

Behind the scenes: keeping the world communicating during Covid-19 – An ESCA perspective

John Wrottesley – ESCA Liaison Officer

At a time of unprecedented risk to human health, subsea fibre optic cables enable the world to continue functioning and to remain connected by delivering light-speed communication across the globe into homes and businesses. The International Cable Protection Committee (ICPC) notes that approximately 99% of the world's communications are provided by such subsea cables, without this connectivity, life during this global pandemic would be unthinkable.

Access to the internet worldwide is increasing, with demand for internet capacity growing in excess of 40% per year, together with the number of devices that people own that have internet access, such as smart phones and laptops. Facebook, Netflix, Google, iTunes and email are part of everyday life and all rely upon subsea cables.

Such demand on subsea cable capacity has now increased even further, as people across the world have demonstrated that social distancing and isolation can be successfully undertaken together. As well as home working and business operations there are also online text and video chats, virtual knitting circles, yoga classes, gym classes, to name a few as people work to stay connected to one another. According to Techcrunch, videoconferencing apps saw just over 62 million downloads between 14-21st March alone.

From university lectures and examinations, to cookery classes, businesses have gone online to deliver their services as best they can. Social media has also helped to facilitate local support networks to assist those who are vulnerable, 'shielding', or self-isolating. All of this relies on smooth and efficient functioning of physical undersea, underground or overhead cable networks.

UK Government is actively working with the submarine cable industry to ensure continued operation. This includes future planning in case greater restrictions on movement are enforced in this ever-changing situation. Government departments are liaising closely to assist companies and protect the economy.

Steve Dawe, speaking as Chairman of the European Subsea Cables Association commented, "In these unprecedented times, we are reaping the benefits of good relationships ESCA has fostered within subsea communities and Government, as we manage the effects of this event. There has been rapid adoption of social distancing of terminal staff who manage and maintain subsea cables, to address the surge in capacity demand while ensuring continued operation of such critical infrastructure"

Keeping this vital infrastructure functioning is a significant task, and personnel undertaking essential maintenance operations have been recognised as key workers. Their vital work includes replacing hardware in remote coastal locations, and foreign crew arriving through an airport must be healthy and ready to join cable ships to attend to fibre optic repairs on the open sea, as may be required.

The workforce is based in worldwide locations and face many logistical challenges. Cable ships require international crews to travel from around the world to join ships based in strategic



locations to conduct essential and fast repairs in order to keep global communications functioning. Where cables come ashore, landing stations must be accessible to replace and repair vital terminal equipment.

Companies have been pro-active in responding to the crisis. Cable ship operators have vessels in port, ready to sail to perform emergency repair work and these ships were quarantined even before government restrictions were imposed. Non-essential personnel were not permitted access. Some companies are requiring crew and personnel to spend 14 days hotel isolation in a nearby port before being allowed onboard. Port calls and crew changes are also being kept to an absolute minimum and time at sea for those onboard has been extended where possible and safe to do so. This can mean a longer time at sea for many of the cable ship crews so that installations and repairs can be completed without port calls and mariners spending time away from their families.

A spokesperson for a cable ship operator Global Marine Group said "The safety of our people is of upmost importance and we are following UK and local Government guidelines as well as public health advice as appropriate, and closely monitoring ongoing updates and changes and of course reacting accordingly. As connectivity right across the globe becomes ever more critical, we will strive to ensure a continuation of service for customers, to maintain the essential infrastructure that our company and the markets we operate in provide to the global community".

Whilst nobody would claim that video conference or telecalls are a perfect solution to business operations – this is currently the way that we are forced to work during this time of crisis. However, there will be lessons to be learned in how we can all work more effectively in the future – and benefits in terms of reducing impact on climate change are being discussed. Some businesses that have never considered home working may now see advantages, or there may be all manner of creative solutions to the way we work and interact that the world has now been cornered into contemplating.

After this global pandemic is over, life as we knew it will slowly return to normal – however there will undoubtedly be some fundamental changes to the way we live and work – as well as a greater appreciation for our ever growing dependence on communications and connectivity.

The European Subsea Cables Association is a forum of national and international companies which own, operate or service submarine cables in European and surrounding waters.

The principal goal of the European Subsea Cables Association is the promotion of marine safety and the safeguarding of submarine cables from man-made and natural hazards, including:

Serving as a vehicle for the exchange of technical and legal information pertaining to submarine systems without compromising the commercial and market aims of individual companies.

Liaising with all relevant parties affected by the installation and operation of submarine cables in European and surrounding waters.