



**Ministry of the Sea,
Transport and
Infrastructure**



Completion of the Motorway on Corridor Vc

July 2018

Corridor Vc



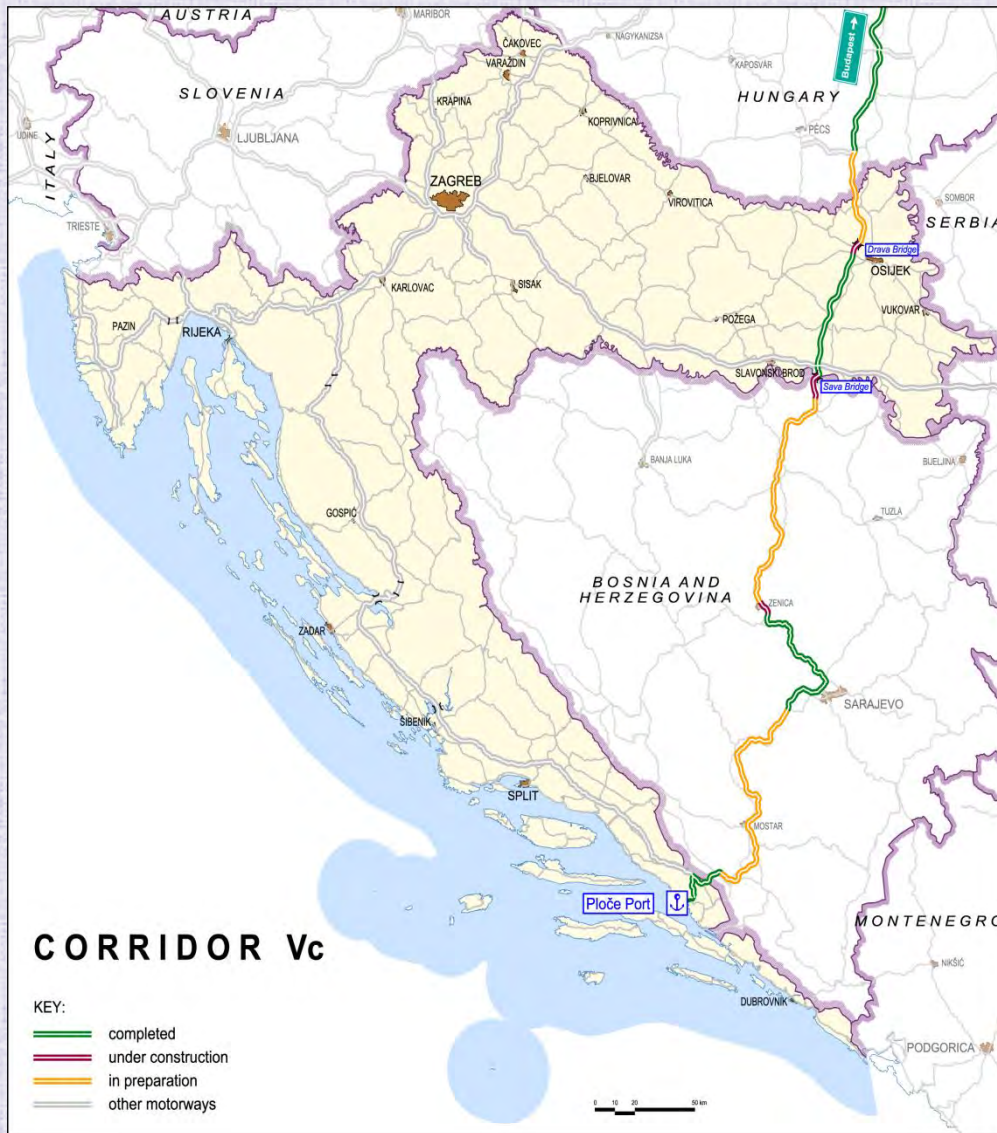
Pan-European corridor Vc is part of the European corridor network as it was agreed in the European Conference of Ministers of Transport in Helsinki in 1997. It is a branch of the fifth transport corridor which links the Budapest gateway with the Adriatic area.

Corridor Vc starts in the north near Budapest and runs through the Republic of Hungary to the border with the Republic of Croatia. In the territory of the Republic of Croatia it runs in the north-south direction in the vicinity of Beli Manastir, Osijek, Đakovo and all the way to the border with Bosnia and Herzegovina. At Sredanci, the route intersects the pan-European corridor X and thus makes a link between north-south and east-west directions.

In the territory of Bosnia and Herzegovina it also runs in the north-south direction, passes by Sarajevo and goes on to the border with the Republic of Croatia, or more precisely to Ploče port on the Adriatic.

With the development of European transport network and a new distribution into 9 main routes, corridor Vc became part of the comprehensive TEN-T network.

