Chapter 20

Specialized Planning Issues

A Policy Perspective on Sea-Rail and Sea-River Connections

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Abstract

Currently most cargoes leave the terminal by road; in Europe, at least, this trend is not sustainable, and sea-rail and sea-river alternatives shall undertake more loads. The focus of this document lays in Europe, including policy and market trends in the European Union, however the problems and the potential solutions may have a global interest. In the text a thorough examination of policy developments in the fields of rail, inland waterways and intermodality is presented. Environmental issues are also discussed. The data from EUROSTAT is used as a basis for further analysis, where it is revealed that even if there is strong political support, it is questionable as to whether it is feasible to promote these links as soon as 2015 or even 2020. The concept of dry (inland) ports and their function in the canalization of cargoes is also analyzed in view of sea-rail and sea-river links. In the last section, all points are summarized and some recommendations are presented.

20.1 Introduction

A seaport is essentially a nodal point in logistics networks, acting as a link in a chain where cargo flows change mode or vehicle of transport. Seaports can only fulfil this nodal role if all modes of transport function optimally; they have a strong interest in efficient and sustainable maritime, road, rail and Inland Waterway Transport

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More and more competition between ports is apparent in the hinterland and the provision of inland access.\textsuperscript{1} Furthermore, arrangements such as of a Free Trade Zone (FTZ) and generally port clusters, where a ‘port cluster’ consists of all economic activities related to the arrival of ships and cargoes and located in the port region increase the economic significance of a port at national or regional level (see De Langen and Chouly (2004)), also attracting the special attention of transport planners, business decision-makers and finally of policy-makers.

Due to the central role of seaports in international supply chains, the issue of “port hinterland” is a task with prominent importance for ports themselves or their respective region, representing a big challenge for all involved players, as the complexity of arising problems is frequently huge.

Literally, hinterland refers to the land (but to what extend?) behind a city, a port complex, or a sea-land interface nodal point. Moreover, hinterland means the geographic area, where customers of the port are located, or more precisely the set of origin and destination locations that are logistically served through the specific port under normal circumstances. Fageda (2000) suggests the following definitions for the hinterland. It is

- the area where a port enjoys a monopolistic position, and
- the origin and destination area of a port, that is, the inner region provided by a port (see Fageda (2000)).

In summary, hinterland consists of the natural market reach of the port, \textit{i.e.} the areas from which cargo originates, as well as the areas where cargo moving through the port is destined. Some ports enjoy hinterlands that extend across many states and regions. Traffic in European seaports is growing at a fast pace, on average 4\% per year, for container traffic between 7\% and 15\% per year and a significant growth of inter-EU seaborne trade (see COM (2009a), p. 137–140).\textsuperscript{2} Some more detailed statistics suggest:

The table above clearly suggests that ports have globally experienced an annual increase of 8.3\%, in terms of TEU, a measure used for capacity in container transportation, throughput, while in the last five years the growth rate has been reduced to 5.5\% and in the last two reported years (2007 and 2008) to 3\%. However, statistics yield a decrease for European and American ports, whereas growth is substantial in Asia. A closer look at the statistics and the economic activity, suggests that this trend will keep up, as the Gross Domestic Product GDP and Industrial Production forecasts indicate a slow recovery of the EU, a rather more encouraging one for Japan and the USA and an impressive one for China, Japan and the newly industrialized countries of Asia:

From the same sources, one receives the information that the average industrial production has sharply fallen in 2008; in Eastern Europe (-10.97\%), in Brazil (-

\textsuperscript{1} Although this is a generally accepted point, an interesting paper of De Broge et al (2007) focusing on its modeling is recommended for further reading.

\textsuperscript{2} Most of the figures of this paper are based on EUROSTAT statistics. EUROSTAT is the Statistical Office of the European Communities situated in Luxembourg. Its task is to provide the European Union with statistics at European level that enable comparisons between countries and regions.