ENHANCED SUPERVISORY CONTROL FOR TRINITY HOUSE.

SCOPE
AN OVARRO TECHNOLOGY

BACKGROUND

Ovarro worked with Trinity House, the General Lighthouse and Deep Sea Pilotage Authority, to develop and deliver an enhanced supervisory control and data acquisition (SCADA) system enabling real-time visibility and control of the maritime navigational network. The latest system provided to Trinity House is an upgrade of the original Ovarro supplied SCOPE system that has provided Trinity House with excellent service for over 20 years.

Over 90% of goods entering the UK spend some of or their entire journey at sea and the requirement to supervise and manage marine traffic is becoming increasingly complex and automated. Trinity House delivers reliable and effective services for all mariners navigating its territories and chose Ovarro to develop a new system as part of their move to the Trinity Planning Centre in Harwich.

Ovarro developed the underlying supervisory control and data acquisition (SCADA) technologies that enable real-time visibility and control of the maritime navigational network. The enhanced system was installed in the new Planning Centre, which was opened by HRH The Princess Royal as part of the 500th anniversary of the Corporation's first Royal Charter.

THE SOLUTION

The Trinity House control room has been re-equipped and upgraded with Ovarro's SCOPE hardware and software systems that monitor and control a wide array of remote navigation and systems assets.

The technology provides the flexibility to add services, change configurations, alarm settings and live information displays using a familiar 'drag and drop' user interface.

TRANSPORT

SCADA

OVARRO
CONNECTING TECHNOLOGIES

Ovarro developed the enhanced system, based on its SCOPE Telemetry and SCADA product, which includes:

- SCOPE SCADA/telemetry COTS software
- Duty/standby hardware on physical servers located in Harwich and a third disaster recovery server based at Trinity House Headquarters in London
- Browser based telemetry interface
- Multi-year historical data store based on SCOPE's archiver product
- Telemetry interface to Ovarro's Seprol range of intelligent outstations
- Integration with Automatic Identification System (AIS) tracking. AIS supplies unique identification, position, course, and speed of traffic that can be overlaid on to SCOPE visualised screens to help monitor vessel movements against an inventory of navigational devices (buoys, light vessels and lighthouses)
- 24/7 software support contract

"We are very proud to have supported Trinity House on this important project. As an island nation the majority of us rely on Trinity House without really knowing who they are or what they do. To go behind the scenes and help build a system that will play a part of their next 500 years of service is a real honour."

SYSTEM OVERVIEW

Trinity House personnel have access to the system from workstations connected to their local area network; this access is dependant on configurable access privileges to ensure that the integrity and security of the system is maintained.

Data from navigation aids is collected via outstations and stored on the duty/ standby pair of data gatherer systems serviced by the SCOPE product.

The data gatherers provide the data collection services from approximately 350 marine navigation based sites and transfer this into the SCOPE real-time and historic databases.

The system is supported via Ovarro's dedicated Support team who provide Trinity House's operators with peace of mind 24-hours-a-day, 7-days-a-week.

The SCOPE family of modular components comprises of a sophisticated SCADA and telemetry engine, a fully customisable user interface, comprehensive configuration environment, sophisticated alarm management, historic data archiver and reporting toolset. Each of these elements has been engineered to interact seamlessly with each other and connect to external systems.

KEY DELIVERABLES

The upgraded SCOPE system provides Trinity House with substantial benefits:

- Integration with Automatic Identification System (AIS) tracking provides a single visual view of shipping traffic plotted against the actual position of navigational aids
- Web based client technology allows access from any of the configured users on the network. This includes access for engineering and configuration purposes
- The inherent ease of use of the browser based web client reduces the engineering effort on configuration/re-configuration and lowers training costs
- Real time telemetry and historical data is integrated in a single browser screen providing instant visual comparisons of live and past data allowing faster response to unusual conditions.