

**Annex 7*****Working Paper as a basis for reviewing and accordingly implementing the measures of the operational plans*****PSSA WADDEN SEA OPERATIONAL PLANS****1. PREVENTION OF ACCIDENTS****1.1 Objective 2030**

Preventing maritime accidents and therefore protecting the marine environment remains a priority for the trilateral partners.

Despite an expected rise in maritime traffic in the wider North Sea area until 2030, respectively in numbers and size of ships, and the development in offshore installations the trilateral partners work closely together both on the international and national level to reduce the low number of accidents in relation to traffic density even further, but at least keep it at the current level. By taking into account and supporting actively the technical developments on board and onshore they constantly improve their existing preventive measures and establish additional ones if deemed necessary.

**1.2 Current Status & Challenges 2030**

- Considering the number of ships every day in the North Sea and due to the preventive measures introduced by the trilateral partners, the rate of accidents has been constantly very low
- Trilateral partners have in accordance with the international Convention for the Safety of Life at Sea (SOLAS) established Vessel Traffic Services (VTS) along their coasts
- Via VHF-connection from simple weather information to support in difficult navigational or meteorological conditions up to compulsory measures if deemed necessary the VTS-C communicates directly to the ship and vice versa
- Keeping emergency towing capacities stand-by and cooperate between the trilateral partners in case of a maritime emergency
- Establishment of mandatory and compulsory pilotage for ships of certain types and sizes, e.g. on fairways to ports has been established
- Establishment of Traffic Separation Schemes (TSS) with a firm regulation for certain vessels e.g. vessels carrying dangerous goods or deep draft vessels

- Using state-of-the-art navigational aids e.g. buoyage, Radar, AIS, VHF-direction finder, e-navigation
- Trilateral parties in the EU use the SafeSeaNetwork (SSN) for the exchange of information on vessels and their cargo

### 1.3 Measures

- ✓ Continue to work on behalf of maritime safety on IMO and EU-level
- ✓ By taking into account the on-going technical development continue to improve existing VTS, including comprehensive monitoring, e.g. through IALA (International Association of Marine Aids to Navigation and Lighthouse Authorities)
- ✓ In addition to constant national risk assessments using Bonn Agreement-wide initiatives like the BE AWARE project to cooperate between neighbouring states in the wider North Sea area to increase the comparability of results and therefore the possibilities of cooperation
- ✓ Study possibilities on the level of the competent authorities on how to improve the cooperation on the operational level, e.g. information exchange, between VTS-Cs from trilateral partners and establish a reporting system for certain commercial ships in the Wadden Sea PSSA
- ✓ Continue on national level to review all preventive measures into account the on-going development, e.g. expected higher density of traffic, construction of offshore wind farms etc. in order to at least keep the current level of safety

## 2. OPERATIONAL POLLUTION

### 2.1 Objective 2030

For a comprehensive protection of the Wadden Sea PSSA/Wadden Sea World Heritage ships will operate in the area and in the wider North Sea under strict pollution regulations with no discharges and release of alien species allowed, but energy efficient and with emissions and container loss kept to a minimum.

### 2.2 Current Status & Challenges 2030

#### *Emissions*

- Regarding the expected increase in the overall fuel consumption, the IMO released regulations to stimulate continuous technical development of fuel efficient ships. The implementation of these measures will lead to a significant decrease of emissions like CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub> and PM.
- The North Sea is declared as sulphur emission controlled area (SECA) in effect from 2007. Regarding the reduction of NO<sub>x</sub> and particulate matter (PM) emissions discussions in Europe are still on-going. Meanwhile alternative energy sources like liquefied natural gas (LNG), fuel cells and H<sub>2</sub> are already tested and will be implemented where possible.
- Many ports invest in basic infrastructure to address insufficient land based electricity supply to decrease fuel consumption and corresponding emissions. The Green Shipping initiative is an example for efforts by the shipping sector to lower environmental impacts. 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. European Ports are engaged in the field of environmental management.

#### *Discharges*

- About 20% of the global discharges of wastes and residues at sea are considered as generated from shipping activities (EMSA). According to MARPOL the North Sea is designated as a “special area”. Since 2000 the “Directive 2000/59/EC of the European Parliament and of the Council on port reception facilities for ship-generated waste and cargo residues” is effective and should prevent ships from discharging their wastes at sea. Still there is a problem with plastic waste originating from ships in the North Sea. European Ports are engaged in the field of environmental management and IMO regulations on the reduction of oil spills through technical solutions. Numbers of oiled beached birds have declined significantly over the last decades in the Wadden Sea, pelagic seabirds, notably common guillemots, still have relatively high oiling rates (QSR 2009).

- Underwater noise is emitted as a by-product from the shipping and the off shore industry. Research on the severity of these impacts e.g. on harbour porpoises is still on-going.

#### *Ballast water treatment and anti-fouling*

- The transport of invasive alien species in ships' ballast water and as biofouling on ship hulls with a potential release into the Wadden Sea or adjacent areas has been discovered as a major (biological) threat to the ecosystem. With the ratification of the IMO Ballast Water Management Convention in 2012/2013 an international instrument for the treatment and handling of ballast will be confirmed. These regulations will not challenge the problem of species being transported attached to ship hulls (biofouling), the avoidance of corresponding toxic anti-fouling substances, and in water hull cleaning.

