



Dry Ports as an integral part of the Logistics Hub structure

StratMoS Leaflet

Some of the key findings of StratMoS Work Package C “MoS Development in Hubs and Hinterland” have been achieved through studies of the Dry Port concept and via the produced report “The Dry Port – Concepts and Perspectives”. When the StratMoS project started primo 2008 the Dry Port concept was still in a developing phase and at that time hardly recognizable in national and EU policies on intermodal transportation. Now, spring 2011 red., the Dry Port concept is much more integrated and reflected in both national and EU policies on transportation. One of the most recognizable indications of this visualization of the concept is given by the European Motorways of the Sea Coordinator

Luis Valente de Oliveira in his annual activity report on Motorways of the Sea. In this report he emphasizes that “Investment in Dry Ports close to great consumption centres is important to ensure the use of maritime ports, provided that proper inland connections (preferably railways or waterways) exist between both of them”. During the StratMoS project period the emphasized focus on Dry Ports has resulted in a number of interesting and prosperous findings, which have build the foundation for further integration and implementation of the Dry Port concept, thus enhancing the focus on environmentally friendly intermodal transport solutions connecting ports with their hinterland.



Author: Michael Stie Laugesen

Institution: FDT – Association of Danish Transport and Logistics Centres



Investing in the Future by working together for
a sustainable and competitive region



Background and challenges

Efficient logistics systems for transportation of goods are vital keystones in the continuous economic development of the European markets. A well functioning transport system, which manages to include economical, social and environmental perspectives in its structure, is on the right track for creating high productivity, employment and sustainable development. The Dry Port concept is a step stone towards such development and can if managed correctly lead to benefits on multiple levels within the transport industry.

In order to fully understand the Dry Port concept a clear definition is necessary. The essence of the concept can be caught through the following definition:

A Dry Port is an intermodal terminal situated in the hinterland servicing a region connected with one or several ports by rail and/or road transport and is offering specialised services between the Dry Port and the overseas destinations. Normally the Dry Port is container-oriented and supplies all logistics facilities, which are needed for shipping and forwarding agents in a port.

Though many different definitions on Dry Ports are available from various reports and studies, the above one encapsulates the idea of the concept in the way it is understood by the StratMoS partners. A clear definition of the Dry Port concept is an important starting point for integrating Dry Ports further into MoS solutions.

Motorways of the Sea (MoS) is by the European Commission seen as one of the most important means for reducing the overall amount of road transportation and leading to sustainable and more efficient transport chains, where sea based transports as effectively as possible are combined with rail and inland waterway transportation. However, in order to be competitive with the road transport, MoS services must be highly efficient and just as reliable as the road alternative. The qualities of MoS services can be improved by developing and making hinterland terminals into Dry Ports, which then can exist as supplements for the port, in the way that some of the functions of the port can be outsourced to the Dry Ports. Hereby the ports can be relieved from functions like storing of containers, sorting of containers, customs clearance procedures, maintenance of equipment, etc.

Objectives

The objective for the Dry Port studies in Work Package C has been to define the concept of the Dry Port, thus describing important aspects of the Dry Port implementation including analyses of ways to make Dry Ports an integral part of the Motorways of the Sea and the corresponding logistics chains. More precisely, this has been done through a number of activities, which included:

- Overview of the features of a Dry Port;
- Insight into possibilities and problems for Dry Port realisation;
- Consideration of options for Dry Port funding and management;
- Communication between Dry Ports and other actors in the logistics chain;
- Description of various ICT technologies for Dry Port management;

Work processes

The work processes for undertaking the Dry Port studies have been based on a number of different methodologies. Firstly, previously made research on Dry Ports and similar inland terminals have been studied and analysed. Secondly, a survey carried out by FDT and cooperating StratMoS partners has given comprehensive inputs to the report. Thirdly, a number of examples from other regions in Europe have been chosen and analysed as best practice examples. To the latter a detailed questionnaire was sent to determine the functions of those Dry Ports in the transport systems, thus revealing their advantages but also disadvantages. Finally a major workshop on Dry Ports, held in Hamburg in March 2009, was used as a source of information. The overall topic of the successful workshop was to discuss the ideas for creating better integration of Dry Ports into the Motorways of the Sea.



Description of results

In many cases the development of Dry Ports should not be planned as developments of completely new sites. Often a Dry port will be integrated as part of an already operating Logistics Centre/Logistics Platform, which enables the utilisation of the already available infrastructure and suprastructure. The main characteristics of a well planned and well functioning Dry Port are mentioned below:

- Is working as a supplement to one or many ports, thus enabling logistics functions and services to be moved/ outsourced from the port areas to the Dry Port.
- Is connected to efficient and adequate hinterland infrastructure on multiple modes
- Is equipped with modern suprastructure and compatible ICT systems, which can communicate with the many different port systems.
- Is located on a site with adequate space, also for future development possibilities.
- Is securing equal treatment of and open access for its users.

