



EQUANS & BESIX UNITEC

Equans modernizes the Beverentunnel with digital automation and digital twin

Digital Twin /
Virtual
Modeling

PLCSim
Advanced

SIMATIC S7-
controllers

Customer Challenge

- The **Beverentunnel** (R2, Antwerp) is a major traffic artery handling millions of vehicles per year. It was in urgent need of complete renovation to meet modern **safety standards**, **energy efficiency**, and **sustainability** goals while minimizing disruption and future-proofing operations.

Solution

- Equans led the renovation's technical and automated control systems, incorporating a digital twin of the tunnel. This digital model enabled automated control, advanced visualization, simulation, and accelerated engineering — improving design, commissioning and operator training processes as part of the integrated renovation strategy.

Customer benefit

- **Greater safety & reliability:** Automated control and advanced modeling ensure safer traffic management and quicker response to incidents.
- **Faster renovation delivery:** Use of digital twin significantly accelerated renovation engineering and commissioning workflows.
- **Sustainability gains:** Modernized infrastructure, including energy-efficient systems and integrated automation, supports long-term operational efficiency and reduced environmental impact.

SIEMENS