Construction of the entire Vc corridor will significantly impact the economic growth of the areas through which it passes, and in terms of traffic it will increase comfort of travel, shorten the journey time and contribute to greater traffic safety.



Corridor completion status

In the area of the Republic of Hungary motorway M6 was built from Budapest to Boly, and there still remains to build a 20 km long section between Boly and the border with the Republic of Croatia.

In the area of the Republic of Croatia the corridor is divided into two segments:

- the northern one from the border with Hungary to the border with Bosnia and Herzegovina which constitutes A5 motorway
- the southern one from the border with Bosnia and Herzegovina to Ploče seaport which is covered by motorways A1, A10 and the state road DC425.

The southern part of the corridor, Bosnia and Herzegovina border to Ploče, is fully completed and opened to traffic as of November 2017, when the last section of the Ploče Gateway was built. Total investment value of southern part of corridor is €275.5 million.

Motorway A5

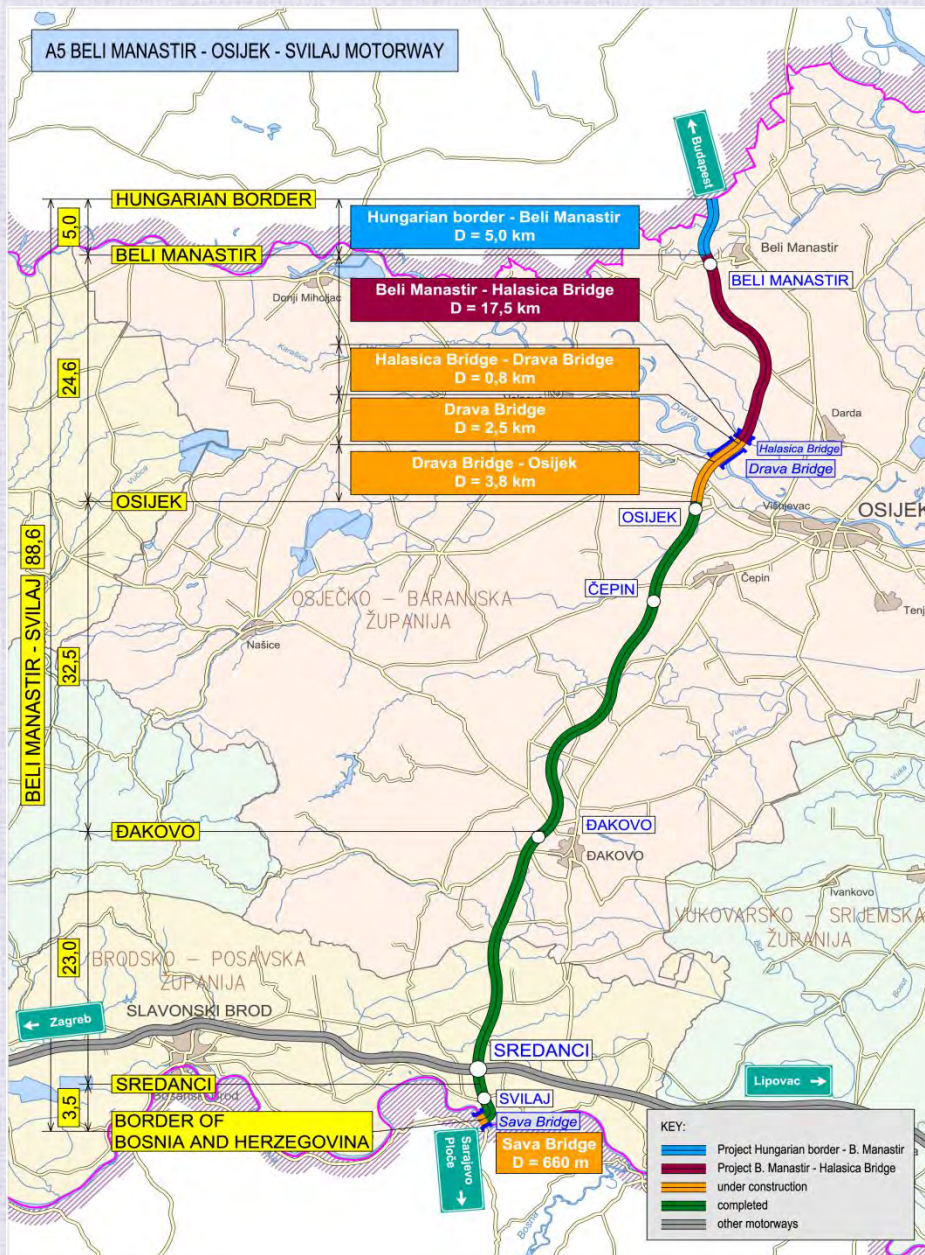
In the northern part of Vc corridor passing through the territory of the Republic of Croatia there is A5 motorway Beli Manastir – Osijek – Svilaj which runs from the border with the Republic of Hungary to the border with Bosnia and Herzegovina. In the transport network of the Republic of Croatia this road represents a mainstay of the east part of the country and links the Osijek and Baranya County with the Corridor X i.e. motorway Zagreb - Lipovac.

