

**Particularly Sensitive Sea Area
(PSSA) Wadden Sea**

A VISION FOR THE WADDEN SEA PSSA

**Trilateral Workshop
Hamburg, 19 September 2012**

Organized by the

**Task Group Shipping/
Common Wadden Sea Secretariat**

Executive Report

06 November 2012

1. INTRODUCTION

On 19 September 2012, the trilateral workshop on the development of a vision for the Wadden Sea Particularly Sensitive Sea Area (PSSA) was held at the Federal Maritime and Hydrographic Agency in Hamburg. The workshop was organized by the trilateral Task Group Shipping and the Common Wadden Sea Secretariat. The workshop was attended by 27 persons representing the competent authorities in the field of maritime shipping and nature conservation, maritime shipping companies, harbour authorities, nature conservation organizations and recreational boating. The workshop was chaired by **Dr Bernd Scherer, Deputy Director General**, Ministry of Energy Transition, Agriculture, Environment and Rural Areas, Schleswig-Holstein. A list of participants is in **Annex 1**.

The chairman opened the workshop and explained the background and objective. It resulted from the decisions of the Ministerial Council Meeting of the 11th Trilateral Governmental Conference on the Protection of the Wadden Sea in 2010. The issue of shipping and ship's safety was addressed in §§ 27 – 38 of the Ministerial Council Declaration (Sylt Declaration). The workshop was a follow up of the first workshop held in May 2011 at which aspects of a vision for the Wadden Sea PSSA were discussed in terms of awareness and risk. The objective of this workshop was now “to develop a vision for the Wadden Sea PSSA” as a central input for the next Trilateral Governmental Wadden Sea Conference to be held on 4-5 February 2014 in Tønder, Denmark, as indicated in the invitation to the workshop.

He looked forward to the presentations and discussions and together with the participants to develop a vision for the Wadden Sea PSSA. He also acknowledged that this was a challenge which had not been met so far by a workshop with representatives of very different and partly also opposing interests. He indicated that the mutual interest in developing a vision for the Wadden Sea PSSA would be to acknowledge the commercial interests of maritime traffic for the national economic development including the Wadden Sea Region, and the necessity of maritime safety and pollution prevention in conjunction with safeguarding the Outstanding Universal Value of the Wadden Sea as expressed in its status as a World Heritage property. He therefore appealed to the participants to acknowledge the mutual interest in developing a vision and to refrain from repeating achievements of the past to impede constructive discussions and the development of a realistic vision.

He underlined that should the workshop fall short of developing a vision, the Wadden Sea Board, being the central governance organization of the Trilateral Wadden Sea Cooperation, would most probably be forced to develop a vision on its own. In his view it would be preferable to conclude the work as far as possible on the expert level rather than to pass the task back to the more political level.

The programme encompassed two main parts:

- A number of presentations of main governmental and non-governmental stakeholders as a basis for the discussions and vision development; this included a discussion of the proposals for visions submitted by participants in advance of the workshop.
- The development of a vision during interactive sessions and plenary discussions

The program of the workshop is in **Annex 2**.

2. PRESENTATIONS AND DISCUSSION

Presentations

Mr Huisman, chairman of the Task Group Shipping (TG-S) installed by the Wadden Sea Board, further introduced the objectives of the workshop and background information relevant for the development of the vision.

TG-S in its work focuses on not only the Wadden Sea PSSA but also on the wider North Sea and maritime activities having an impact on the PSSA. It has identified five operational themes being prevention of accidents, preparedness to respond to accidents should such happen in spite of prevention measures, reduction of the impacts ensuing from operating ships, raising the awareness of the PSSA and finally cooperation on all levels relevant for the themes.

TG-S has commissioned the elaboration of a background report (the "Bahlke report") with the tasks to provide a forecast of maritime traffic and adjacent area until 2025/2030 and identify main issues of maritime safety and pollution prevention of shipping for the Wadden Sea PSSA. Some of the findings of the report: From 2000 to 2007, the volume of world merchandise exports increased with an average of 5.5 % per year. The growth 2005 to 2013 is estimated to encompass almost 75%. Ports adjacent to the PSSA would continue to grow because of the growth in goods but also because of the increasing offshore activities on the North Sea with the rapid extension of offshore wind farming.

The Safety of ships have been further improved by measures by the IMO and the probability of a most harmful contamination of the Wadden Sea by an accident, causing the leakage of fuel oil has been further diminished by even better protection of the hull and piping arrangements inside the ship. Preventions have been improved and further expanded by the IMO legal framework and by the EU maritime policy directives. A key element is the routing measures along the southern boundaries of the PSSA and the Vessel Traffic Services. This will be further improved in the future by e-navigation and maritime spatial planning.

