

# VISIONARY CONNECTIVITY: AN INSIDE LOOK AT AECONNECT, **AQUA COMMS' NEXT-GENERATION** TRANSATLANTIC SUBSEA CABLE SYSTEM

evolutionizing connectivity between North America and Europe, Aqua Comms' America Europe Connect (AEConnect) is one of the first subsea cables constructed across the Atlantic in 12 years. Featuring the latest technology of 130 Gbps x 100 Gbps per fiber pair, it's designed to meet the bandwidth requirements of carriers, cloud and content providers, and large enterprises, particularly the bandwidth demand from Web-scale providers and Over-the-Top (OTT) companies that expect exceptional reliability and performance. AEConnect will utilize innovative optical technologies to provide secure, flexible and scalable connectivity. By providing private dedicated connections, AEConnect will lower network costs and enable higher, more consistent network performance for end-users.

AEConnect arrives at an auspicious moment in the history of transatlantic communications. TeleGeography forecasts growth in data traffic across the Atlantic between now and 2021 will be 41% CAGR.

## **Planning for Tomorrow**

For Aqua Comms, whose tagline is 'Planning for tomorrow, so you are connected today,' getting to this milestone was no easy plugand-play. From concept to completion, AEConnect has taken three years to actualize. The Company began building the transatlantic system, which spans more than 5,400 kilometers, including deep water branching units for future landing station connectivity, last spring. Microsoft was one of AEConnect's anchor customers.

As with any technological achievement of such magnitude, the market inspired the genesis of AEConnect. Peter Zwinkels, Aqua Comms' Chief Commercial Officer, is responsible for driving global commercial strategy and product development for the Company's transatlantic network solutions.

"Four years ago, we saw the first big OTT players entering the submarine market that were seeking exponential capacity. They wanted to control their destiny in securing sufficient capacity at predictable costs for the next 20 years," states Zwinkels. "It was on this basis that the idea of AEConnect turned into a reality."

### A New Way of Building Networks

AEConnect is a major advance upon systems built at the turn of the century that were designed for 10G, and, in some cases, 2.5G services. Designed as a coherent optimized system, it will therefore benefit the most from the improvements that Coherent Technology offers, today and into the future.

"AEConnect represents not only a new transatlantic cable design, but also a new way of building networks - data center to data center, instead of Cable Landing station to Cable Landing station,"

says Zwinkels.

Prior to Aqua Comms, Zwinkels worked at Ciena® where he led global submarine sales and business development in the EMEA region. On AEConnect, he points out, Aqua Comms is deploying Ciena's 6500 Packet-Optical Platform, powered by WaveLogic 3 Extreme coherent optics, to provide 10G and 100G services between Points of Presence (PoPs) in New York, Dublin and London.



#### **Fast and Secure**

While speed is important, especially for financial market participants - AEConnect can transmit the entire U.S. Library of Congress in under five minutes – security and reliability of the cable system is paramount. The cable transverses the minimum length of shallow water along the continental shelf on both sides of the Atlantic and avoids major fishing grounds and shipping anchorage areas that are known to expose subsea cables to damage.

"By choosing the right route and ensuring good burial, we're looking at a cable system that is the most secure in the Atlantic," comments Zwinkels.

#### Irish Diversity and Connectivity

The landing of AEConnect in Ireland offers diversity from many of the other transatlantic cables that land in the UK or France. The terrestrial segment supports metro networks, data center interconnectivity, and access to all of the major data centers in Dublin as well as from Wales to London.

"Aqua Comms is directly addressing the needs of big OTT and Web-scale players that primarily focus on data center to data center connectivity," remarks Zwinkels. "Half of all new subsea capacity on the Atlantic this year will be driven by Web-scale customers, which creates a huge opportunity for Aqua Comms."