#### *General*

- The MSFD will enhance monitoring efforts (by 2014) and it is aiming for "good environmental status" in European waters including the German and the Danish Wadden Sea by 2020.

## **2.3 Measures**

#### *Emissions*

- ✓ The three countries will support appropriate IMO initiatives with the goal to further reduce ship emissions both on sea and in the ports as already stated in the Wadden Sea Plan 2010.
- ✓ The three member states will support OSPAR and HELCOM countries in their initiative to apply for Nitrogen Oxide (NOx) Emission Control Area (NECA) status. The introduction of alternative energy, propulsion technologies and low draught hull designs in Wadden Sea World Heritage area and the wider North Sea should be promoted. Alternative energy supplies should be implemented in ports.

#### *Discharges*

- ✓ Promote European initiatives to support the implementation of an adequate system for ship-generated waste and support harmonization of a "no special fee" system similar to the corresponding HELCOM initiative 2010.
- ✓ Existing obstacles (e.g. charges) for the fishermen to deliver marine litter found in their nets to a Port Reception Facility (PRF) should be investigated<sup>1</sup>.
- ✓ Prevention of oil spills and other hazardous substances, residual materials and litter to the aquatic environment and wildlife. Activities aiming at improving enforcement (surveillance and prosecution) of agreed regulations

<sup>1</sup> [http://www.helcom.fi/Recommendations/en\\_GB/rec28E\\_10/](http://www.helcom.fi/Recommendations/en_GB/rec28E_10/)

and policies to prevent illegal discharges will be continued and corresponding fines have to be adjusted where possible<sup>2</sup>.

- ✓ Paraffin pollution is a problem for the beaches along the North Sea including the Wadden Sea. Denmark sent a submission to IMO (BLG/ESPH in October 2013). The measures could be both, more monitoring through authorities like Port State Controls (PSC), and stiffening of the regulations covering discharge of cargo-residuals. Research projects in this field like in Schleswig-Holstein should be supported.
- ✓ Support the development of guidelines and technical and operational measures for the reduction of underwater noise currently under development within IMO.

#### *Ballast water treatment and anti-fouling*

- ✓ Implementation of the IMO Ballast Water Management Convention when in force.
- ✓ Apply/implement IMO Marine Environment Protection Committee 2011 guidelines for control and management of ships' fouling and consider measures indicated in the trilateral Strategy for Alien Species.

#### *Prevention of container loss*

- ✓ Following Supporting initiatives like lashing@sea. The project is aiming to prevent lashings systems from failing. A second aim is to increase lashing efficiency where possible, incl. proper cargo handling.

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<sup>2</sup> [http://www.helcom.fi/Recommendations/en\\_GB/rec19\\_14/](http://www.helcom.fi/Recommendations/en_GB/rec19_14/)

### 3. AWARENESS AND EDUCATION

#### 3.1 Objective 2030

Achieve a level of awareness and education of the Wadden Sea PSSA and its function amongst stakeholders that will contribute to the safety of maritime traffic and the protection of the area.

#### 3.2 Current Status & Challenges 2030

The Sylt Declaration agreed to recognize the importance of shipping to the Wadden Sea Region and to coordinate and intensify raising the awareness and education for the Wadden Sea PSSA and other relevant regulations to mariners and relevant stakeholders. The stakeholder workshop 2011 confirmed that the degree of awareness with regard to the Wadden Sea PSSA is low and needs to be improved; the focus in terms of future awareness should be the sensitivity of the Wadden Sea including its status as a World Heritage property, as well as the function and purpose of the Wadden Sea PSSA, which is to protect it from impacts from international maritime activities. Meanwhile the Wadden Sea PSSA appears on all national and the relevant UKHO-nautical charts. The IMO has decided to establish a special exhibition on PSSA at its headquarter in London. The Wadden Sea is naturally part of the exhibition.

#### 3.3 Measures

- ✓ *Include appropriate information on the sensitivity and purpose of the PSSA in the Port Information Guides of all ports.*  
The information must be targeted to mariners which are those with the greatest ability to protect the environment and exercise caution when they operate in or adjacent to the PSSA.
- ✓ *Include (Wadden Sea) PSSA in the curriculum of nautical education.*  
The environmental awareness education including PSSA should become part of the new Standards of Training Certification and Watch keeping (STCW) Code at nautical colleges. Pro-Sea and standardized education material may support and promote education in this regard. In order to reach this the IMO has to be approached.
- ✓ *Establish a Wadden Sea PSSA Ambassadors Programme.*  
Invite and educate a number of relevant persons with long term experience in and/or high profile in the maritime industry to act as ambassadors for the cause of the Wadden Sea PSSA during events, conferences, meetings etc. Such programme should be related to the trilateral communication strategy.
- ✓ *Bi-/Tri-annual Progress Report*  
A bi-/tri-annual progress report should be published on the PSSA Wadden Sea based on the data collected within the Trilateral Monitoring and Assessment

Programme including incidents reported in the period ensuing from the incident reporting database.