Effective coordinated response measures exist within the Bonn Agreement and sub-regional cooperation is warranted within the DenGerNeth Agreement. The current ongoing risk analysis BE-Aware aims to analyse the current risk and provide a basis for more effective response measures. Also the impacts has been reduced significantly in recent years by lower emissions, the Ballast Water Convention, the Lashing@sea project etc. The PSSA Wadden Sea is now indicated on all sea charts to enhance the awareness and companies should be approached directly but the challenge remain to keep a high level of awareness in spite of no or very few incidents. Finally he underlined that a very elaborate cooperation exists on all levels and use should be made of this framework in any future efforts to improve the situation around the Wadden Sea PSSA. He concluded by pointing out that the vision in his perspective should combine overall objectives with the five themes and should indicate level of ambition, what should be done within the IMO and the EU and what the limits are.

Mr Hintzsche, representative of the German Shipowner's Association (VDR), in his presentation explained the structure and position of the German merchant fleet which had significantly increased during recent years measured e.g. in tonnage and now being amongst the important shipping nations of the world. He further explained the role of the VDR in which the political work on all levels such as the IMO plays a major role. The maritime cluster now provides work for some 400,000 persons. Currently also the world economic crisis was felt in the shipping industry but he emphasized that it should not be exaggerated. Currently 248 ships with ca. 621,500 TEU (Twenty-foot equivalent unit) are layed-up, which relates to only 3,9 % of the total fleet and container ships are still ordered and delivered, e.g Mærsk has recently been delivered the new 18,000 TEU. It is realistic that even bigger container ships will be delivered in the future.

In terms of the vision discussed today the question is whether zero-emission shipping in the future would be possible and should be the aim of some future oriented vision. The first priority should however be maritime spatial planning. He commended the spatial planning of the German North Sea (EEZ) as being very progressive and effective. Shipping lanes are basic structure of the draft (Art. 60 VII UNCLOS), priority areas have been kept free from obstacles, reservation of areas where shipping has special weight in the balancing process and existing traffic has been protected.

In terms of environmental protection shipping is the least environmentally damaging form of commercial transport and, compared with land based industry, is a comparatively minor contributor to marine pollution from human activities. There has been a substantial reduction in marine pollution over the last 15 years, especially with regard to the amount of oil spilled into the sea, despite a massive increase in world seaborne trade. This is also the result of cleaner and efficient ships design. The VDR advocates the green shipping approach. There is further a major potential in new and clean energies from liquid hydrogen offshore production potential. In 2020, about 3GW generation capacity is assumed to be installed in offshore wind energy parks in the German Exclusive Economic Zone. Up to 30% of the generated power may not be put into the grid and could be available for Hydrogen production (up to 3600 GWh/a). A 500 MW wind farm may produce up to 6.000 t liquid Hydrogen (LH2) using its surplus power. This could serve 3 feeder vessels. An intermediate storage of LH2 for up to 10 days requires insulated tanks of up to 3000 m³.

Mr Vollmer presented the vision of the Wadden Sea Forum (WSF), a stakeholder organization of the Wadden Sea Region working towards a sustainable, balanced development. The core elements of that vision were a protected and managed North Sea through a regional seas approach, safe and clean waters, a balanced use of the available sea space as well as recognition of the intrinsic value of the natural sea basin. Due to the heavy and further increasing ship traffic, the traffic management system should be improved. In this respect, he emphasized the need for traffic separation schemes, the improvement of control mechanisms, emergency management and awareness raising. Also a sound risk management and maritime spatial planning with cross-border cooperation and shared responsibilities had to be implemented respectively applied. To work towards the vision, further measures like safe cargo storage, implementation of transnational harbor concepts and the improvement of waste management should be used.

Another focus of the presentation was on emissions and its reduction measures. Shipping would substantially contribute to CO₂, NO_x, SO₂ and fine particle emissions. He promoted new standards and parameters in Emission Control Areas (ECAs) and the application not only in the shipping business but also in gas and oil exploitation. Techniques to reduce the mentioned emissions would already be available, such as advanced ship designs, filter systems, alternative fuels and speed reduction, but are not consequently applied by the industry.

Finally, Mr. Vollmer stressed the application of some relevant policies. The full implementation of the Bonn-Agreement would be very helpful to strive for safe and clean waters. Also the application of the EU Maritime Transport Policy according to the recently elaborated goals and recommendations by the Commission would be a milestone to reach the expressed vision. Further policies like the Ballast Water Convention and Convention on anti-fouling systems would be important supporting measures. At the end of the presentation, he expressed the wish of the WSF for a sound collaboration with the Trilateral Wadden Sea Cooperation to work jointly towards a common vision for the North Sea with its outstanding nature reserve Wadden Sea.

