Baltic Sea Parliamentary Conference
Working Group on Integrated Maritime Policy

To:
Representatives of Parliaments,
Parliamentary Assemblies,
Institutions and Working Group Members
of the Baltic Sea Parliamentary Conference

15th December 2010

Abstract of the 4th Session of the Working Group "Integrated Maritime Policy, especially infrastructure and logistics" in Tallinn on 23rd November 2010

The 4th Meeting of the Working Group "Integrated Maritime Policy, especially infrastructure and logistics" was held in Tallinn under the chairmanship of Mr Jochen Schulte (State Parliament Mecklenburg-Western Pomerania, Germany) in the premises of the Riigikogu on 23rd November 2010. 26 representatives from 15 parliaments and parliamentary assemblies as well as 5 experts attended the meeting.

In the **first segment** of the session representatives from Lloyd's Register in Hamburg, the Hamburgische Schiffbau-Versuchsanstalt (HSVA), the Danish Maritime Authority, the Estonian Maritime Administration (Vessel Traffic Services Centre) and from the Finnish Transport Agency (on behalf of HELCOM) informed the participants about options for the reduction of emissions from maritime shipping (low-emission propulsion systems and ship operation technologies, treatment of exhaust gases, ship building and refitting with regard to the current state of research and perspectives in the ship-building sector as well as setting up an LNG infrastructure in the Baltic Sea region), maritime shipping in ice conditions and maritime vessel and traffic monitoring.

Ms **Ramona Zettelmaier** (Lloyd's Register, Hamburg) outlined the legal framework on the international level and the timeline for the reduction of SOx-, NOx- and CO_2-emissions. She reported that on the basis of Annex VI of the MARPOL convention the NOx Emission Control Areas (NECAs) were obliged to reduce emissions considerably from 2016 in order to comply with the applicable emission standard fixed in TIER III. As a consequence a fundamental change to the marine propulsion and operation technologies in the NECAs was required. From 2015 this was also applicable to the SOx-Emission Control Areas (SECAs) since also the gradual reduction of the sulphur content in marine fuels to 0.1 % had an enormous impact on the ship operation technology. Subsequently she illustrated the change of the fuels used during the past 30 years which was primarily due to the tightening of environmental regulations. Today mainly middle distillates were used and had been reference fuels for the MARPOL convention

since 2008. Taking account of the respective fuel regulations of the different sea areas, the vessels were equipped with different fuel tanks. This made them less cost-effective. A solution might be on the one hand combining the use of middle distillates and the application of exhaust gas treatment (scrubbing) in order to reduce SOx-emissions and on the other hand modernising the propulsion technology so as to reduce NOx-emissions (new injection technologies, application of water-fuel emulsions). According to her new vessels could be run with LNG and could keep all emission standards without any problems; but there was still a huge number of vessels with “antiquated technology“. In addition, the use of LNG required special safety engineering. Ship operation had to be both profitable and environmentally compatible. Technology had to be functional, reliable, durable and easy to handle. Against this background she claimed that firstly there should be one consistent and proportionate Port State Control worldwide and that the ports should have sufficient reception facilities in order to prevent distortion of competition; secondly she claimed a certification of bunker suppliers; thirdly there should be standardised criteria for exhaust gas treatment; fourthly and finally Ms Zettelmaier claimed that research in the use of alternative fuels had to be intensified.

Mr **Jürgen Friesch** (Hamburgische Schiffsbau-Versuchsanstalt GmbH, HSVA) illustrated the possibilities of hydrodynamic optimisation of ships and ship propulsion systems with the aim of reducing emissions. He pointed out that more than 95 % of the goods traded worldwide were transported by ship, primarily slow-going container ships and tankers. According to him their efficiency could be considerably improved by modifying the hull form (especially the length-width ratio), the machines and propulsion technologies as well. But this could only succeed if no standard ships designed on the drawing board were used; instead, ships had to be designed for their main intended use. A modified length-width ratio while retaining the same tonnage and speed could save 25 % of the energy. Already a reduction of speed of 10 % could reduce energy consumption by 40 %. Yet there were limits depending on the ship-specific operating range and speed range which themselves were related to the width, length, hull form, and draught of the ship as well as to the propeller type and the engine speed. He added that also the surface of the underwater hull played an important role. Water resistance could be reduced by up to 30 % by smoothing welding seams and using improved smoothed paints. Further ways of reducing water resistance were the use of new technologies like air injection at the bottom of the hull, a balanced and precise ballast distribution, the optimisation of the propeller design and the use of additional jets and fins. Further on he briefly referred to alternative propulsion technologies like fuel cells, nuclear power and the use of solar and wind energy, some of them to be used as add-ons (e.g. wind power). Closing his presentation, he claimed that in future political focus should particularly be put on technologies designed to reduce emissions, taking into account hydrodynamic aspects of ship design.

