
The potential of intermodal terminals in Poland in the context of commercial exchange with China

Szymon Wiśniewski*^{†1}, Remigiusz Kozłowski*^{‡1}, and Łukasz Borowiecki*^{§1}

¹University of Łódź (UL) – Poland

Abstract

The aim of this presentation is to show research results devoted to the potential of intermodal terminals in Poland in the context of commercial exchange with China. Due to its geographical and geopolitical position as well as its place in the international transport network, Poland is a natural area in which different manipulation activities on commodities traded between China and Europe take place. Implementing an adequate policy of logistics infrastructure development nationwide will result in synergy effects the moment the commercial exchange with the countries of Eastern Europe is 'unblocked'. Some challenges in this respect include minimizing barriers (mainly infrastructure ones) where Polish and Eastern transport systems meet, maintaining the competitive edge with respect to terminals in Western Europe and preventing the drain which represents a threat to the Polish multimodal industry if there are new railway and road infrastructure connections of meridian character running through the eastern part of Poland.

As for the source materials, the analysis uses data concerning the parameters of Chinese container terminals, the distribution and loading and storing capacities of inland terminals in Poland, the characteristics of the transport network on the area in question as well as a group of other factors (such as administrative and legal barriers) which affect transport accessibility of the Polish handling infrastructure. The group of source materials also includes data on the volume of cargo directed from the European market to Central and Eastern Asia.

Both the tools of qualitative and quantitative analysis were used as research methods. For the purposes of research into accessibility the author used methods of isochrone accessibility, cumulative accessibility and accessibility expressed by means of infrastructure facilities. This allowed to define areas which are particularly predestined to intensive development of intermodal terminals as well as those which, despite their centrally conducted policy of transport infrastructure implementation, remain 'excluded' from key trade flows. The research proceedings were based on the tool of spatial information systems. In relation to qualitative research, the author used a query among organizations which deal with handling container traffic in Poland with reference to obtaining data on the volume, structure and directions of cargo flows. The research was extended to include in-depth interviews with the main intermodal operators which concerned investment activities in the long term.

The conducted research indicates a high potential of Poland's space in the context of the development of logistics infrastructure connected directly with handling trade with China. This potential results mostly from the location of the region. The area in question, however,

*Speaker

[†]Corresponding author: szymon.wisniewski@geo.uni.lodz.pl

[‡]Corresponding author: rjk5511@gmail.com

[§]Corresponding author: lsb.lsb.017@gmail.com

does not have the potential suited to possible cargo flows in the form of terminals handling the change in the means of transport which carries the container. Moreover, as it is largely indicated by the research of logistics operators, the system does not have points which make it possible to use multimodal solutions big enough for relations with China. A stable competitive advantage of the Polish handling offer should be constituted by the combination of unique conditions of transport accessibility of Poland with the offer of logistics centres which goes far beyond container handling. It is particularly attractive for the the Chinese investor to have a possibility of customizing the transported goods just before they are delivered to the end user. As this makes it possible to perform a considerably larger number of services related to the given product to the assembly facilities, and consequently increase the revenues.

Keywords: intermodal transport, logistics centre, transportation flows, Poland, China