Mr Rösner, representing the World Wide Fund For Nature (WWF), stated that a vision is needed for guidance how shipping and environment/nature interests can come together. To protect undisturbed natural processes is the guiding principles for the Trilateral Wadden Sea

Cooperation. The shipping industry from the conservation point of view is a “loose cannon” for the protected areas of the Wadden Sea and accidents can have large scale consequences for the ecosystem. Furthermore operational pollution is recognized as a constant risk damage for the environment. Several reports dealing with the PSSA Wadden Sea were conducted. Recent incidents (“Katja”, “Flaminia”) are underlining the risk. In terms of the trilateral cooperation it should be considered to form one shipping group instead of two, e.g. by joining the activities of the Task Group and of the Wadden Sea Forum’s Shipping Group.

Since major shipping routes are excluded from the PSSA, the shipping sector seemed to consider the PSSA as more or less irrelevant, but this would be a biased understanding: As any incident close to the Wadden Sea can have major impacts there, the PSSA must be saved from any harm also from outside its limits, which makes the discussion about the exact borders of the PSSA not so relevant. A vision approach should consider economy, environmental friendliness, concrete APMs (“Associated Protective Measures”) and improvement of existing safety measures growing with enhanced traffic, even if there is already a high standard. Some suggestions for commitments or APMs are desirable, e.g. mandatory tug support for high risk vessels. It is furthermore necessary to strengthen the trilateral cooperation on these issues. Further discussion on PSSA extension is contra productive for developing a vision.

He presented the following attempt for a possible joint vision:

“The Wadden Sea is an area of outstanding universal value, being protected by three countries and by European law and inscribed as a World Heritage Site by the UNESCO. The IMO has designated the Wadden Sea as a “Particularly Sensitive Sea Area” (PSSA) in the understanding that harmful influences from shipping on the protected area must be avoided. This is also very important for the tourism sector. Shipping in and close to the Wadden Sea has a large importance for the economies of our countries and fulfills already a high environmental standard when compared globally. However, further improvements are necessary, concerning among others the global standards, the awareness in the shipping community, a trilateral system for vessel-traffic management, the coordination between DK DE NL, precautionary measures and quick reactions on emergencies, a continuous risk assessment as a basis for measures, and risk reducing efforts in the context of offshore developments which must ensure that the safety standard is not weakened.

The PSSA Wadden Sea is also a tool for both the nature and shipping sector to come together for their PSSA, to develop a mutual understanding and discuss joint issues, with the view to jointly support necessary changes in regulations and the awareness in the shipping community.”

Presentation and Discussion Vision Proposals

In advance of the workshop participants had been invited to send in their personal forward looking visions to help the formulation of a vision at the workshop. Seven visions had been received which are attached in **Annex 3**. Because of the relative limited number of visions these were presented at the workshop by the proposers and discussed in plenary in order to provide some first ideas of the direction of a vision.

Ms du Bois emphasized that enhancing awareness of the Wadden Sea PSSA is a central task to further the responsibility of boat owners and other maritime users. Mr de Hoop supported this issue very much and referred to the responsibility of recreational boat owners when cleaning their boats. Organizations applying for a power boat race in the World Heritage area of the Netherlands clearly had not taken a responsibility that is valid for such an area.

Mr Kreß underlined that sustainable development was a leading principle for all policies of the city of Bremen and should be valid for a vision as well. The vision should not be restrain and limit economic activities but to show mutual responsibility. Mr de Hoop underwrote this statement and underlined that sustainable development encompassed economic, social and environmental development. Economic growth is only possible if the environment is protected at the same time.

Ms Metzko in the presentation of the vision of the port authorities of Hamburg, Bremen and Brunsbüttel emphasized that there are sufficient and promising international rules to ensure safety of international shipping and to reduce its environmental impact also in the vicinity of the Wadden Sea PSSA. A common approach for a sustainable maritime industry within the Wadden Sea PSSA, where the German ports should be partners, is therefore necessary.

Mr Cimiotti emphasized in his presentation that only by extending the borders of the Wadden Sea PSSA to include also the main shipping lanes could a successful awareness be made. Also the moving of the traffic separation scheme further offshore would be necessary to enhance the safety for the Wadden Sea PSSA. Finally he underlined that the reduction of the emissions of nitrogen emissions was also a health question for the people living in the region.

Ms Kuiper underlined in her presentation of the vision of the Wadden Society that economic growth and safety of maritime traffic goes hand in hand. The one is not possible without the other. Furthermore, a key activity in the coming period is more awareness, improved cooperation and risk assessment as a basis to better manage threats.

