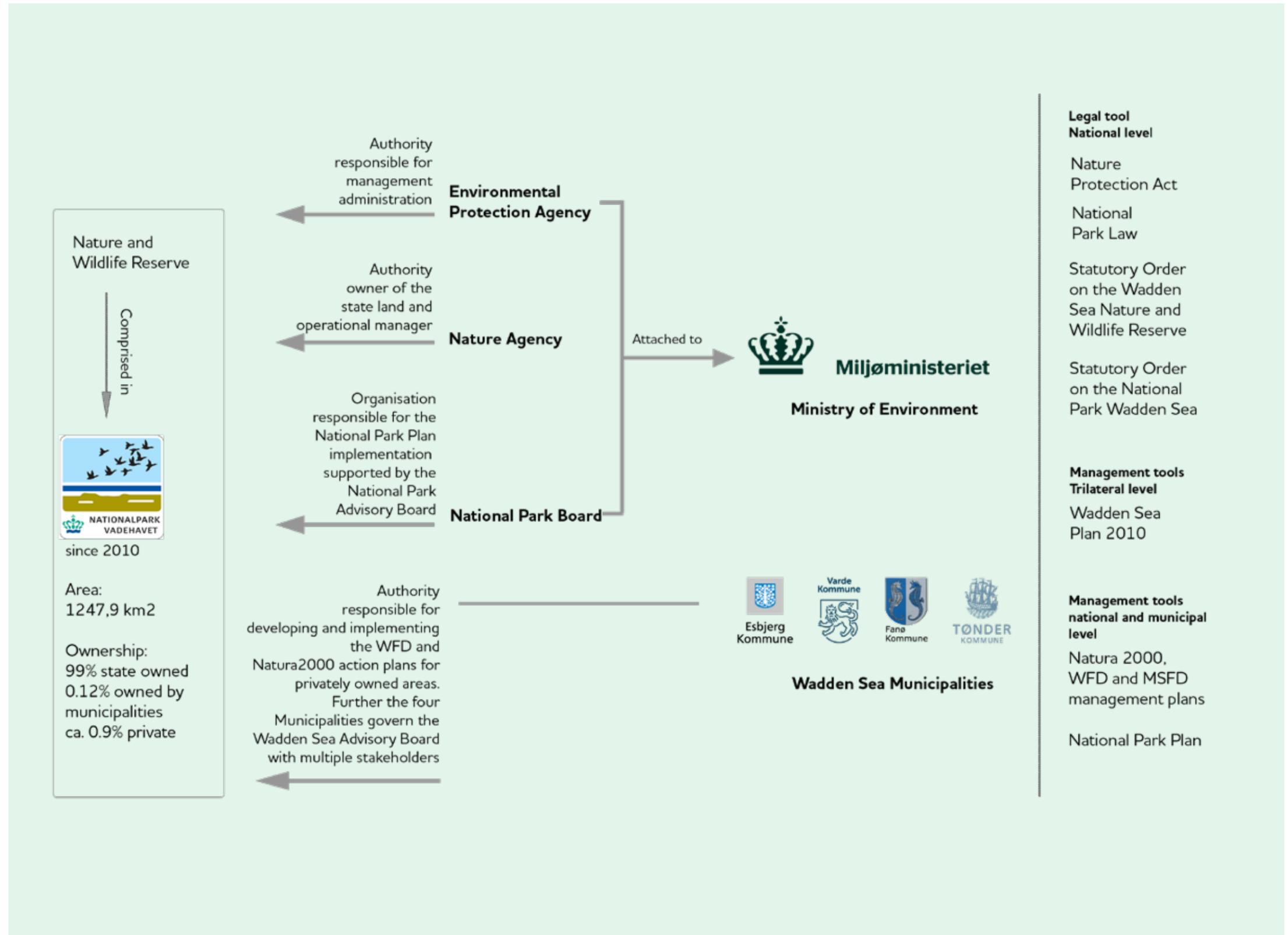


Figure A.4. General management system of the Wadden Sea Cooperation Area/Nature Conservation Area is organised at the Federal State level as outlined in the Federal Nature Conservation Act. State National Park Authorities are the competent authority for the management and protection of each National 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”.

