

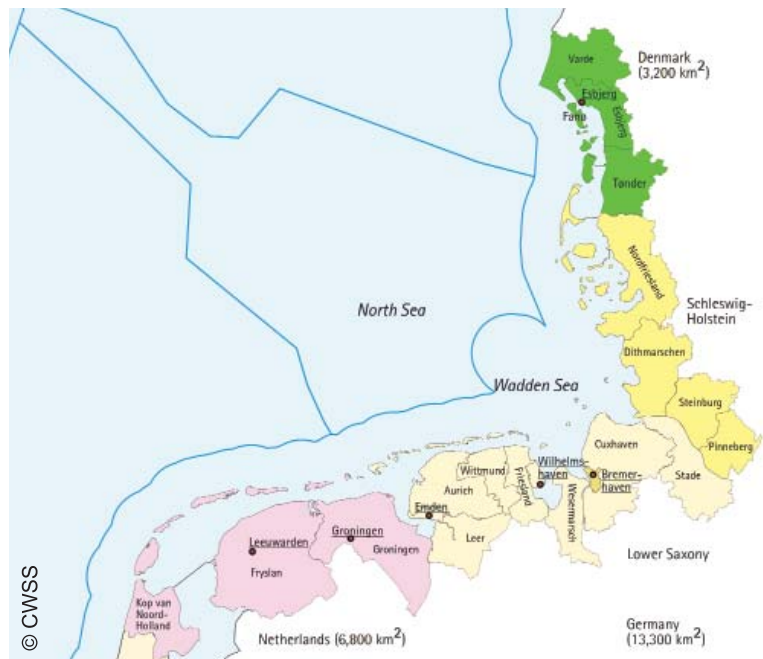
Scenarios for the Future of the Trilateral Wadden Sea

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*Dear Ladies
and Gentlemen,*

Multi-risk situations incorporating diverse risks and uncertainties resulting, for example, from natural hazards, climate change or socio-economic changes, represent a new challenge for risk management in the trilateral Wadden Sea Region. This challenge calls for an increased cooperation between responsible authorities, national representatives and the affected communities. This implies, in particular, an intensive discussion on ways of working with and managing risks. What are the risks facing the trilateral Wadden Sea Region? Which risks are society willing to take? Which kind of impacts will be tolerated by society and which impacts can be minimized by risk management processes? And which measures will be accepted by society in this regard?



Through the ENHANCE Project and a stakeholder workshop of the Wadden Sea Forum, the principal risks affecting the Wadden Sea Region were identified and discussed. Once the principle risks are identified, the collaborative development of future risk scenarios can help to address the question of how to handle these risks. Visionary narratives of future development scenarios present a possibility to create a common future vision about a certain area based on experiences, regional cultural frames and a visionary dialogue process.

In the following we would like to present you short versions of future visions, developed for three hazards by the Wadden Sea Forum. The hazard-scenarios are oriented along the risk prioritisation provided by the stakeholders and were developed and discussed within small stakeholder-groups. Based on a small set of information used to set the scene, the working groups looked ahead to the year 2030 and described the anticipated threat and the impacts of the crisis for the society and the region.

With the resulting future scenarios, we hope to make a constructive contribution to risk management in the trilateral Wadden Sea Region. In this context we would like to invite you to give your opinion about the scenarios by means of the short questionnaire at the end of this brochure. We look forward to your comments, reactions and further questions.

Enjoy reading!

Hamburg 2016 //
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Scenario 1: 1962 revisited and the energy grid

It is the 14th November 2030. A severe low-pressure system, has hit land across the Wadden Sea Area causing damage across the region. Heavy storms have shaped the coast for centuries, but this storm was exceptional even for this region. Memories of the 1962 Vincinette storm come up, but improved coastal protection systems prevent loss of life. Nevertheless, infrastructure and the wind energy sector have been particularly affected by the storm, leading to difficulties in energy supply and mobility along the Wadden Sea coast. Individual storage capacities were able to prevent energy shortages, but the industry sector faced outages. The harshest impacts could be mitigated and no lives were lost, although blocked roads posed difficulties to emergency operations.

The coastal defense system still assures safety in 2030. The energy supply will have drastically changed to a decentralized system based on renewable energies. While the wind turbines are highly vulnerable, decentralized individual storage capacities are able to prevent energy outages for individual households. Additionally, the European system grid helps to mitigate energy losses.

Drawing future strategies: To provide effective risk management at the regional level, coordinated action, especially in spatial planning, is needed. The effects on the industry sector call for a broad-based engagement to reduce anticipated impacts. The WSF as stakeholder forum for the Wadden Sea Region could play a role in risk management and initiate a discussion on a trilateral level about infrastructure emergencies, the responsibility for infrastructure and joined energy grids. Existing WSF instruments such as the planning portal as well as the working group ICZM and further action groups of the WSF could support these intentions. In this process, the WSF could raise awareness regarding the existing risks and develop recommendations with regard to mitigation and adaption to encourage integrated and responsible decision-making.

Scenario 1:



Scenario 2: „Oil tanker crashes at offshore wind park Borkum Reef“

In a heavy storm on the morning of the 3rd November 2030 an oil tanker, on its way from Rotterdam to Hamburg, got in distress for yet unknown reasons. In the further course of events, the out of control ship ran aground on the foundations of a wind turbine located in the offshore wind farm “Borkum Riffgrund West”. Several cargo tanks on board sprang leaks or exploded. This resulted in thousands of litres of oil which are leaking into the sea. The estimated loss of crude oil was about 10,000 t. It is unclear when the leakage will be stopped.

