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Abstract

More than 300,000,000 tons of dangerous goods are transported in the Baltic Sea Region (BSR) annually. In spite of formal implementation there are still substantial differences in operational practices between stakeholders and authorities involved in the dangerous goods (DG) transport. The need to improve the exchange of information between DG authorities and commercial actors, and to coordinate DG processes in the whole BSR is imminent. Seaports are important links of DG logistics in the Baltic Sea Region since the majority of export and import is transported by sea. The increasing cargo flow in past years has also set new demands for capable information management. Efficient IT Systems and proactive IT development are crucial elements to meet the requirements of safe and reliable transport flows. This study examined and evaluated the current status of used port IT Systems in six Baltic Sea countries.

The starting point for this study is that very little information about the port IT Systems already in use in Baltic Sea area is available. Some ports, especially in liner traffic, co-operate with each other, but IT Systems are mainly country-specific and/or developed inside each port. First, this study aims to list ICT Systems for handling of DG in target ports. The objective is to analyse the level of integration of IT systems in port operations and the technical characteristics of the IT systems. Second, the identified systems in the Baltic Sea region are compared against "optimal" criteria of a fictional IT System for controlling and surveying DG flows.

A selection of case ports were studied in more detail: Helsinki, Tallinn, Riga, Klaipeda, Hamburg and Stockholm. In addition to literature research, data gathering involved visits to the selected ports and interviews with users and system maintenance staff. The site visits took place in 2006 and 2007.

Among the key results was the finding that the systems are fragmented, and the level of system development differs very much in each country or port. The concrete level of co-operation between BSR ports in ICT Systems and ICT infrastructure is very low. The European platform for maritime data exchange: SafeSeaNet, is going to be mandatory centralized database for DG-cargo information in next few years. Not many of the studied port IT Systems were compatible to meet the SSN requirements and the prevailing atmosphere was that larger IT projects were put on hold until the European Commission finalizes the regulations concerning SSN.

Key words	Dangerous goods , Baltic Sea region, ICT systems, port operations, cargo handling
Further information	