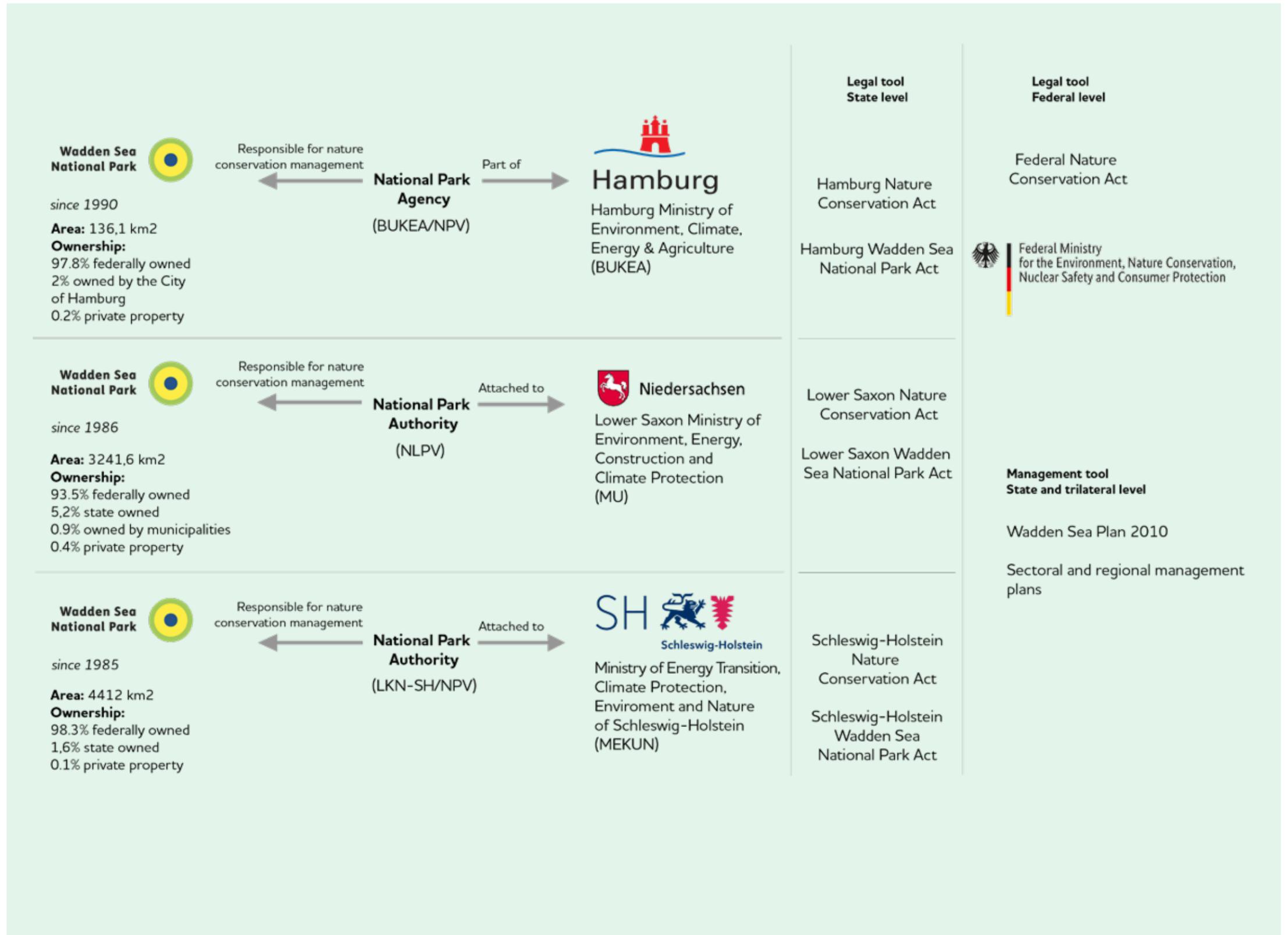
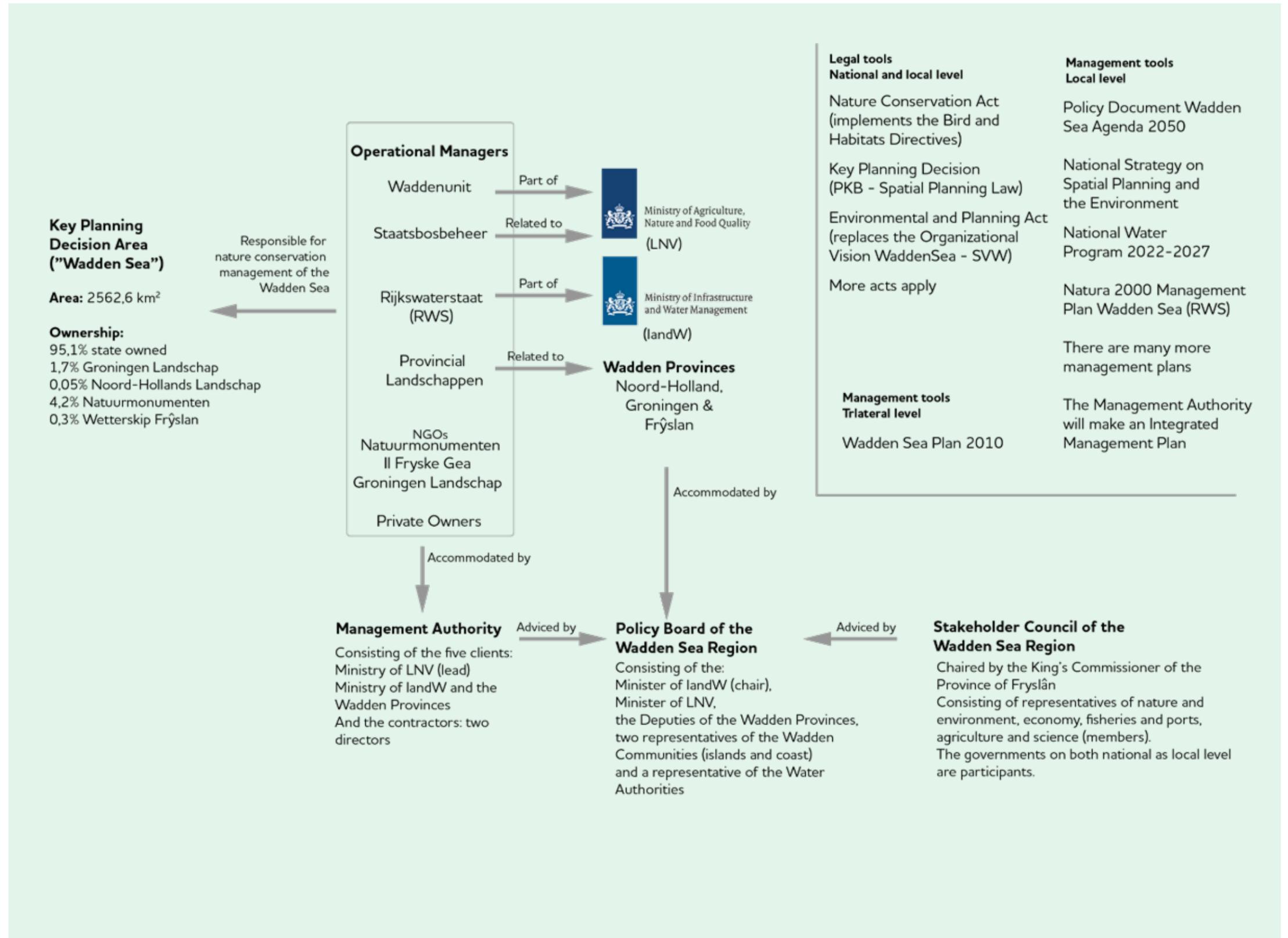


Figure A.5.
 The Management system of the Wadden Sea in the Netherlands (established in 2020) is comprised of the Management Authority responsible for the management of nature, fish and water, the Policy Board and the Stakeholder Council. The Ministries of LNV and landW and the Wadden Provinces are responsible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





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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

