



New full-fibre network enhances life-saving operations around the UK's coastline

The Maritime and Coastguard Agency (MCA) is tasked with preventing loss of life on the coast and at sea, and is an Executive Agency of the Department for Transport. The MCA produces legislation and guidance on maritime matters and provides certification to ships and seafarers. As part of MCA, His Majesty's Coastguard provides the frontline emergency response for thousands of incidents every year, including 24-hour search and rescue services around the UK's coast.

To support His Majesty's Coastguard to carry out its life-saving tasks effectively and provide the public with the reassurance that they can respond to any emergency, the MCA required a new national communication network to connect 163 remote radio sites spanning across 11,000 miles of UK coastline. The MCA's £175 million investment in the Radio Network Infrastructure Replacement Programme (RNIR) included a replacement of its legacy network. In turn, distress calls from maritime users, seafarers and fishing fleets can be received and responded to, as well as search and rescue operations coordinated.

Coast-to-coast connectivity

In July 2020, Telent secured a new ten-year contract with the MCA to design, build and operate an upgraded mission-critical communications network for HM Coastguard. The new network, which combines full-fibre and microwave technology, was set to replace the aging copper infrastructure. The upgrade to a fibre network enables the transmission of large amounts of data, including voice and video communications over long distances.

Client



Maritime & Coastguard Agency

"The national radio network is integral in supporting our mission of preventing the loss of life on the coast and at sea, enhancing our ability to respond to emergencies across the UK."

- Matthew Leat, HM Coastguard Assistant Chief Coastguard

This upgrade would enhance connectivity for the 163 remote radio sites to ensure that distress calls from the UK's waters could continue to be received and to transmit communications between the national data centres, 10 HM Coastguard Operation Centres and the vessels at sea. The upgraded full-fibre connectivity was set to deliver improvements, such as greater bandwidth and security, along with enhanced performance and improved reliability.

First ground broken

When the installation work began in December 2020, representatives from HM Coastguard and Telent visited Bincleaves. Assistant Chief Coastguard Richard Hackwell and Telent Network Services Managing Director Peter Moir marked the landmark occasion.

Lee-on-the-Solent was among the first sites switched to the new state-of-the-art search and rescue radio network. Sites at Crystal Palace, Humber Bridlington and Brighton Marina quickly followed. The remote radio sites cover the whole of the UK coastline, spanning Scotland, Northern Ireland, Wales and England.

Continuing the longevity

Now that 1,220km of new infrastructure has been installed connecting all 163 remote radio sites Telent is providing a fully managed service. As part of this, Telent is monitoring and managing the end-to-end performance, undertaking maintenance activities and implementing technical updates. Having first begun working together in 2010, maintaining radio equipment at the remote radio sites and delivering additional support services, Telent and MCA's relationship has moved from strength to strength. The use of the fibre technology from the RNIR project also has applicability for MCA's future projects.

"The reliable digital connection and the improved resilience provided by the new network will aid HM Coastguard's life-saving search and rescue operations for years to come with Telent on hand to provide its critical expertise. The new network provides a firm foundation for the MCA's potential future and new technology services and projects that only the high performance of a full-fibre network can support."

- Jo Gretton, CEO at Telent