The 88.6 km long A5 motorway Beli Manastir - Osijek - Svilaj, has been split into the following sections:

- border with Hungary - Beli Manastir, 5.0 km long
- Beli Manastir – Osijek, 24.6 km long
- Osijek – Đakovo, 32.5 km long
- Đakovo – Sredanci, 23.0 km long
- Sredanci – border of Bosnia and Herzegovina, 3.5 km long.

The design speed of the motorway is 130 km/h. It was planned as a full scale motorway with two traffic lanes and one emergency lane for each way, separated with a central reserve.

The motorway corridor has been accepted in all spatial planning documents at the national, county and local levels. The environmental impact assessment has been carried out and the Decision on environmental acceptability of the project was passed.



Motorway A5 completion status

The status of works on A5 motorway with the investment values is as follows:

- **completed / in traffic**
 - Osijek – Đakovo section (as of 2009) (€281.9 million, HAC)
 - Đakovo – Sredanci section (as of 2007) (€184.4 million, HAC)
 - Sredanci – B&H border except for Sava Bridge (as of 2015) (€20.7 million, EIB/EBRD)
- **in construction**
 - Halasica Bridge – Osijek section (€160.7 million, KfW/EBRD)
 - Sava Bridge (€23.3 million, share RoC/B&H 50:50, RoC CEF/EIB)
- **tendered / or to be tendered**
 - Beli Manastir – Halasica Bridge, (€89.2 million, HAC/EIB/EBRD)
- **in preparation**
 - border with Hungary – Beli Manastir (€35.0 million)

Completion of the motorway towards Bosnia and Herzegovina

Sava Bridge

Sava Bridge near Svilaj is a continuation of the already built section Sredanci – Bosnia and Herzegovina border. In order to complete the southern portion of A5 motorway, a cross-border bridge is being constructed, the works on which started in September 2016. Croatian side has already built the motorway to the bridge while the works in Bosnia and Herzegovina on the border sections between the bridge and Odžak are in an advanced stage of completion and will be finished and opened to traffic once the bridge has been built.

Three traffic lanes for both traffic ways are planned on this 660 metres long bridge. The superstructure is a continuous beam over seven spans with double composite cross section consisting of a steel box and concrete bottom slab and steel deck slab. The superstructure openings are $70.0 + 85.0 + 100.0 + 130.0 + 100.0 + 85.0 + 70.0 = 640,0\text{m}$ between the abutment axes. The steel box has a variable height between 3300mm and 5500mm.

The total value of this investment is €23.3 million and the Republic of Croatia finances €11.9 million (in line with the bilateral agreement, 50% is financed by Bosnia and Herzegovina). 50% of the total value of construction that is financed by Hrvatske Autoceste d.o.o., is covered by an EIB loan and a CEF fund grant. CEF grant amounts to 57.75% of all acceptable costs of the Croatia's investment share.

The completion of the bridge and the section in Bosnia and Herzegovina shall be by mid 2019.

Completion of the motorway towards Hungary

To complete the motorway to the Republic of Hungary it is necessary to build sections Beli Manastir – Osijek and the Republic of Hungary border – Beli Manastir.

Beli Manastir – Osijek Section

Since Beli Manastir – Osijek Section includes the most important infrastructure structure on the entire motorway, the Drava River Bridge, the section is divided into two subsections because of the varied construction schedule:

- Subsection Halasica Bridge – Osijek, l=7.1 km
- Subsection Beli Manastir – Halasica Bridge, l=17.5 km

Construction of subsection Halasica Bridge – Osijek started in 2011 with the construction of a 2,507 m long bridge over the Drava. The works on the bridge are completed and preparations for technical inspection are in progress. The works were financed out of a KfW bank loan. Simultaneously with the works on the bridge, the works on the 3,8 km long route towards the south from Drava Bridge to Osijek started as well as on the route towards the north in the length of 0,8 km. The completion is expected in the second half of 2018, when technical inspection will be conducted also for the Drava River Bridge. These works are financed out of an EBRD loan.

Construction of subsection Beli Manastir – Halasica Bridge is planned for the late 2018 with the construction of Halasica Bridge, overpasses and road crossings for which procurement procedure is in course. At the beginning of the third trimester a call for tenders will be launched for the remaining works on the subsection route.

In line with the Public Roads Construction and Maintenance Programme for the 2017 and 2020 period the planned time of completion is by the end of 2020.



Drava Bridge



Sava Bridge

Hungarian border - Beli Manastir Section (1/3)

General

The project route, 5 km long, runs through the territory of Osijek-Baranya County and constitutes a link with the planned M6 motorway in the Republic of Hungary.

