

Test equipment precedes demand for 40-Gbit networks
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DALLAS - Test equipment for 40-Gbit/second networking continues to emerge, as vendors at the National Fiber Optic Engineers Conference (NFOEC) announced products illustrating that the technology is ready even if the market isn't.

Spirent Communications announced 43-Gbit/s optical interfaces for its OTA-4400 bit-error-rate tester, complementing the system's previously announced ability to test electronics at that speed. Jitter testing capabilities are still in development, said Jason Nutt, director of strategic marketing at Spirent (Honolulu).

Meanwhile Agilent Technologies Inc. debuted its ParBert 45G, which handles BER testing on the electrical and optical sides at speeds up to 45 Gbits/s.

Agilent also introduced the OmniBer OTN 40G, which tests optical components for Sonet compatibility. "That to me is the last missing piece of test equipment to really start deploying 40-Gig," said Larry Desjardin, high-bandwidth program manager at Agilent (Palo Alto, Calif.) .

Whether the market is ready for 40 Gbits/s is another matter, particularly in the case of long-haul networks in North America, where carriers are hesitant to deploy new technology unless demand already exists. Still, development of 40-Gbit/s networking is continuing. "Certainly R&D efforts are going on today" among component vendors, equipment vendors and service providers as well, Spirent's Nutt said.

Speakers at an NFOEC session on OC-768 (40-Gbit/s) technologies noted that long-haul OC-768 technology could see deployment relatively soon, but only in isolated cases where carriers desperately need influxes of bandwidth. Still, speakers were adamant that these cases will emerge.

"There's some traction for 40-Gbit/s long-haul, and that will lead to some real deployment next year," said the director of product marketing at Mintera Corp.

Many believe that short-reach and very-short-reach connections, such as switch-to-switch interfaces within a service provider's point of presence, will be one of the first 40-Gbit/s markets. Some argue that metropolitan networks are a possibility as well, as some carriers are deploying OC-192 (10-Gbit/s) pipes that will need to be aggregated.

"There's probably more talk around 40 Gbit/s in the metro rather than in the long-haul," said Joe Padgett, who heads optical-networks marketing for Nortel Networks.