

# **RAILWAY BRIDGES UNDER VYŠEHRAĐ**

## **Verbal evaluation of Concepts**

### **CONCEPT NO. 10**

#### **TRANSPORT SOLUTION**

The design of platforms, platform edges and track layout of the Výtoň stop is with reservations, but it ensures the required transfer links and direct connection between the platform and the footbridge over the Vltava River. Bicycle transport is addressed less suitably. On Smíchov side there is no connection to A3 cycling path, on Výtoň side there are only elevators (cyclists' movement on the platform is prohibited).

#### **ARCHITECTURAL AND URBAN DESIGN**

The proposed design of the replica and the new structure is too historicising. The conceptually weaker design carries an internal contradiction in the justification of the proposed design, which is reflected in the other parameters. This Concept does not develop the area urbanistically and does not bring any significant improvement to the current situation.

#### **FUTURE OPERATION**

The contactless track design is not documented – in the design of the new bridge it would probably be necessary to implement a division into simple girders. Future maintenance of both the old and the new structure appears to be more challenging, and the robustness and safety of both structures in an emergency situation appears to be lower compared to the other Concepts. Preserving two-track traffic on the bridge replica and, conversely, proposing bicycle and pedestrian traffic on the new structure is disadvantageous.

#### **TECHNICAL PARAMETERS**

The use of a lattice arch with a suspended bridge deck is a rather inappropriate historical solution from a technical and structural point of view. Less suitable are also the proposed designs of different shapes and complex structural connections. The rails are placed on an orthotropic bridge deck. Another issue is the displayed dimensions of all elements.

#### **RESTRICTIONS DURING CONSTRUCTION**

These are independent structures in 2+1 track layout with zero-track traffic and time restrictions in the range of comparable designs of this layout.