NATIONAL RAILWAY COMPANY OF BELGIUM

TBOX
AN OVARRO TECHNOLOGY

THE CHALLENGE

Created in 1926, the National Company of Belgian Railways (Infrabel) operates a 3,536km network throughout Belgium. As the reputational damage caused by severe delays - or worse, rail accidents - are crippling for operators, it is increasingly important that operators adopt sophisticated monitoring and preventative maintenance systems to monitor the condition of their assets.

Switching facilities are located approximately 1km apart throughout the Infrabel railway network and each switching facility represents a potential weak point or opportunity for failure. Therefore, it was important for Infrabel to have a reliable method of collecting operational data from each switching facility to monitor its status and condition and to ensure that their switching facilities were safe, secure and operational.

THE SOLUTION

The contractor, Alstom, called on Ovarro to provide TBox MS RTUs: a market-leading modular remote control and automation unit for monitoring and control of:

- Signal status
- Building temperature and automated ventilation control
- Temperature history for ventilation efficiency monitoring
- Fire detection (some locations)
- Water level (some locations, particularly tunnels)

Communication is over a dual, fibre optic network, which follows the routing of the rail lines and connects the switching facilities. Fibre was selected due to its noise immunity, as the railway facilities are characterised by high electrical interference.

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TRANSPORT

MONITORING & CONTROL

RTU'S

OVARRO
CONNECTING TECHNOLOGIES

ABOUT TBOX

The wide operating temperature range makes the unit suitable for outdoor installation, rugged designs allow operation in locations with high electrical interference, IP/Web platform provides open comms over public networks, alarm management and data logging functions are integrated into the RTU and open programming tools adapt to the specific requirements of the end user.

"Ovarro's TBox devices are used throughout the world, in a wide variety of transport and infrastructure applications."

OPERATIONAL BENEFITS

By choosing the TBox MS, Infrabel obtained a number of operational benefits that optimised their network, combining to give Infrabel operational staff a real-time overview of the status and condition of every switching facility in their network.

These benefits are possible as a result of TBox MS features such as: PC based webpages that provide a view of all local HMI operations, data logging capabilities that enable the retention of historical data for each facility, an alarm system that detects and reports all alarm conditions and alarm management that escalates unacknowledged alarms while push technology ensures personnel are immediately notified of alarms and important events without the need for polluting the RTU.

KEY DELIVERABLES

- Infrastructure savings
- Reduced expenditure through preventative maintenance
- Improved safety
- Less delays and failure rates
- Reduce labour