

Huccorgne Viaduct: the rehabilitation of a major axis in Wallonia

The Huccorgne viaduct, located on the E42/E25 motorway between Liège and Namur, is a crucial part of the E42 motorway, linking the west and east of the Walloon region, across Belgium. With a total length of 547 metres and a height of 60 metres, the viaduct features two separate decks, each for one direction of traffic, and carries 60,000 vehicles daily. The comprehensive rehabilitation project was carried out by BESIX and its partner, on behalf of SOFICO and the Service Public de Wallonie Mobilité & Infrastructures, the entities responsible for the road network infrastructure in the Walloon Region. The rehabilitation has substantially been completed and the motorway fully reopened on Sunday 30 July 2023, slightly ahead of schedule, offering three lanes in both directions.

Rehabilitation in two parts

Originally built in the 1960s, the Huccorgne viaduct was in need of a comprehensive makeover. The works included a complete rehabilitation of the entire structure, including the replacement of the beams, the deck, and the support structure. New waterproofing, surfacing, and sound walls were also installed. This challenging renovation project has been the region's largest infrastructure project in recent years.

The rehabilitation started in August 2021 with preparatory works. In January 2022, renovation works began on the bridge supporting the lanes in the direction of Namur-Liège. This first half of the viaduct was completed and inaugurated by the Walloon authorities in July 2022. The opening of the lanes to traffic allowed the second part of the works to begin, in the direction of Liège-Namur.

Precise planning

Ensuring uninterrupted traffic was of utmost importance, as 60,000 vehicles cross the viaduct every day, making it a major challenge to minimise traffic disruption. In order to do so, BESIX's teams adhered to an extremely strict plan to keep two lanes open in each direction throughout the entire project. This was possible thanks to meticulous planning, communication, and collaboration among all partners.

"The project was extremely well-prepared, and there was excellent communication and collaboration with our client SOFICO and partners", says Jean-François Deswijnsen, Operations Manager Wallonia-Luxembourg. "This is essential for large infrastructure projects like this, where timing is tight and unforeseen challenges are inevitable. I would like to thank our partners, subcontractors, and suppliers for their contributions to the success of this project. We are proud to say that we even finished slightly ahead of schedule", he adds.

Heavy lifting

Another challenge was the removal and replacement of 36 concrete beams on both sides of the viaduct. With each beam measuring 30 metres long and weighing 60 tonnes, this manoeuvre was visually spectacular. The crane had to lift the beams up to 60 metres high, adding to the complexity of the manoeuvre.

This was a particularly impressive operation that, despite some windy weather, remained on schedule. "On windy days, the wind was monitored every hour to determine if it was safe to lift the beams. If the wind was too strong, work was postponed until the evening or night, so that the schedule could be maintained," states Jean-François Deswijnsen. Despite the challenges, the placement of the new beams was completed right on schedule in less than a month.

Safety and sustainability

The completion of the Huccorgne viaduct rehabilitation project is a major milestone for the road network in the Walloon Region. The project has significantly improved the safety and durability of the viaduct, and it will ensure that it continues to serve the travelling public for many years to come.

Project details

Huccorgne Viaduct

Location

E42/E25 motorway Liège-Namur, Belgium

Client

SOFICO & Service Public de Wallonie Mobilité & Infrastructures

Partner

Galère

Contract type

Build

Construction period

2021 - 2023

Contract value

€23 million



Planning and organisation were essential in this project, as traffic had to be maintained at all times. We proposed a plan that would minimise traffic disruption.

Jean-François Deswijnsen, Operations Manager Wallonia-Luxembourg