Mr **Mogens Schrøder Bech** (Danish Maritime Authority) presented the current status of the Liquid Natural Gas (LNG)-infrastructure in the North Sea, the English Channel and in the Baltic Sea region and outlined new perspectives for the use of LNG in maritime transport, based on a strategic discussion paper. In general, the use of LNG required the establishment of specific technical prerequisites. In addition, safety aspects both on the ships and in the ports had to be considered. Nevertheless he described LNG as a competitive marine fuel – particularly in view of the Emission Control Areas (ECAs) – which currently was available on the global market at

lower price than distillates. Further he pointed out that if potential LNG suppliers were expected to invest in port infrastructure, political intervention by the states and economic incentives were required. Only then consumers were ready to use this environmentally friendly fuel which caused neither SOx nor particulate emissions and very low NOx emission. Further a network of LNG-filling stations as well as industrial standards (and public regulations if necessary) was required as supporting framework conditions. He recommended carrying out a feasibility study for the Baltic region, to serve as a basis of decision-making both for politics and industry. In order to promote the use and acceptance of LNG, he continued, it was vital to use the latest technologies (new engines or retrofitting), to increase the number of filling stations (both stationary and mobile) and integrate them into the supply network, starting with the existing regular service. At present Norway was the only country in northern Europe disposing of an adequate LNG-supply structure. The only LNG-terminal currently being planned in the Baltic region was Szczecin. Norway and Denmark were partners in a pilot project which investigated until the end of 2012 the feasibility of the use of LNG in the Baltic region. He concluded that ECA provisions set the competitiveness of Short Sea Shipping under pressure. Action had to be taken to avoid a modal back shift from water to road transport. New technologies of Green Shipping had to be introduced.

Mr **Are Piel** (Vessel Traffic Services Centre, Estonian Maritime Administration) illustrated "Examples for a harmonised and overall supervision of sea transport in the Baltic Sea region", using the Gulf of Finland as an example. He started his presentation by outlining the hydrographical and morphological characteristics of this sea area which had a high traffic density due to tankers going from and to Russia, ferry and cruise traffic. In addition the North Stream gas pipeline was being built, and more than 100 days per year maritime traffic had to cope with ice. He continued, the risk potential for the region was ever increasing due to increasing oil and freight transports on ever growing vessels. Based on the HELCOM Copenhagen Declaration of 2001, Russia, Finland and Estonia had agreed to create a common and binding traffic management and monitoring system with the aim of enhancing safety. VTS (Vessel Traffic Service) was mainly radar-based and offered traffic guidance services; GOFREP (Gulf of Finland Reporting System) was AIS-based and managed the standardised cross-border surveillance of maritime traffic. But the system could not be applied for international waters to the desired extend, he added, since to date competencies were not clarified and transmission processes were not consistent. Information referring to the name, position, speed and course of the ship were given as so-called short reports or full reports, respectively, to the respective coastal station. Sometimes reporting was very labour- and time-intensive for the shipmasters; e.g. on a trip from the Mediterranean to the Gulf of Finland a vessel had to give eleven reports to the coastal stations altogether. Against this background the Safe Sea Net was applied, a network which interlinked databases of different systems and nations provided users with the requested data. In addition a Single Window facility was used which provided national regulatory documents for customs, Port State Control, weather services etc. at one single location. He continued that from the side of the European Commission a common communication platform entitled "MARSUNO – Maritime Surveillance North" was planned, aiming at the reduction of administrative effort of cross-border maritime traffic, providing traffic information and appropriate instruments for pollution control and identifying rescue efforts and fisheries control.

