

## DETERMINATION OF BOTTLE-NECKS FOR THE BEOGRAD CENTAR-NOVI SAD-SUBOTICA RAILWAY THAT LED TO MODERNIZATION DEMAND

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Abstract – The railway line Belgrade Center - Novi Sad – Subotica is of great strategic significance, it connects 3 out of 5 biggest cities in Republic of Serbia, but it also represents a part of Paneuropean corridor X b and it's also a core part of European railway network (TEN-T). In this paper, the capacities of Belgrade Center - Novi Sad railway were determined. They were determined, by use of classic method for line capacity calculation, UIC method for line capacity calculation from the year 1979 (UIC 405-1) and the newest modification of UIC method, from 2013. (UIC 406) as well. Considering the results from the calculations and considering the results from the scientific work (Mandic, Todorovic 2009) bottle-necks for the Belgrade Center - Novi Sad – Subotica railway were defined. With the calculation of the line capacity between Beograd Centar and Novi Sad it was determinaded that the bottle neck between Stara Pazova and Indjija.Observing the whole section between Beograd Centar and Subotica, it was determined that the bottle neck between Backa Topola and Zednik.

Keywords - capacity, line capacity, capacity utilization, bottle-necks, railway

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