

Oosterweel – from an underground and even underwater road infrastructure plan to an urban transformation project

Luc Hellemans

CEO Lantis N.V., Antwerp, Belgium

Contact: luc.hellemans@lantis.be

Abstract

For the coming ten years, the heart of Europe will turn into a gigantic construction site for works on one of the largest hubs of the continent: Antwerp. The Oosterweel Link is the project whereby the motorway ring around Antwerp is undergoing a metamorphosis to reinvigorate traffic flow and add living space to the City. The project had come to a standstill for several years as a result of protests by assertive citizens, but was given a second lease of life following a large-scale participation project.

To ensure its successful completion, unparalleled efforts are being made in the field and in the area of digitization. It is therefore with good reason that in Belgium the project is referred to as “the construction site of the century”.

Keywords: tunnels, road infrastructure, urban development, environmental issues

1 The Oosterweel project renewal

1.1 Antwerp, a city of fashion, diamonds and traffic jams

With a population of more than 500,000, Antwerp is Belgium’s second largest city. The city is world famous not only for its fashion and diamonds, but also for the port of Antwerp. Following the recent merger with the port of Zeebrugge, it will be Europe’s second largest port in 2022. Moreover, the port of Antwerp is home to Europe’s largest chemical cluster and even the second largest cluster worldwide. It is no wonder then that hundreds of thousands of people come to work in and around the city.

Alongside the heavy local traffic of residents, commuters and recreational visitors, Antwerp also handles large volumes of transit traffic. The Antwerp ring road is, in fact, a major European traffic hub. Three of the nine European transit routes (TEN-T) run through Antwerp.

Antwerp’s central location and easy accessibility therefore represent a double-edged sword because the impact of the traffic is tremendous. In both national and international rankings, Antwerp is ranked as Belgium’s congestion capital.

1.2 Redesign necessary

Mobility in and around Antwerp is affected not only by the traffic intensity, but also by the road infrastructure itself. A total of 7 motorways connect to the ring road over a distance of less than 17 km. At some places, acceleration lanes were provided on the left-hand side. In addition, the ring road was never actually completed. As a result, few alternatives are available to avoid congestions. The Kennedy tunnel, the only toll-free Scheldt crossing, is unable to cope with the traffic flows.

At the end of the nineties, there was also a growing awareness that closing of the Ring was the only solution for managing the rising traffic volumes. In 2002, the Flemish Government created a separate entity for the realisation of the so-called “Antwerp