

Severn Vessel Traffic Services upgrade to VoIP for radio control

Manned by a team of professional Vessel Traffic Service Officers (VTSOs), Severn VTS offers an Information Service defined by the International Maritime Organisation as a 'service to mariners to ensure that essential information becomes available in time for on board decision making'.

In addition, Severn VTS provides a regional port information service by acting as the central coordinating point for all marine related matters, such as berthing information, port information, pilotage and ISPS security for all the ABP South Wales ports.

From its control room in Cardiff, Severn VTS has access to three transmitter/receiver sites at Swansea, Barry and Newport that all have the ability to communicate on approx ten of the VHF marine channels. At Swansea there is also a dedicated Channel 69 receive only station.

These four radio sites are linked back to the control room using a combination of microwave and dedicated landlines.

But the control room is where it all changes !

All the signals from the remote sites are converted into Voice over IP using Cyfas IP223 interfaces. The IP223 which can control two radios and was specifically designed for Radio to VoIP, also provides the IP to radio conversion for signals going back to the remote sites..These VoIP signals are then available on a small dedicated IP network around the control room.

Severn VTS had selected the Cyfas IP based C-Soft touch screen based dispatcher software for the two control positions within the control tower as it is a very flexible user configurable touch screen based dispatcher application that provided Severn VTS with the reliability and flexibility that they required in a dispatcher terminal providing site and channel selection. Both operators run independently of each other and therefore present a very resilient solution.

The C-soft application runs on a standard PC with (or without) touchscreen and a Headset interface box interfaces the users handset, desk mics or headset with the PC sound card.

If IP connectivity was available at the remote radio sites VoIP control could have extended right out to the site.

The Severn VTS control room radio system upgrade project was a collaboration of three Companies Transas Marine delivered the overall concept, Smye Rumsby provided the system design and installation and Cyfas systems provided the C-Soft application, configuration and IP223 interfaces.

Since the implementation at Severn VTS further developments of the solution include the ability to integrate telephony.