The oil spill has severe consequences for all three countries of the Wadden Sea Area. As a direct consequence, extensive oil pollution has occurred both onshore and offshore, particularly effecting vulnerable flora and fauna. This leads to losses in the fishing and tourism sectors. Furthermore, the waterway between the ports of Rotterdam and Hamburg is blocked for days so that the transport of goods has been disrupted. All this impacts caused severe financial losses. Additionally, the connector cable of the wind farm, which was also affected by the accident with the oil tanker, was damaged, so that the electricity supply was hampered for two days. The oil tanker accident has disastrous ramifications and caused huge ecological and economical losses.

Drawing future strategies: For this scenario different prevention measures can be called upon. At first, enhanced management strategies and an integrated trilateral approach are needed. In the German Bight, where increasing economic activities are concentrated in a limited space, transnational control systems must be implemented as recommended by the WSF in the past. A sound marine traffic management system should be mandatory. Additionally, emergency capacities, e.g. for towing, should be increased. It is also possible to prepare an Emergency Harbour in the Wadden Sea Region. Whereas shipping safety in the WSR was addressed already in many fora, the resulting recommendations require implementation and application. Because the WSF cannot implement the identified strategies itself, it has to rely on its capacity as a communicator and as ambassador for the unique Wadden Sea. If the WSF realizes its full political potential, it ´ll be able to gain more weight in these decisions.

Scenario 2:



Scenario 3: Societal change – Be together in order to be individual

By the year 2030, life in small villages in the Wadden Sea Region will look very different. The continuing trend of grocery shops closing down poses a threat to the rural infrastructure in the Wadden Sea Region. Traditional shops and other facilities have been closed. Many people are leaving the rural area in need of new challenges. Multi-functional spaces that combine the changing needs of society and overcome the obstacles of decreasing infrastructure in rural areas could offer a solution. Here, people come together in order to shop and run errands, to socialize and converse, as well as for recreational activities.

Major developments in society, particularly in terms of supply and communication, have additionally transformed living in rural areas. New technologies support the interconnection between villages' inhabitants and facilitate people coming together, contributing to the development of a new way of live. People spend time together in order to be individual, however this coalescence of the community increases social pressure on the individual. The community expects the individual to participate.

Drawing future strategies: The situation in 2030 demands new solutions for the rural communities. They can be found in collective action. With the identified aim of a collectively organized community, the WSF could use its role as an ambassador to initiate action and promote role models. The WSF could use its broad scope to identify best practice projects and communicate promising ideas to the other parts of the region. Additionally, the WSF itself could become a shared best practice project.

Scenario 3:



What do you think about the scenarios?

We kindly ask you for your opinion and comments on the developed scenarios presented above.

Please return this short questionnaire to: vollmer@waddensea-forum.org

Q1: I need more information about this scenario to get an idea about future risks:

	Strongly disagree	Disagree	Neither nor	Agree	Strongly agree
S1: Severe storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S2: Oil tanker accident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3: Socio-demographic change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


Q2: Action has to be taken regarding this scenario as it is quite realistic and prevention is necessary:

	Strongly disagree	Disagree	Neither nor	Agree	Strongly agree
S1: Severe storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S2: Oil tanker accident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3: Socio-demographic change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q3: I or my sector are concerned and we have to play a role in taking action regarding this scenario:

	Strongly disagree	Disagree	Neither nor	Agree	Strongly agree
S1: Severe storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S2: Oil tanker accident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3: Socio-demographic change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q4: From my perspective, these risk management issues are most urgent and should be dealt with:



IMPRINT

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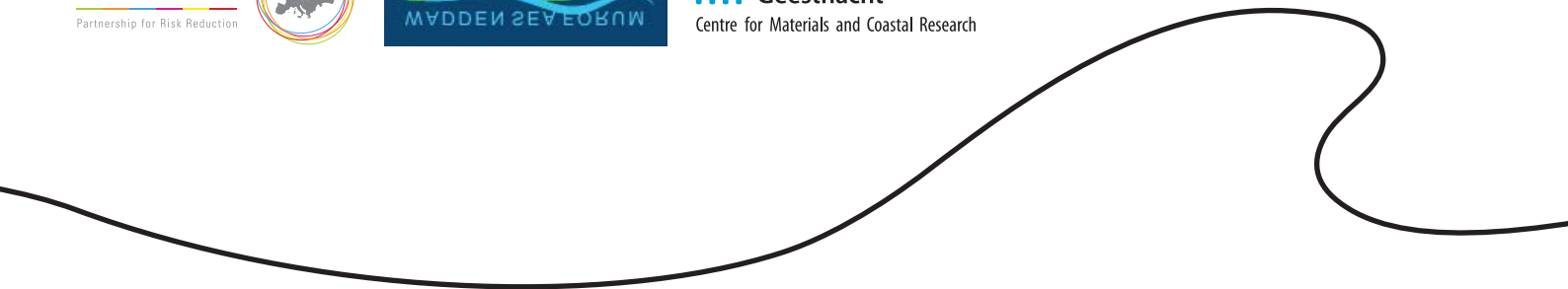
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