Mr Hintzsche in addition to what he had already outlined in his presentation underlined that maritime planning is the a key to success in conjunction with the European SafeSeaNet-System as a world-wide reporting system for improved emergency response and increased efficiency of port logistics in combination with the reduction of reporting workload onboard the ships. Mr Reijnders questioned whether this would improve safety of maritime traffic including the Wadden Sea PSSA. Mr Hintzsche argued that this would be an essential contribution since this would merit a better and more efficient transport of goods e.g. less waiting times on route and in ports and allow to concentrate more efficiently on safety requirements and reduce emissions e.g. from more efficient fuel use. This should part of the vision, he suggested.

3. VISION DISCUSSION

Following the presentations and the discussion on the proposed visions the workshop considered how to develop a vision taking account of the starting points mentioned by the chairman at the beginning of the workshop. Mr Hintzsche welcomed many of the observations made during the presentations and discussions and felt that there was a broad field of agreement between the various positions made. He was particularly pleased with the vision presented by Mr Rösner, WWF, because he found that there were many points on which the VDR and the WWF could agree. He therefore suggested that the WWF vision should be taken as a starting point for the discussion and development of the vision.

This resulted in a discussion on whether this would be an appropriate approach. Ms Schneider and Mr Litmeyer from the TG-S doubted that it would be possible to come to a consensus within the limited time given and furthermore, formally speaking the task of formulating a vision was assigned to the TG-S. Such a proposal could only be a discussion contribution to the development of vision by the TG-S.

Mr Rösner underlined that the vision outlined was not a vision as it would be formulated solely by WWF, but based on many years of experience with the Wadden Sea PSSA theme and as a try to find a joint understanding among the different sectors. He felt that the time had now come to reach an agreement on a much needed vision of where we want to take the Wadden Sea PSSA, in a forum where all relevant stakeholders were represented.

The chairman reiterated that the objective of the workshop as agreed with TG-S was to develop a vision for the Wadden Sea PSSA as a central input for the next Trilateral Governmental Wadden Sea Conference as indicated in the invitation to the workshop. Either the workshop would accept this task and try to fulfil it, or – at least to his impression - the WSB would claim the authority to develop a vision for the conference. He again suggested to reach an agreement on a draft vision.

Finally the proposal made by Mr Hintzsche was agreed to and the meeting went in detail through the vision proposed by Mr Rösner. With the aim to reach full transparency of the process and to document the degree of consensus the chairman went finally through the text – sentence by sentence. After some final amendments there was unanimous agreement on every part of the draft vision by all participants of the workshop **Annex 4**.

4. CONCLUSION AND FOLLOW UP

The chairman concluded that an agreement had been reached on a common vision for the Wadden Sea PSSA. The mission, which he had conceived as being nearly impossible at the start of the workshop, had been accomplished. He thanked the participants for very constructive contributions and fruitful discussions and congratulated them to a very fine outcome.

Ms Kuipers stated that she had problems in acceptance of this as a vision as long as there is no common understanding of corresponding measures i.e. further APMs have to be proposed to the IMO. The chairman underlined that the vision constitutes the overall vision for the Wadden Sea PSSA – in this first step without specification of the possible measures. It would now be the task of TG-S to develop specific measures to reach the vision (“operational action plan”) under the 5 themes outlined by the chairman of the TG-S and report these to the WSB.

A draft report of the meeting would be circulated for comments within the next couple of weeks. The final report will after review of the comments amending of the report be placed on the CWSS website together with the presentations and be circulated within the Wadden Sea Cooperation.

