

Ship originated air emissions, solid waste and wastewaters

- a Feasibility Study of the New Hansa Project

Summary

The drainage area of the Baltic Sea is densely populated with heavy urban, industrial and agricultural centres having vivid traffic from and to the Baltic Sea Region. This causes heavy environmental loading and environmental problems in the Baltic coastal and sea areas. The Baltic Sea is an extremely sensitive shallow brackish water basin with unique coastal regions and archipelagos, which exacerbates the effects of the environmental loading. Therefore, the environmental management following the principles of sustainable development is crucial for the successful regional development of the Baltic Sea area.

Marine transport traffic is increasing in the Baltic Sea, thus increasing concerns over ship-generated atmospheric emissions, solid waste and wastewater management. Management of environmental issues in international shipping is regulated by international conventions by International Maritime Organization (IMO) and within the Baltic Sea by the European Union (EU) and the Helsinki Commission (HELCOM). However, a need to develop more sustainable port policies for the Baltic ports has emerged among the Baltic cities, the aim being the developing of successful methods and improvement of the environmental management and co-operation between ports, cities and shipping companies in the Baltic Sea Region. From this starting point, the New Hansa of Sustainable Ports and Cities -project was introduced.

The project aimed at developing ports (practices and policies) as parts of sustainable transport corridors for improved spatial integration in the Baltic Sea Region. This will be achieved by harmonising a number of environmental management practices with regard to ships in ports and by speeding up the implementation of sustainable port policies in all main ports of the Baltic Sea Region. The problems addressed have economic, social and environmental aspects as well as considerable territorial impacts calling for integrated solutions. These solutions necessarily need to be developed in strong co-operation of ports, port cities and stakeholders on all sides of the Baltic Sea. Specifically, the project concentrated on harmonising and strengthening the policies and practices to reduce air emissions, wastewater discharges and solid waste generation and to improve reception practices of ship-generated wastes at ports.

The project included a feasibility study that comprises basic information about the emissions of shipping, their effects on ports' operating methods and spatial planning and recommendations for ports and ship operators in form of best practises and harmonization proposals. The results and recommendations of this study have been taken into account when the joint policy document - Baltic

Memorandum of understanding on sustainable port and maritime policy in the Baltic Sea Region- has been written. This study is part financed by the European Union (European Regional Development Fund) within the BSR INTERREG III B programme and within the project "New Hansa of Sustainable Ports and Cities".

The conclusions and recommendations of the feasibility study are based mainly on the data collected from project partners and the topics discussed in project meetings and visits. Following are the recommendations for ports to improve and harmonize the environmental management of ship-generated atmospheric emissions, waste and waste waters:

1. Introduction of economic incentives and co-operation between ports in developing them
2. Introduction of shore-to-ship electricity wherever possible
3. Harmonization and improvement of waste collection and management in ports
4. Encouragement to discharge sewage ashore to prevent the discharges on the open sea
5. The active promotion of the environmentally sustainable best practices (promoting the sustainable development as a competitive advantage, co-operation with the stakeholders)
6. Gaining the knowledge about ambient environment for harmonization of the
7. environmental management of the ports in the Baltic Sea region.