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Mykola Kurhan

Dnipropetrovsk National University of Railway Transport

Roadway and track facilities Doctor of Engineering

Dmytro Kurhan

Dnipropetrovsk National University of Railway Transport ·

Roadway and track facilities Doctor of Engineering

Laura Černiauskaitė

Vilnius University of Applied Sciences

Use of Container and Piggyback Services in International Railway Traffic

Abstract

A modern cargo owner imposes rather strict requirements on transport services in terms of delivery time, cargo safety, quality of forwarding services. In the current conditions, it is necessary to explore the possibility of developing new additional types of carriage on rail transport, in close cooperation with the road transport. In the interaction of rail and road transport the reliability, speed and carrying capacity of the first one is combined with the flexibility and efficiency of the other. However, many issues within the framework of interaction between rail and road carriers still require scientific solutions – from the selection of criteria to a comprehensive assessment of the effectiveness of piggyback transportation. Principles of transport service quality management were formulated and evaluation criteria were determined. Piggyback traffic in the direction of Odessa-Klaipeda will allow Ukraine, Belarus and Lithuania to maintain roads, ensure purity of environment, make it possible to save fuel, as well as allow owners and carriers to significantly reduce operating costs and improve the quality of services provided. **Keywords:** railway transport, container services, piggyback services

References:

1. Kurhan, M., Kurhan, D.: The effectiveness evaluation of international railway transportation in the direction of “Ukraine – European Union”. In: Transport Means 2018, Proceedings of the 22nd International Scientific Conference, Trakai, Lithuania, 3–5 October 2018, Pt. I, pp. 145–150 (2018).
2. Tarapata, Z.: Modelling and analysis of transportation networks using complex networks: Poland case study. Arch. Transp. 36, 55–65 (2015).
3. Horvat, F., Fischer, S.: Magistrale for Europe. Közlekedésépítési Szemle **59**(5), 33–37 (2009).
4. Cerniauskaite, L., Sakalauskas, K., Massel, A.: European-standard railway line between Vilnius and Kaunas. In: The 7th International Conference on Environmental Engineering, pp. 1125–1129 (2008).
5. Vaičiūnas, G., Steišūnas, S.: Investigation of priority directions of Rail Baltica extension from Warsaw. Procedia Eng. **187**, 40–45 (2017).
6. Shevchenko, A., Matviienko, O., Lyuty, V., Manuylenko, V., Pavliuchenkov, M.: Ways of introduction of the high-speed movement of passenger trains in Ukraine. In: 7th International Scientific Conference “Reliability and Durability of Railway Transport Engineering Structures and Buildings” (Transbud-2018), MATEC Web of Conferences, vol. 230, p. 01014 (2018).
7. Kurhan, M.B., Kurhan, D.M.: Scientific-technical support of the railway Ukraine - European Union, Dnipro, Ukraine, 268 p (2018).
8. Viking Train. <http://www.vikingtrain.com>. Accessed 01 Mar 2019.
9. Government portal: Ukraine and Lithuania note the increase in commodity turnover and strengthen the logistics capabilities of the two countries. <https://www.kmu.gov.ua/ua/news/ukrayina-ta-litva-vidznachayut-zrostannya-tovaroobigu-ta-posilyuyut-logistichni-mozhlivosti-dvoh-krayin-zustrich-glav-uryadiv>.
10. International railway transit tariff (Tariff 8100). Official Edition of OSJD. http://osjd.org/dbmm/download?vp=51&load=y&col_id=2066&id=2910.

URL: https://link.springer.com/chapter/10.1007/978-3-030-38666-5_55