# UVATERV

#### **BRIDGE AND STRUCTURAL DESIGN**

## MOTORWAY - BRIDGE OVER THE MURA RIVER

**Hungary-Croatien** 



Client:

Nemzeti Autópálya Rt., NIF Zrt.

Technical data:

Total length of the bridge: 216 m

Spans: 36 m + 3x48 m + 36 m

Width of the bridge: 1,47 + 12,5 + 0,6 + 0,8 m gap +

+0.6 + 12.5 + 1.47 = 29.94 m.

**Design period: 2002 - 2009** 

Execution period: 2007 - 2008

#### Consultancy services provided:

Design for Approval
Execution designs
Technical supervision
As-built Design, Instructions for the Operator

**Bridge structure:** steel structured bridge acting with 1-1 rc plate by road carriageway, with 2-2 steel boxes by bridge.

#### Special features of the bridge:

- The designs were elaborated by UVATERV according to the Hungarian standards, the bridge was constructed by Croatian contractors.
- The substructures of the bridge are supported by vertical and inclined driven rc piles, prefabricated with centrifugal technology.
- The innovative structure of the rc deck slab and the method of its dimensioning allowed to omit completely the relocation/moving of the supports and the prestressings, time- and work consuming activities.
  - The deck slab was concreted without application of interim temporary supports. The deck slab was concreted without the application of interim temporary supports.
- The contractor mounted the steel main girders on the riverside and launched them to the final place in longitudinal direction, by means of temporary pylons mounted on the top of the superstructure, without using temporary supports.



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Longitudinal launching in 2008, form paneling of the rc deck slab of the other bridge