

Rehabilitation and security of the N5/E420 Reconstruction of the Yves-Gomezée viaduct



On the N5/E420 highway, Yves-Gomezée (BE)

Complete mission of architecture and stability

Owner
SPW - DG01 - Direction des
Routes de Namur et Sofico

Architect
Bureau greisch

Cost of the works
€15 M excl. vat.

Studies
2017 - ongoing

Execution
Scheduled in 2026

OA



The Walloon Public Service (SPW) has initiated the replacement of the Yves-Gomezée viaduct on the basis of :

- the inspection campaign carried out by the Technical Expertise Department, Directorate of Structural Expertise, which highlighted the need for major work;
- the will of the SPW to add emergency lanes and to renew safety equipment as part of the N5/E420 rehabilitation and security project.

The new viaduct will consist of two independent decks each supporting two traffic lanes, an emergency lane and a service sidewalk. The spans are 40 meters wide for a total length of 259 meters.

Structurally, the decks consist of two metal girders and a reinforced concrete slab. There is a fixed connection between the piers and the deck to limit the number of supports and to install expansion joints on the abutments only, where they are easily inspected.

An important constraint is to maintain a traffic lane in each direction during the duration of the work. On the other hand, the shift of the road axis must be reduced to a minimum given the presence of dwellings in the valley and an overhead bridge at 60 meters from the south abutment, the opening of which does not have extra width.



The dismantling and reconstruction of the viaduct will be done in phases.

This requires the study of the existing structure and the establishment of temporary measures since the deck and the current beams are one piece across the width.