Annex 1**List of participants**

| Last name | First name | Country | Authority |
|------------------|-------------------|----------------|--|
| Baerends | Bernard | Netherlands | Ministry for Economics, Agriculture and Innovations (EL&I) |
| Bootsmann-Gäbler | Hans-Jürgen | Germany | Bundesverband der See- und Hafenslotsen e. V. |
| Cimiotti | Dominic | Germany | NABU |
| de Hoop | Albert | Netherlands | Ameland |
| du Bois | Janny | Netherlands | Watersportverbond |
| Enemark | Jens | | Common Wadden Sea Secretariat (CWSS) |
| Hebbelmann | Hubertus | Germany | State Environmental Ministry of Lower-Saxony |
| Hilmer | Hartmut | Germany | Waterways and Shipping Directorate North (Kiel) |
| Hintzsche | Wolfgang | Germany | Association of German Ship Owners, VDR |
| Hofmann-Ivens | Felicitas | Germany | Freie und Hansestadt Hamburg, Behörde für Wirtschaft, Verkehr und Innovation |
| Huisman | Sjon | Netherlands | North Sea Directorate |
| Jensen | Alex | Denmark | National Operations Branch, Maritime Environment, Admiral Danish Fleet HQ |
| Klöpffer | Sascha | | Common Wadden Sea Secretariat (CWSS) |
| Kress | Jochen | Germany | Free Hanseatic City of Bremen Senator for Economic Affairs and Ports (SWH) |
| Kuipers | Ellen | Netherlands | Waddenvereniging |
| Litmeyer | Bernhard | Germany | Waterways and Shipping Directorate North West (Aurich) |
| Meißner | Ute | Germany | Free Hanseatic City of Bremen Senator for Economic Affairs and Ports (SWH) |
| Reinders | Geert-Jan | Netherlands | Groningen Sea Port |
| Rösner | Hans-Ulrich | Germany | WWF |
| Scheiffarth | Gregor | Germany | Nationalparkverwaltung Niedersächsisches Wattenmeer |
| Scherer | Bernd | Germany | Ministerium für Energiewende, Landwirtschaft, Umwelt und ländliche Räume |
| Schneider | Christina | Germany | Waterways and Shipping Directorate North (Kiel) |
| Stoldt | Michael | Germany | Deutscher Seglerverband (DSV) |
| Vader | Martine | Netherlands | KWC (Dutch Coast Guard) |
| Vollmer | Manfred | Germany | Wadden Sea Forum Shipping Group |
| Wild-Metzko | Sonja | Germany | Hamburg Port Authority |
| Jensen | Torben | Denmark | Esbjerg Harbour Authority |

Annex 2

Workshop programme

**Trilateral Workshop on
Vision Development for the
Particular Sensitive Sea Area (PSSA) Wadden Sea**

Hamburg

Bundesamt für Seeschifffahrt und Hydrographie, Bernhard-Nocht-Str. 78

19 September 2012

9:30 – 16:30 h

PROGRAMME

Chair: Bernd Scherer, Deputy-Director General, Ministry of Energy Turnaround, Agriculture, Environment and Rural Areas of the State of Schleswig-Holstein

| | | |
|----------------------|---|--|
| 9:00 – 9:30 | | Registration / tea and coffee |
| 9:30 – 9:40 | Bernd Scherer | Opening |
| 9:40 – 9:50 | Sjon Huisman (Rijkswaterstaat Noordzee) | Introduction, Objectives of the Workshop |
| 9:50 – 10:10 | Wolfgang Hintzsche (Association of German Ship Owners, VDR) | Vision Shipping Section |
| 10:10 – 10:30 | Manfred Vollmer (Wadden Sea Forum) | Vision Wadden Sea Forum |
| 10:30 – 10:50 | Hans-Ulrich Rösner (WWF) | Vision Nature Conservation |
| 10:50 – 11:10 | | Coffee break |
| 11:10 – 11:30 | CWSS | Presentation vision proposals participants, proposal for discussion themes |
| 11:30 – 12:15 | Plenary | Exchange of views / first round of discussion on the different approaches |
| 12:15 – 13:15 | | Lunch in BSH cafeteria |
| 13:15 – 14:15 | Breakout session | Vision development, interactive discussion in 3-4 groups |
| 14:15 – 15:15 | Plenary | Presentation break out session / discussion / agreement on elements vision |
| 15:15 – 15:30 | | Coffee Break |
| 15:30 – 16:15 | Bernd Scherer | Revisit vision development and discussion of overall vision |
| 16:15 – 16:30 | Bernd Scherer | Final announcements, Workshop closing |

Annex 3**Visions sent by participants****Janny du Bois (Watersportverbond)**

The Waddensea 2030; some remarks from the perspective of active sailors in the region.

We don't expect larger groups of yachts for the next years, but new people will discover the area: we want them to absorb the principles of the "Code of Honor" to develop respect for Wad-nature (I explained this "Code of Honor" in the PSSA-workshop 2011).

Marinas with more berth, are not needed. More attention for safety is urgent: in summertime harbors are often overcrowded, which asks for appropriate safety-measures and updated plans e.g. paying attention to the fire situation.

Other branches of tourism will grow:

- Tourist boat-trips
- Rental yachts
- Rib-trips
- Water taxis, for instance for island hopping

They need all special treatment to develop their respect to nature.

It is necessary to improve awareness by personal education:

- by courses (good approach for motivated people, they will take in the information voluntarily)
- by personal approach in the area (see and learn by experience)

The goal: foster responsibility of visitors to the natural beauty when visiting the Waddensea.

Better maintaining order (for the obstinate).

In our vision awareness and responsibility are the first parts of the chain: and that also means more space for the good-willing people. Order is needed as the last link in the chain. More order in the area instead of restrictions (we experience now more restrictions because the order cannot be realized)

- Better collaboration between services in the area

Goal: those who are not following the rules will be punished, others are more free in enjoying the Waddensea-nature.

