FOR IMMEDIATE RELEASE

Ciena GeoMesh Extreme Solution Helps Submarine Cable Operators Double Capacity

New Capabilities Support L-Band Frequencies

HANOVER, Md. — January 22, 2018 — Ciena (NYSE: CIEN) is introducing new capabilities that allow submarine cable operators to better address surging bandwidth demand driven by video-centric streaming, virtual reality, the Internet of Things, and future applications such as 5G. Ciena’s GeoMesh Extreme submarine solution now supports L-Band capabilities and can operate on TE SubCom’s industry-leading L-Band wet plant system, nearly doubling the information-carrying capacity of a submarine cable.

Submarine optical fiber has a wider range of available spectrum than is presently used today. Traditional submarine cables exploit the C-Band (~ 1530nm to 1565nm). TE SubCom’s C+L technology effectively doubles the available bandwidth and capacity per fiber pair over a traditional C-Band-only designed system. This capacity results in an extremely low cost per transported bit and represents an exceptional value to cable operators. Furthermore, C+L’s efficient use of fiber bandwidth and the subsequent limited number of fiber pairs required for transmission capacity, enable the cable itself to remain a compact and cost-effective design.

Ciena’s GeoMesh Extreme solution now opens up the L-Band (~ 1656nm to 1625nm) in the same optical fiber, doubling the amount of information operators can support on a single submarine cable. This means that submarine cable operators can potentially secure twice the amount of potential revenue over a single cable, versus deploying two traditional cables, and yield better economies of scale for an improved return on submerged network assets.

Key Facts:
• The same technology used by Ciena’s C-Band SLTE, which is deployed worldwide, is ported to the new L-Band SLTE to ensure the highest level of performance. Ciena has already deployed in the L-Band over terrestrial networks for many years and will leverage this extensive knowledge, expertise, and field experience to ensure a seamless migration into the L-Band in submarine networks.

• TE SubCom announced earlier in 2017 that it has demonstrated a new transmission record of 70.4 Tb/s capacity over 7,600 km. This record transmission is made possible utilizing SubCom’s C+L technology, effectively doubles the available transmission bandwidth of the repeater by an unprecedented factor of two in supported capacity per fiber pair when compared to the same number of fiber pairs in traditional C-Band technology.

• Submarine cable operators will also benefit from Ciena’s advanced Blue Planet MCP solution that allows for managing the Ciena C/L-Band SLTE and TE SubCom C/L-Band wet plant from a single, unified management platform for a seamless, end-to-end, best-in-breed Open Cable.

• Ciena and TE SubCom’s continued partnership furthers the advancement of Open Cable submarine networking solutions. Leveraging the strengths of both companies, submarine operators can securely and reliably leverage the L-Band of optical fiber cables to approximately double the total capacity of each fiber pair for significantly improved economies of scale.

Executive Comments:

• “Our partnership with TE SubCom has been critical in ensuring that customers can meet demand growth while delivering the highest level of performance. Leveraging L-Band, over and above the traditional C-Band, changes the economics of submarine network connectivity by providing unprecedented improvements in capacity, reliability, and simplicity.”
  - Steve Alexander, Chief Technology Officer, Ciena

• “We are always looking for ways to push the boundaries in order to improve subsea connectivity and provide our customers with more choice. Ciena’s and TE SubCom’s move towards L-Band provides access to greater capacity and economies of scale, which means greater return on investment.”
  - Neal Bergano, Chief Technology Officer, TE SubCom

About Ciena
Ciena (NYSE: CIEN) is a network strategy and technology company. We translate best-in-class technology into value through a high-touch, consultative business model – with a relentless drive to create exceptional experiences measured by outcomes. For updates on Ciena, follow us on Twitter @Ciena, LinkedIn, the Ciena Insights blog, or visit www.ciena.com.

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