Opening up the Northern Sea Route  
Fast L-Band satellite network speed

Passage through northern shipping routes and Arctic waters has received a boost following the doubling of the connectivity speed of the Iridium Certus™ network. This was reported by maritime communications specialist IEC Telecom from Norway on 23 March.

As the shortest sea route between Europe and the Asia-Pacific region, the Northern Sea Route holds immense potential to compete with conventional trade passages. There has been a significant increase in maritime traffic across the main transport corridors in the Arctic, Northern Sea Route in the Russian Federation, the Northwest Passage in Canada as well as the Arctic Bridge from Canada to Europe. It has been reported that in the Canadian Arctic, traffic tripled between 1990 and 2015. Moreover, cargo volume in the Northern Sea Route increased by 40% between 2016 and 2017.

With the Iridium Certus™ 700 service becoming commercially available at speeds of 700 kbps, said to be the fastest L-band speed in the industry, Iridium’s network with pole-to-pole coverage can only serve to further unlock new opportunities for fleets operating in northern waters. Fishing fleets, commercial ships, and other vessels transiting Arctic waters can benefit from enhanced connectivity in these remote and potentially hazardous waters.

Many of IEC Telecom’s clients operating in the Northern Sea region have recently switched to the Iridium Certus service. Explained Alf Stian Mauritz, Managing Director, IEC Telecom Norway: ‘Vessels operating in this region require robust solutions that can be relied upon under harsh weather conditions.

‘Iridium Certus is the only global network able to meet these requirements. With this new speed northern operators can share greater levels of data with their shore offices, avail VOIP calls, and access faster email exchange.’

It is understood that Iridium Certus™ 700 will also be beneficial to the oil and gas sector, which has been expanding in the Arctic region. With more than 40 billion barrels of oil produced over the past 40 years and 184 active rigs in 2018, the industry is increasingly focusing on innovative ways to reduce costs with sustainable practices. Satellite-based technologies are excellent drivers of operational efficiency with optimized navigation, decreased fuel consumption, and better crew welfare options.
Upgrading to Iridium Certus™ 700 requires no new hardware for existing users. Added Mauritiz: ‘As an Iridium Master Distributor, not only does IEC Telecom offer its customers the expertise required to transition to this service, we also provide a completely compatible network management solution, OneGate. With our technical support services, customers get better visibility over their remote satellite assets. Such solutions can help operators in the Northern region enhance their crew welfare options, access reliable cyber security and filtration, and even customize cloud-based features.’

Powered by a sophisticated global constellation of 66 cross-linked Low-Earth Orbit (LEO) satellites, the Iridium® network provides high-quality voice and data connections, enabling partner companies such as IEC Telecom to deliver an innovative and rich portfolio of reliable solutions across the globe.

When Iridium completed its constellation upgrade in early 2019, it replaced all its satellites and upgraded the supporting ground infrastructure. This enabled the launch of Iridium Certus®, a multi-service platform that delivers speciality broadband services. At only 780 kilometres from the Earth, the proximity of Iridium’s LEO network means a shorter transmission path, stronger signals, lower latency, and shorter registration time than GEO satellites. Each Iridium satellite is linked with up to four others, creating a dynamic network that routes traffic among its satellites to ensure global coverage, even where traditional local systems are unavailable.

IEC Telecom’s strategic partnership with Iridium further strengthens its commitment to delivering connectivity services no matter where its customers are located.