The construction of the motorway between Hungarian border and Beli Manastir is the final phase of construction of motorway on Corridor Vc in Croatia. The main goal is to remove a bottleneck in the road traffic between Croatia and Hungary by ensuring functionality of the border road network and by connecting both parts of the Corridor Vc (the one in Croatia with the one in Hungary).

In line with the EU policy regarding strengthening the border collaboration between the neighboring countries in the region, it is important to note the importance of the regional border corridors between the EU and the non-EU countries. The uncompleted parts of the road network especially in the border zones are obstacles for the transport of cargo and passengers between the neighboring countries.

Furthermore, with the completion of the said project there will be more benefits for users in mobility, transport within the EU and in relation to the third countries.

Completion of this project will make:

- the travel route shorter,
- time of travel shorter,
- construction of the new road infrastructure

The said objectives are defined in Transport Development Strategy of Republic of Croatia for period 2017 - 2030.

Hungarian border - Beli Manastir Section (2/3)

Status of the project

The section is incorporated in spatial plans; the decision on environmental acceptability of the project has been issued and currently design-engineering elements of motorways in the Republic of Croatia and Hungary, at the point of connection are being adjusted together with the Hungarian side.

After adjustment, design documents will be further elaborated and building permit will be issued. Pursuant to the Public Roads Construction and Maintenance Programme for the 2017 – 2020 period, building permit shall be issued in early 2020.

Technical description

The route lies on low embankments except in the area of the railway crossing and a crossing over Karašica watercourse where a 300m long overpass is planned. In addition to the the mentioned overpass, two small bridges are planned over channels and two crossings for local roads.

Since the frontal toll gate Sudaraš is located on Beli Manastir – Osijek Section, motorway from Hungarian border to Beli Manastir is toll free.

The section will be built as a full scale motorway with two traffic lanes and one emergency lane for each way, separated with a central reserve.

Hungarian border - Beli Manastir Section (3/3)

Implementation plan

In accordance with the Public Roads Construction and Maintenance Programme for the 2017 – 2030 period, the construction shall start in late 2020. The scheduled time of completion is late 2023 which is in line with the schedule of construction of the remaining section in Hungary.

Investment value

Total investment value of the project is €35.0 million. To date, the costs for EIA and preliminary design were €0.4 million. The remaining costs of €34.6 million include:

- | | |
|--|---------------|
| • design documents | €0.9 million |
| • land acquisition and archeological works | €1.6 million |
| • construction with equipment | €31.2 million |
| • supervision | €0.9 million |

Project promotor

Hrvatske Autoceste (HAC) – Croatian Motorways

- a limited liability company with the registered seat in Zagreb operates, builds, reconstructs and maintains motorways
- operates motorways A1 (except Zagreb – Bosiljevo 2 sector), A3, A4, A5, A10 and A11 in a total length of 918,5 km

Owner

Republic of Croatia 100%

Revenues

Toll collection, fuel taxes, other revenues

Web

<http://hac.hr>

Organization, procedures and regulations (1/2)

Organizational Structure

- **Client** – Hrvatske Autoceste d.o.o. (Croatian Motorways Ltd.) – acquires land, organizes development of design documentation (services outsourced to specialized design consultants) including design documentation revisions, design approvals by competent bodies, permits, registration of construction sites etc. Organizes services of the independent supervisory team (also outsourced to outside expert companies)
- **Supervisory team** – fulfilment of legal requests defined by the Construction Act, Quality control. Lead supervising Engineer (team leader) usually has the role of an Engineer (FIDIC) with limitations regarding decision making, approval of additional and unforeseen works including approval of new unit rates (all defined in the Supervisory Services Contract and Particular Conditions of Works Contract)
- **Governing bodies** – Ministry of Construction and Physical Planning, public authorities – building permits, special conditions for construction, detailed design certification etc.
- **Designer** – preparation of all necessary studies, preliminary, detailed and implementation design, other technical documentation, preparation of tenders (technical part), and documentation necessary for issuing permits
- **Contractor** – construction works and/or utilities

Organization, procedures and regulations (2/2)

Procurement and Contracting

- **Procurement and contracting** – in accordance with the Public Procurement Act or lenders' rules (EBRD, EIB, World Bank etc.)
- **Tender documents for construction works/utilities** – based on previously completed preliminary or detailed design (BoQ, Technical description, scope of works, etc.)
- **Award criteria** – before 1 January 2017 – the lowest price among qualified tenderers, 1 January 2017 onwards – MEAT (Most economically advantageous tender) – in compliance with the EU directive 2014/24/EU
- **MEAT criteria** – usually overall price, warranty period
- **Forms of Contract** – FIDIC "red book" edition 1999, MDB Harmonized edition 2006

Thank you for your attention