Point of interest:

The Trilateral countries do not act in an uniform systems. People are sailing from one country to another, but the rules are different.

Janny du Bois-Minholts, Watersportverbond, September 2012

Jochen Kreß (Der Senator für Wirtschaft, Arbeit und Häfen. Referat Umweltangelegenheiten, Energiepolitik, Land- und Ernährungswirtschaft, Verbraucherfragen)

It was requested to give a vision for the PSSA North Sea prior to the workshop which takes place on 19th of September at BSH in Hamburg.

The Free Hanseatic City of Bremen follows the principle of sustainable development in all aspects. In its Environment policy statement for the ports of Bremen the Senator for Economic Affairs and Ports has declared to follow sustainability with regard to the ports of Bremen/Bremerhaven in many details.

If this applies to the ports, this should apply equally to shipping on the routes to the ports. Sustainability contains the aspect of economic welfare. This means that shipping will have to play a major role for the development of the federal state Bremen and must not be curbed down, especially with regard to competition between the German and the West European ports.

On the other side it is clear that shipping has to take considerations of the high ecological value and the outstanding importance of the Wadden Sea and has to act in an environmental friendly way which is a major keystone of sustainability. Shipping has made considerable progress as regards its environmental performance during the last years. This development goes on and will be enhanced by the widespread use of new alternative technology, e.g. LNG. So I see that shipping will have reduced its environmental impact furthermore considerably in 2030 and a responsible partnership between shipping and environmental concerns will have been developed.

Sonja Wild-Metzko, (Hamburg Port Authority)

Visions for the Particular Sensitive Sea Area (PSSA) Waddensea until 2030 by the Hamburg Port Authority, bremenports, Niedersachsen Ports and Brunsbüttel Ports

Within the international maritime sector a big variety of regulations by IMO, the EU policy, the MARPOL Convention, OSPAR and other constant efforts of the shipping sector as well as of the Ports (e.g. greenports-initiative by Bremen) contribute to a sustainable development with ecological improvements and thereby positive impacts on the PSSA Waddensea:

In the sector of **energy efficiency** IMO has developed the Energy Efficiency Design Index (EEDI) and the Energy Efficiency Operational Indicator (EEOI), both to increase the efficiency and to reduce the fuel consumption on ships. More efficiency on board of ships leads to less ship emissions of CO₂, NO_x, SO_x and PM, as well as added propulsion systems like sky sails, the usage of renewable energies (photovoltaic e.g.) or slow steaming.

Regarding **fuel quality** there are fundamental rules listed in the MARPOL Convention as well as EU-regulations take effect with the target to reduce ship emissions in general and in special within the emission controlled areas (ECA). Alternative fuels like LNG (liquefied natural gas) to reach required specifications in ECA are being implemented. The Ports support any helpful step to introduce LNG as a low-emission fuel that could replace heavy fuel oil with all its impacts on environment.

The Green Shipping initiative is an example for the constant efforts of the shipping sector to lower environmental impacts. Also port authorities founded initiatives like Ecoports and the World Port Climate Initiative (WPCI) to improve the **environmental situation** in ports, surrounding areas and the transport chain. In this context HPA, bremenports and Brunsbüttel Ports introduced the Environmental Ship Index (ESI) and give incentives for ships with lower emissions than requested. Niedersachsen Ports is preparing next years` introduction of ESI in its ports. German Ports are engaged in the field of environmental management, e.g. the Ports of Bremen/Bremerhaven are the first German ports that were certified for their environmental management according to the PERS-standard. Other environmental fields contain accordant to IMO regulations the reduction of oil spills through technical solutions, use of bio degradable oil as lubricant or bio-fuel.

According to MARPOL **garbage treatment** the North Sea is designated as a "special area". In every German port reception facilities are in place. Further investigation is definitely necessary to come to further improvements.

Noise regulations also to reduce underwater sound will be revised by IMO.

With the ratification of the IMO **Ballast Water** Management Convention in 2012 an international instrument for the treatment and handling of ballast water will come into place.

Further the Water Framework Directive (WFD) and the Marine Strategy Directive (MSD) will contribute with their programs of measures to improve the chemical and ecological status of the Waddensea within the coming decades.

The Maritime Spatial Planning (MSP) coordinates the spatial conflicts between different uses as offshore wind farms, shipping, nature conservation and others and thereby contributes to the future **safety of shipping activities** and thus for the adjacent Waddensea PSSA.

There are sufficient and promising international rules to ensure safety and security of marine transport and to reduce its environmental impact, also on the Wadden Sea. In our vision for the German bight we promote coexistence of all ecosystem services and uses in the Wadden Sea until and after 2030. Therefore we need a common approach for a sustainable maritime industry within a unique and sensitive Wadden Sea area, where the German sea ports and shipping should be partners¹ and not a threat.

