

A scenic photograph of a coastal landscape at sunset. The sun is low on the horizon, creating a bright glow and lens flare over the sea. The foreground shows green coastal plants with small pink flowers. The sky is a mix of orange, yellow, and blue.

Successfully providing an ultra-fast 100G network to the Channel Islands and Isle of Man

In 2020, Sure, the leading telecommunications provider across the Channel Islands and Isle of Man awarded technology provider Telent with a major project to upgrade its core network.

Sure wanted to increase capacity, reliability, speed and security to enhance its consumer, enterprise and wholesale propositions within and between its core network locations.

UK and European connectivity to the Channel Islands and Isle of Man is crucial for Sure's enterprise business customers in sectors including financial technology, gaming, betting and offshore finance. With the islands' unique industry and commerce driving the requirement for advanced communications services, having high capacity and resilient network access is paramount.

Sub-sea fibre optic cables are subject to damage from shipping, and this is particularly apparent in the English Channel, due to high levels of shipping. Indeed, another Channel Island telecommunications operator lost most of its UK connectivity in 2016 due to such an event.

Sure's policy however is to maintain full off-island capacity to the UK across no less than three independent physical routes from the Channel Islands and Isle of Man. Sure chose Telent to help future-proof that policy.

Telent's Sure solution

With all of this in mind, Sure chose to work with Telent due to the company's expertise in designing, building, supporting and managing the UK's critical digital infrastructure. The project entailed major capacity upgrades and crucial security enhancements to replace the existing equipment in the Sure network. Telent has extensive experience in network management, and it was well placed to deliver these services to the highest quality. The project would deliver an enhanced network design with increased capacity, resiliency, flexibility and security to enable Sure to deliver advanced, world-class services to its customers and wholesale partners.

Later in 2020, Telent began work on the Channel Islands upgrades, with a specific focus on Guernsey and Jersey, as well as additional work on Sure's connections in Paris and London. The first priority was to upgrade Sure's existing 10G core network to a 100G Juniper core network. This subsequently paved the way for Sure to deliver faster, more reliable internet connectivity to its consumer and business customers across the Channel Islands, increasing bandwidth usage and data capacity.

With the faster 100G core network, the project delivered increased capacity and high-speed connections to the islands, helping connect businesses and public sector organisations. International connectivity for the islands is provided through dedicated points of presence (PoPs) in London and Paris, with links back to Sure's other operations in the Isle of Man. These installations further enhanced the international connectivity for businesses overseas that require a consistent connection directly to the Channel Islands and Isle of Man.

Ensuring that the overall security of the network was not compromised by any international cyber threats, Telent implemented a Corero Distributed Denial of Service (DDoS) solution to provide real time, automated protection. This service detects any signs of incoming threats and blocks any malicious traffic that could potentially degrade the network performance. In addition to cyber protection from incoming network security breaches, the Corero solution enabled Sure to sell "clean pipes" to its business and wholesale customers, which are DDoS protected circuits. This meant that the telecom network provider's customers benefitted from improved connectivity performance while having further assurance that the network was protected and secure.

How the network ensured Sure's continued success

The network implementation provided extra capacity for growth and future-proofed the network in preparation for new technologies, including Fibre-To-The-Home (FTTH), ensuring smooth and effective mass roll outs can take place. As a core network, it also delivered increased capacity to London and Paris, connecting the islands globally without the risk of interruption or reception latency.

The final customer migrations were completed in January 2022, with all ongoing upgrade, maintenance and quality assurance work for the foreseeable future scheduled by Telent to ensure a continuous, reliable connection to the Channel Islands and Isle of Man.

The upgrades in Guernsey, Jersey, London and Paris enabled Sure to meet increasing demands, future-proofing its business for continued growth in the Channel Islands as secure, ultra-fast internet access becomes more widespread and essential to daily lives. Supported in continued collaboration with Telent, Sure became the first network provider to operate a 100G network in the Channel Islands and continues to lead the mobile and home telecoms market by consistently providing reliable services to more than 170,000 end users. The project provided Sure with the best infrastructure in the Channel Islands to ensure that it remains the leading player for global organisations requiring connectivity or hosting in the Channel Islands or partners needing a wholesale partner to connect to the islands.

"The network upgrades from Telent have delivered increased capacity and high-speed connections to the Channel Islands to connect businesses and public sector organisations. Coupled with our tier3 datacentres and private cloud infrastructure located in both Guernsey and Jersey, the Telent and Sure successful 100 Gigabits infrastructure collaboration opens a new horizon for international and local business looking to setup or expand business leveraging Sure's services. And this future-proofed network means that we are well placed for roll outs of the latest technologies in the years ahead."

Cyrille Joffre – Sure Chief Operating Officer

