

State-of-the-art VTS system at Zelzate Bridge, Belgium

Kornwestheim, August 2005 – in-innovative navigation GmbH delivers Radar Video Network and AIS integration necessary for modernisation of a VTS system, which is used to detect all vessel movements on the Ghent-Terneuzen Canal.



Figure 1: Zelzate Bridge over the Ghent canal, Belgium

In 2005, the Flemish Shipping Assistance Division of the Ministry of the Flemish Community selected Barco to install a state-of-the-art VTS system along the Ghent-Terneuzen canal. The system replaced a monitoring system at Zelzate Bridge, which was approaching end-of-life. Featuring the latest in VTS technology, the new control centre provides a detailed, integrated image of all ship movements on the canal, including the Port of Ghent.

The VTS system combines a suitable short-range radar unit, a complete radar video network for radar acquisition. It is based on the modular VTS components of in-innovative navigation GmbH RADARserver, RADARrecorder, RADARextractor, RADARtracker, RADARlib and the MultiSensorTracker fusing the target data of the Schelde-AIS-Network and a radar locally installed.



Figure 2: Radar scanner at Zelzate Bridge

Operators are presented with local radar data, additional external radar data from the “Schelderadarketen” (Scheldt Radar Chain) and information from the ships’ Automatic Identification Systems on a single ECDIS map. In addition, the system is able to show high-resolution raw radar video from the local radar on the ECDIS chart superimposed with synthetic track data, coming from the AIS network or radar extractor tracker.

Furthermore, the system features a built-in logging and replay functionality (RADARrecorder), which archives all system tracks and raw radar data for 10 days. The archived data can also be exported to a DVD for incident analysis.

All information is presented on two independent visualization units: one was installed in the operational room at Zelzate Bridge, the second one in the Port Commander’s Department of the Ghent Port Company.

Project summary

Time frame	May 2005-July 2005
Customer	Barco GmbH
Scope of delivery	RVN (Radar Video Network), radar recording and replay functionality, radar tracking for one radar scanner, integration of AIS information for two traffic centres