Mr **Ilmari Aro** (Finnish Transport Agency - FTA, on behalf of HELCOM) informed the participants about the special conditions and requirements of maritime shipping in the Baltic region in ice conditions. He explained that during an average winter FTA-icebreakers had to keep approx. 800 km of iced sea routes navigable for maritime traffic (pre-defined routes along the coastline). It was the goal to achieve a maximum waiting time of four hours for the vessels and enable them to cruise at a speed of 10 knots. In winter 2009/2010 almost 8,000 vessels in the Baltic had received assistance by the FTA, nearly 3,000 of them in the Gulf of Finland, he continued. Due to the limited amount of icebreakers the vessels had to manage up to 60 % of their ice trip alone. For this reason special requirements had to be fulfilled both regarding the vessels and the crew. According to him the main problems in ice conditions were sea spray icing, insufficient vessels and inadequate trained shipmasters. Finland had a fleet of nine icebreakers which was in a good state although some of them were more than 30 years old. Further he explained that for maritime shipping in ice conditions there were certain restrictions, classified according to the ice thickness (there were four classes: 10-15, 15-30, 30-50, and more than 50 cm). Only those vessels received assistance by icebreakers which corresponded to certain ice classes and dead weights. These restrictions were aimed to keep out unsuitable vessels in winter. Thus safety of navigation and continuity of winter traffic should be guaranteed. The Baltic Icebreaker Meeting (BIM), he continued, was a common information platform for the Baltic region which was running by all countries bordering the Baltic Sea (except Lithuania). It also had an interface with the HELCOM database. This year Finland and Sweden had concluded a separate co-operation agreement for the Gulf of Bothnia and the Åland Sea area. Last winter Finland had spent 38.5 million euros on icebreaking, 10 million out of that for fuel.

The presentations are available on the following BSPC website:
http://www.bspc.net/page/show/217 (Folder: Related Information; sub: Background Documents).

In the **second segment** of the session Mr Roger Jansson (Ålands Lagting) was appointed vice-chairman of the working group, succeeding Ms Grönfeldt Bergman who retired from the Swedish parliament in September 2010.

Regarding remaining topics and open tasks the chairman explained the fields of activity which should be worked on in more detail by the working group. He reflected the decisions of the 19th BSPC in Mariehamn and proposals of Members of Parliament. The participants decided not to follow the Mariehamn proposal of Anita Brodén to discuss the matter of insufficient wastewater treatment in the Baltic Sea region because this had been a genuine HELCOM task for years, mainly in the framework and implementation of the Baltic Sea Action Plan. The members asked Mr Widberg to invite – in agreement with the chair of the BSPC Standing Committee, Ms Gestrin – the Executive Secretary of HELCOM, Ms Anne Christine Brusendorff, as an expert for the next session of the Enlarged Standing Committee on 2nd February 2011 in Brussels to discuss this matter.

As an outcome of the discussions the participants agreed on the continuation of the working plan for the next year until the 20th BSPC. The 5th session will be held in Stockholm, Sweden, on 24th March, focusing on ways for improving competitiveness in the maritime sector and on maritime spatial planning. The 6th and final session will take place in Schwerin, Germany, from

19th to 21st June 2011 with the main focus on the infrastructure of ports, including technical challenges of cruise tourism, the discussion of political recommendations and the report of the working group for the 20th BSPC in Helsinki in 2011.

In this context the participants decided to elaborate first recommendations for discussion by the 5th session in Stockholm in order to submit key points for the Enlarged Standing Committee's consultations in May 2011. Last recommendations should be added to the draft resolution subsequent to the final session by end of June 2011.

The meeting gave the chairman and the vice-chairman the mandate as political representatives of the BSPC-Working Group on Integrated Maritime Policy for the European Maritime Day on 20th May 2011 in Gdansk. The European Commission would like to present a tripartite event of maritime actors from the CBSS, BSSSC and the BSPC which will be prepared by Germany.

Further the working group agreed not to generally formulate recommendations for the resolution as brief and precise political demands; in some cases it might be useful to include also technical details in order to keep the resolution understandable.

Finally the participants decided to create a directory of all working group members based on a standard form which will be distributed to the parliamentary secretariats by e-mail.

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Chairman

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