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Leading operators and communications technology vendors sign 25GS-PON multi-source agreement to accelerate development of 25G symmetric PON

- Industry group brings together major operators and vendors to define and promote next-generation 25GS-PON technology in support of emerging 5G and industrial demands
- The 25GS-PON multi-source agreement (MSA) highlights the importance and urgency of having 25GS-PON to close the gap between 10G and 50G PON
- 25GS-PON provides communications service providers with the most cost-effective and timely evolution path for PON fiber technology

Ten major communication industry operators and vendors today announced the signing of a 25G symmetric PON multi-source agreement (25GS-PON MSA) with the goal of promoting and accelerating the development of 25GS-PON. The MSA Group has defined the 25GS-PON specification needed to address the gap between 10G XGS-PON and 50G PON in the ITU-T. The MSA was created after the ITU-T SG15/Q2 group did not reach consensus to standardize 25GS-PON, which is seen as a crucial technology by many of the world's top operators and vendors.

The formation of the 25GS-PON MSA Group underscores how important 25GS-PON is to the industry as it seeks a cost-effective and timely network upgrade path that can meet the needs of the mobile 5G era and large-scale enterprises where symmetrical connections become increasingly important. As a first step, the 25GS-PON MSA Group created a specification for 25GS-PON which includes optical specifications based on the IEEE 802.3ca 25G EPON standard, along with a Transmission Convergence (TC) layer that is an extension of XGS-PON. The MSA Group will also promote and catalyze the market development for 25GS-PON.

Julie Kunstler, Principal Analyst at Omdia, said: "25 gigabit symmetric PON is an important next-step and a natural evolution for fiber networks, especially since it leverages existing technologies. Numerous operators are interested in 25GS-PON, for use in 5G transport as well as enterprise and business services. Establishing an MSA to bring this technology to market demonstrates innovation, leadership and customer-centric market awareness on the part of its members."

The founding members of the 25GS-PON MSA Group include: **AOI, Chorus, Chungwa Telecom, Ciena, MACOM, MaxLinear, NBN Co., Nokia, Sumitomo Electric Industries, Ltd, and Tibit Communications**.

The 25GS-PON Group has published a website with a copy of the 25GS-PON specification and additional information at www.25gspon-msa.org. The 25GS-PON MSA Group invites other industry leaders to join the group to advance the technology and market.

Member Comments

AOI: "This new 25G symmetrical PON data transport platform gives service providers a fiber PON system capable of delivering high speed bandwidth using multiple transmission formats. As an active partner in the development of this MSA, we look forward to moving this specification to production and being a provider of cost-effective optical solutions for this next generation, 25GS-PON platform."

Chorus: “Chorus plays a critical role in keeping New Zealanders connected. For most homes and businesses across the country, fibre is the principal access technology and we’re soon to launch multi-gigabit services, using XGS-PON, in response to exponential demand for fast, reliable broadband. Chorus is delighted to be part of the MSA team defining the standard for the next logical evolution of PON; one that will ensure that fibre continues to be the pre-eminent access technology for businesses and homes.”

Chunghwa Telecom: “As 5G mobile coverage rapidly expands, we strongly anticipate that 25GS-PON will provide a highly cost-effective solution for the 5G transport network.”

Ciena: “This collaborative effort to accelerate next-generation 25GS-PON technology in support of the evolution to higher capacity broadband access and to 5G is a significant step in the journey to achieving fast, reliable, and ubiquitous connectivity.”

MACOM: “With the increased demand for bandwidth driven by 5G communications, we believe that the need for a clear upgrade path leveraging PON connectivity is critical. We are proud to be part of the 25GS-PON MSA Group and look forward to working closely with our industry peers towards a cost-effective and timely evolution path for PON fiber technology. MACOM seeks to provide a broad portfolio of physical layer ICs and optical components to support the 25GS-PON MSA.”

MaxLinear: “We are delighted to jointly define, with our partners and customers, the next step in PON evolution. We see broadband access further evolving to higher speeds, lower latency and augmented service offerings over the next decades. Leveraging existing standards, 25GS-PON allows us to provide better solutions to our customers for both broadband access and 5G infrastructure – both of which are key-focus areas of MaxLinear.”

Nokia: “25GS-PON is a cost effective and logical step in the evolution of fiber access networks. 25GS-PON offers value to operators by leveraging the technology and ecosystem currently available in the market today, allowing the quick development of next-gen networks. In addition, 25GS-PON is able to support market needs for symmetrical business services as well as mobile anyhaul, which is important to the overall success of 5G. Nokia is excited to have a seat at the table with the 25GS-PON MSA Group as it allows us to offer our expertise and deliver solutions that our customers need.”

Sumitomo Electric: “Sumitomo Electric is excited to be a part of the 25GS-PON MSA! This MSA will promote technology that may be one of the most cost-effective solutions to carry 25Gbps symmetrical access services. Sumitomo Electric's decades of commercial and technical experience with 10 and 25Gbps PON components and systems will enable us to support our customers as they begin mass deployment of 5G mobile networks.”

Tibit Communications: “Tibit is a long-standing supporter and developer of XGS-PON. We are excited to be a 25GS-PON developer and contributor to this standards process. 25GS-PON is the ideal bandwidth evolution to target an expanding range of applications which rely on the point-to-multipoint economics of PON, including 5G and wireless X-Haul. 25GS enables Tibit to continue port-by-port expansion of PON services, leveraging the same switch host platforms in which our MicroPlug™ OLTs are deployed today.”