¹Compare the cooperation between bremenports and the National park management Wadden Sea of Lower Saxony: <http://www.bremenports.de/en/greenports/news-from-our-partners>

Dominic Cimiotti (Naturschutzbund Deutschland e.V. - NABU)

My vision for the PSSA Wadden Sea

The recent accident (and near disaster) of oil-tanker "Katja" demonstrated the threat and need for an effective protection of the PSSA Wadden Sea. Therefore the PSSA should be extended to include the shipping routes to the harbors and along the Wadden Sea. Shipping safety has to be improved by concrete measures such as obligatory pilots on board and higher capacities of powerful emergency towing vessels. Furthermore people and marine environment in and around the PSSA should be protected by obligatory soot particle filters and selective catalysers to reduce nitrogen oxide emissions for all ships. On the medium term ships should not longer carry heavy crude passing the PSSA. My vision for the PSSA Wadden Sea is an area where people and nature can exist without fearing heavy pollution from the sea.

Ellen Kuipers (Wadden Sea Society)

Personal PSSA Wadden Sea Vision

The Wadden Sea is a very sensitive sea which is shown through the classification of the area as a PSSA by the IMO. The need to take more proactive measures to ensure the safety at sea and to protect its surroundings becomes more urgent every day due to the increased maritime traffic and offshore activities. These pose a potential risk not only to the environment but also to the quality of life along the coastal zones around the Wadden Sea.

That's the reason the Wadden Sea Society wishes that in 2030 the Wadden Sea is a forerunner on maritime safety and serves as a good example to other states how PSSA can help to increase maritime safety.

We use the PSSA framework in an effective way. New APM's will be developed and implemented according to assessments of threats and vulnerability based on changes in shipping and offshore activities and the latest scientific/technical knowledge. Therefore there

is an excellent cooperation between (inter)national, regional and local actors and authorities. Regional and local actors are the ones who best know the situation in their adjacent coastal zone and who best can assess the need for which kind of protective measures that needs to be taken. National authorities on the other hand are the only actors who could propose new APM's to the IMO.

In short we need:

- Raise awareness about the PSSA framework / Raise training standards for seafarers and coastal communities
- Improve and extend common monitoring, navigational and vessel equipment solutions for the whole region which can affect the Wadden Sea.
- Increase interregional cooperation and consult regional and local actors in order to get an assessment of threats and vulnerability.
- Develop adequate solutions to the threats within the possibilities given from the PSSA framework and forward proposals of new APM's to the IMO

Wolfgang Hintzsche (German Shipowners' Association -VDR)

Shipping Vision for the PSSA Waddensea until 2030
by the German Shipowners' Association (VDR)

The basis for the future safety of shipping and for the free entry to German Ports lays in the Maritime Spatial Planning (MSP) which coordinates the spatial conflicts between different uses as offshore wind farms, shipping, nature conservation and others and thereby contributes for the adjacent Waddensea PSSA.

Within the international maritime sector a big variety of regulations by IMO, the EU policy, the SOLAS and MARPOL Conventions, OSPAR, HELCOM and other constant efforts of the shipping sector contribute to a sustainable development with ecological improvements and thereby positive impacts on the PSSA Waddensea: Shipping is the least environmentally damaging form of commercial transport and, compared with land based industry, is a comparatively minor contributor to marine pollution from human activities. There has been a substantial reduction in marine pollution over the last 15 years, especially with regard to the amount of oil spilled into the sea, despite a massive increase in world seaborne trade.

It is estimated that land based discharge (sewage, industrial effluent and urban/river run off etc.) and atmospheric inputs from land industry sources account for some 77% of marine pollution generated from human activities. In contrast, maritime transport is only responsible for some 12% of the total. However, these United Nations estimates were produced in 1990 and the proportion of marine pollution that can be attributed to shipping is now thought to be much lower than 10%.

The shipping industry is a small contributor to the total volume of atmospheric emissions compared to road vehicles and air transport as well as public utilities such as power stations, and atmospheric pollution from ships has reduced in the last decade.

There have been significant improvements in engine efficiency and hull design, and the use of ships with larger cargo carrying capacities have led to a reduction in emissions and an increase in fuel efficiency. Meanwhile, improvements in hull design and slowsteaming have led to further reductions in fuel oil consumption with consequent reductions in air pollution. The latest marine engines give a 30%-40% reduction in discharges of nitrogen oxide, with reductions of 80% likely in the future.

The impact of SOx emissions has been dramatically reduced worldwide from 4.5% to 0.5% sulphur content in fuel by 2025 and to 0,1% sulphur content in SECA's/ECA's by 2015.