Based on the above Dry Ports can be significant facilitators of development of efficient MoS services, under the prerequisite that they are seen as an integral part of the MoS supply chain. The main benefits can be named as reduced transport expenses, increased hinterland space of the seaport, limitation of traffic bottlenecks and greater focus on sustainable transport solutions.

The implementation of a Dry Port can bring significant advantages, however the realisation of such terminals or their later exploitation may also be impeded by several major challenges.

First, Dry Ports requires are an extra transshipment point for the transportation of goods to and from the port. This means that additional costs for the total transport chain are increased. These additional costs include monetary costs (terminal handling charges) risk costs (damage on equipment) and time cost (extra time spent). Thus, the attractiveness of the Dry Port and intermodality can somehow decrease if these costs are assessed to be too high. On the other hand, some ports located in the city centres don't have extra space for port extensions, and could therefore gain both economic and time wise savings from a Dry Port.

Second, like for any other major investment, the lack or absence of investment sources

can appear as a significant impediment for Dry Port implementation. Concerning this point it is best if the Dry Port is organised as a Public-Private partnership structure. The public-private partnership is featured by greater flexibility and the reach of synergies from cooperation between those two sectors. Public organisations are usually aiming at development of a balanced economic and legal framework and can contribute with the land, while the private body can carry some of the risks, and still aim at a certain return on investment.

Third, local resistance may be influential on the development plans of a Dry Port site. Due to the increased risk of noises, smells and pollution from the traffic to and from the site, the local neighbours can oppose the placement of a site too close to the residential areas. Therefore as stated earlier, choose a site with potential development possibilities and adequate distance to residential areas.

Finally, some difficulties may be faced after the implementation of a Dry Port. For example, when a container is checked and sealed at a Dry Port, it should be checked again at the seaport, since the cargo may have changed (robbery, modification, etc.) during the transportation to the seaport. The issue of sealing containers is being dealt with in StratMoS Demonstration Project 4.

The appearing challenges should, however, not prevent those interested in planning and developing a Dry Port from doing so. Good communication and cooperation between different public and private bodies is necessary in order to enable effective solutions for the bottlenecks in the logistics chains.



Bringing the results forward

The Dry Port studies conducted in the StratMoS project have shown that Dry Ports in connection to the North Sea ports could prove to be vital nodal points for further Motorways of the Sea development. Special attention has been put on the testing of the Work Packages C studies in connection to a new Dry Port outside Aberdeen in Scotland, which is another of the StratMoS achievements.

For developing the Dry Port concept further in the North Sea Region a serious of planning and administrative issues should be taken into consideration:

- Reduction of administrative barriers by developing the single window/one stop shop concept, where ports and Dry Ports are organised as one administrative entity.
- Improve logistics capacity in ports through development of corridor infrastructure, shared IT supporting system, co-modality and cooperation along the supply chain.
- Plan for open and integrated logistics solutions which should be made available to all users of the Logistics Centres and their associated Dry Ports.
- Generate logistics synergies based on the local capacities and focus on the commodities that can create added value to the local area, thus playing the right role in the overall hub and spoke system.



Contact:

WP C Coordinator - Michael Stie Laugesen
FDT – Association of Danish Transport and Logistics Centres
Ved Stranden 22,
9000 Aalborg, Denmark
E-mail: mst@ntu.eu
Phone: +45 99 30 00 30

The StratMos Project

The full name of the project is “Strategic Demonstration Project for Motorways of the Sea”.

The name signals that the project seeks to be strategic and policy oriented, and at the same time seeking for concrete and tangible results.

The core aim and idea of the StratMoS project is to promote and facilitate shift of cargo from road to seabased intermodal transport as well as to improve accessibility within the North Sea Region by supporting the implementation of Motorway of the Sea (MoS) and related transport networks in an integrated logistical chain.

The StratMoS project is funded by EU and the Norwegian government through the Interreg IV B North Sea Region Programme. The project comprises for the time being 29 partners, covering the North Sea Region from Flanders in the south to Finnmark in Northern Norway in the north. The Murmansk, Arkhangelsk and Nenets regions in Russia are associated partners.

The StratMoS project was approved in December 2007, and the first formal International Management Group meeting was held in April 2008. It will end on 30 September 2011.

Reflecting the dual aspect of the project, the project comprises work packages that are policy and methodology oriented and demonstration projects which shall provide concrete and tangible results.

The StratMos Partners

- Rogaland County Council
- Vest-Agder County Council
- Telemark County Council
- Troms County Council
- Norwegian Coastal Authorities
- Hamburg State Ministry
- Hafen Hamburg Marketing
- Technical University Hamburg- Harburg
- Port of Amsterdam
- University of Hull
- Logistics Institute
- Aberdeenshire Council
- Aberdeen City Council
- Edinburgh Napier University
- Hordaland County Council
- Flemish Ministry of Mobility and Public Works