



## Realization of Sava River Crossing with its Approach Bridges as First Section of Belgrade Inner City Semi-Ring Road

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### Summary

The paper deals with the realization of Sava River Crossing with its approach bridges as first section of Belgrade Inner City Semi-Ring Road (ICSRR). The Sava River Crossing, as the first section of the Project named Belgrade Inner City Semi-Ring Road (ICSSR with overall length of 17,5 km), consists of the main bridge across Sava River and so-called South Approach Roads (SAR) and North Approach Roads (NAR). The Ada Bridge carries 6 lanes of vehicular traffic, 2 rail tracks for LRT (future Belgrade metro BGM) and 2 lanes of pedestrian/cycle-way. The bridge has total length of 967 m and 43500 m<sup>2</sup> bridge deck area. SAR contains altogether 22 bridges (viaducts and ramps) with overall length of 3350 m and 36700 m<sup>2</sup> bridge deck area. NAR contains altogether 19 bridges (viaducts and ramps) with overall length of 2830 m and 36300 m<sup>2</sup> bridge deck area. The new Sava River Crossing with its approach bridges is a major infrastructure project realized in Belgrade last years that significantly effects to the reduction of traffic jams of vehicular traffic in the city. Sava River crossing with its approach bridges was completed for roadway traffic by start 2014.

**Keywords:** bridge design; bridge construction; roadway bridges

### 1. Introduction

In order to reduce traffic congestion in Belgrade city and increase the capacity of the network, it was constructed Sava River Crossing with its approach bridges. The Sava River Crossing, as the first section of the Project named Belgrade Inner City Semi-Ring Road (with overall length of 17,5 km), consists of the main bridge across Sava River (Ada Bridge) and so-called South Approach Roads (SAR) and North Approach Roads (NAR). As a part of the planned Inner City Semi-Ring Road (ICSRR), the Sava River Crossing serves for the distribution of traffic flows between diametric peripheral city zones, and operationally connected to the city highway, it shall allow diversions of highway flows to the Inner City Semi-Ring Road and vice versa. The new Sava River Crossing significantly improves the link from the "old" Belgrade City (on the right bank) to New Belgrade (on the left bank). The new Sava River Crossing with its Approach Bridges is a major infrastructure project realized in Belgrade last years that significantly effects to the reduction of traffic jams of vehicular traffic in the city. The Sava River crossing with its approach bridges was completed for roadway traffic by start 2014. The LRT traffic will be firstly introduced by tramway, that it is planned for the next year, and later by BGM. The works according to rest NAR Lot 1 is planned for autumn 2014-2015. The whole Project was financed by EBRD & EIB loans and partly by the client - City of Belgrade.

### 2. Project of Inner City Semi-Ring Road (ICSRR)

The new Sava Bridge and approach roads will form the first stage of the first section of the Inner City Semi-Ring Road (ICSRR). Inside the continuously built Belgrade City area, according to General Plan of Belgrade until 2021, it is planned to form the Inner City Semi-Ring Road (ICSRR) around the wide central city zone that includes: old Belgrade centre, New Belgrade and centre of Zemun.