In terms of CO₂ emissions per tonne of cargo transported one mile, shipping is recognised as the most efficient form of commercial transport. However, the enormous scale of the industry means that it is nevertheless a significant contributor to the world's total greenhouse gas emissions (around 3% of total global CO₂ emissions). The industry is therefore closely involved in global discussions on ships' CO₂ emissions now being firmly led by IMO, and has worked to develop proposals for maritime transport in advance of the UNFCCC conferences on climate change.

The industry has also been exploring other possible solutions, such as the increasing use of alternative fuels like LNG, although for the foreseeable future fossil fuels will probably continue to be the predominant source of power for the majority of the industry. Alternatively the industrial production of Methan through the process of combining Hydrogen and CO₂ by means of Offshore Windpower has been further developed.

The Green Shipping initiative is an example for the constant efforts of the shipping sector to lower environmental impacts. According to MARPOL **garbage treatment** the North Sea is designated as a "special area". In every German port reception facilities are in place.

Noise regulations also to reduce underwater sound have been introduced by IMO.

With the ratification of the IMO **Ballast Water** Management Convention end of 2012 an international instrument for the treatment and handling of ballast water has come into place and the installation of Ballast Water Treatment Systems has been successfully performed to all ships.

The European SafeSeaNet-System has been introduced as an worldwide **Reporting System** for improved emergency response, increased efficiency of port logistics and reduction of Reporting workload onboard the ships.

There are sufficient and promising international rules to ensure safety and security of marine transport and to reduce its environmental impact, also on the Wadden Sea. In our vision for the German bight we promote coexistence of all ecosystem services and uses in the Wadden Sea until and after 2030. Therefore we need a common approach for a sustainable maritime industry within a unique and sensitive Wadden Sea area, where the German sea ports and shipping should be partners and not a threat.

Annex 4**A Vision for the PSSA Wadden Sea**

The Wadden Sea is an area of outstanding universal value, being protected by three countries and by European law and inscribed as a World Heritage Site by the UNESCO.

The IMO has designated the Wadden Sea as a "Particularly Sensitive Sea Area" (PSSA) in the understanding that harmful influences from maritime activities on the protected area must be avoided. Maritime activities in the Wadden Sea and the adjacent waters of the North Sea have a large importance for the economies of our countries and fulfill already a high environmental standard when compared globally. However, through the coordination between Denmark, Germany and the Netherlands future improvements will be necessary, concerning among others:

- the global safety and environmental standards
- the awareness of maritime and other stakeholders
- further implementation of international vessel reporting and monitoring for improved safety and efficiency of navigation and emergency response
- a continuous risk assessment as a basis for precautionary measures and adequate response on emergencies
- risk reducing efforts in the context of offshore developments which must ensure that the safety standard is maintained
- Initiate further cooperation on marine spatial planning between North Sea coastal states

The PSSA Wadden Sea is also a tool for both the nature conservation and maritime sector to come together for their PSSA, to develop a mutual understanding and discuss joint issues, with the view to jointly support necessary changes in regulations and the awareness among maritime and other stakeholders.

Vision with tagged changes

A Vision for the PSSA Wadden Sea ~~an Attempt~~

The Wadden Sea is an area of outstanding universal value, being protected by three countries and by European law and inscribed as a World Heritage Site by the UNESCO.

The IMO has designated the Wadden Sea as a "Particularly Sensitive Sea Area" (PSSA) ~~_~~ in the understanding that harmful influences from shipping maritime activities on the protected area must be avoided. ~~This is also very important for the tourism sector.~~

Shipping Maritime activities in ~~and close to~~ the Wadden Sea and the adjacent waters of the North Sea ~~has~~ have a large importance for the economies of our countries and fulfill already a high environmental standard when compared globally.

However, through further the coordination between DK DE NL future improvements ~~are~~ will be necessary, concerning among others

;

the global safety and environmental standards,

the awareness ~~in the of~~ shipping maritime and other stakeholders ~~community~~,

~~a trilateral system for vessel traffic management,~~

further implementation of international vessel reporting and monitoring for improved safety and efficiency of navigation and emergency response.

~~the coordination between DK DE NL, precautionary measures and quick reaction on emergencies,~~

a continuous risk assessment as a basis for precautionary measures and adequate response on emergencies,

~~and~~ risk reducing efforts in the context of offshore developments which must ensure that the safety standard is ~~not weakened~~ maintained.

Initiate further cooperation on marine spatial planning between North Sea coastal states.

The PSSA Wadden Sea is also a tool for both the nature conservation and shipping maritime sector to come together for their PSSA, to develop a mutual understanding and discuss joint issues, with the view to jointly support necessary changes in regulations and the awareness among in the shipping maritime ~~community-~~ and other stakeholders.