- ✓ *Look at practices of other PSSAs worldwide*  
Learn from practices of other PSSAs worldwide and clarify if those would make sense to be implemented to enhance the awareness on the Wadden Sea as well.
- ✓ *General awareness*  
An effort should be made to inform the general public in the three countries on the Wadden Sea. The Wadden Sea has been described in the German Railway magazine. Comparable descriptions could be made in the Danish and Dutch Railway magazines, or similar magazines/newspapers.
- ✓ *Communication of measures already in place*  
An effort should be made to inform the general public and expert audience in the three countries on all those measures that have already been implemented within the past years (see Current status & Challenges 2030 of all 5 vision documents).

## **4. PREPAREDNESS AND RESPONSE**

### **4.1 Objective 2030**

Maritime activities e.g. shipping, oil & gas exploration and exploitation, wind energy parks and recreation may due to circumstances cause an incident. Also, the daily operation may lead to non-permitted emissions to the water column.

If an unfortunate event occurs posing a threat to the (marine) environment the partners will respond without delay, either individually or in a joint effort. Sufficient means will have to be in place and would be deployed by well-educated and trained personnel.

### **4.2 Current Status & Challenges 2030**

- Long term analyses of collected data on floating pollution (mineral oil) released by ships or offshore indicate a sharp decline both in numbers as in volumes. Further reduction of discharges is an international effort.
- Assessment of the impact to the PSSA Area of input of oil and Hazardous and Noxious Substances (HNS) by ships is produced at the level of the BONN AGREEMENT as a result - a risk analysis - of the BE-AWARE project. The three PSSA partners are member of the BONN AGREEMENT and consider the outcome of the project as the basis for defining the level of Preparedness. This risk-analysis is regularly reviewed.
- Incidents in the PSSA area and the wider North Sea may have an impact on the coastal area and on wildlife. The level of preparedness in the three countries is considered to be at a high level also due to the best available technology.
- Preparedness and Response are individually initiated. However in specific sea-areas, so-called Quick Response Zones, neighboring countries agreed on dedicated response plans under the Bonn Agreement umbrella. Additionally recourse on a mutual agreement concerning emergency towing capacity in case of need is in force.
- PSSA partners strive to establish a common approach for responding to any maritime incident. Scenarios are fully developed and implemented e.g. in the DenGerNeth plan.
- An integrated response plan is established in co-operation between responders and nature conservation authorities as well as port authorities. This plan is regularly reviewed.



### 4.3 Measures

- ✓ Continue to co-operate at the level of the BONN AGREEMENT on risk analysis, sensitivity mapping, pollution response capacity and response to polluted wildlife.
- ✓ Continue to obtain data on polluted wildlife (mainly birds) as the existing, internationally accepted, measurement tool on the status of pollution by hydrocarbons in the marine environment.
- ✓ Continue to co-operate in the BONN AGREEMENT in the field of satellite and airborne Remote Sensing with the objective to detect and observe pollution and polluting sources.
- ✓ Continue to study possible technical improvements on response strategies, measures and equipment also considering the principles of Net Environmental and Economic Benefit Analysis (NEEBA) approach.
- ✓ Continue to organize the annual equipment exercise in the PSSA area and the adjacent area according to DenGerNeth.
- ✓ Study possibilities to extend the exercise participants with other stakeholders.
- ✓ Initiate research on new technical and pragmatic means to respond to oil pollution. Focus should be given to the specific PSSA Wadden Sea hydrodynamic conditions. Additionally the communication of the results of response measures with stakeholders should be improved. Additionally, improve the communication of the results into the shipping and conservation community.
- ✓ Initiate discussion at (inter)national level to agree on common approach with regard loss of cargo or wrecks.
- ✓ Continue to co-operate at EU level on the issue of “Potentially Polluting Wrecks” and also on Claims Management.
- ✓ Initiate a trilateral harmonized approach for an inventory of PSSA sub-regions with regard to the environmental sensitivity to oil and HNS (sensitivity mapping) as a basis for further developments of emergency plans.

## **5. COOPERATION**

### **5.1 Objective 2030**

At national level within the trilateral parties data is collected, analyzed and presented in reports. Information about the PSSA area and North Sea is published annually. Relevant data required for understanding the PSSA area and the North Sea is shared in the CWSS.

With respect to autonomous responsibilities of stakeholders, co-operation is intensified on a pragmatic basis.

### **5.2 Current Status & Challenges 2030**

- The organizations concerned manage their business according their legal autonomous responsibility.
- The CWSS publishes reports on their web-site and strives to collect information at national administrations and in international fora.
- Cooperation between the secretariat and representing authorities of the three parties endorse the initiatives to improve the information sharing and making information available to the public.

### **5.3 Measures**

- ✓ Trilateral parties and the CWSS will investigate the feasibility of making information available, defining what sources could be consulted and what information is required.
- ✓ Facilities, such as internet links, will be used to simplify the exchange of data and information. E.g. link to Bonn Agreement web-site and national web-sites in order to be informed on actual accidents or annual reports.