

OIF Completes Implementation Agreement for OTN Switching

Fremont, CA – December 7, 2011 – The Optical Internetworking Forum (OIF) members approved an implementation agreement (IA) for OTN-over-Packet-Fabric Protocol. The OIF initiative addresses the market need for Packet and Optical convergence and the architectural challenges associated with transporting Packet and OTN traffic on a common packet/cell switching fabric.

“The IA will enable faster convergence of Packet and OTN traffic which the industry needs,” said Eve Griliches, ACG Research analyst. “A common method of mapping and translating OTN into a packet fabric will help drive the cost of network equipment down for multiple switching options, and lay the groundwork for the growing converged IP+OTN networks.”

The IA is the combined output from leading network service providers, network equipment manufacturers and semiconductor suppliers and is applicable to switches and routers, and to transport equipment alike. The IA defines the mapping protocol for converting an OTN stream into packets while preserving its frequency and phase. The protocol can be implemented in ASSP, FPGA or ASIC solutions. The goal of the IA is to reduce the cost and power of network equipment by avoiding the need for dual or hybrid fabrics.

The optical communications network is evolving from a pure TDM (SONET/SDH) oriented network to a converged Packet (Ethernet) and TDM (OTN) network. Historically, Network Elements used separate fabrics, one for
packet and another for TDM traffic. A single converged fabric is expected to be simpler, and consume less power and shelf real estate. As packet traffic is expected to form a significant portion, and in some cases the majority, of the traffic, it will be economically advantageous to build Network Elements using packet oriented switching fabrics and employ circuit emulation techniques to convert OTN client streams into packet format for switching by the packet fabric.

The OTN Over Packet Fabric Protocol implementation agreement was approved by members and is available to the public at http://www.oiforum.com/public/impagreements.html.

**About the OIF**

Launched in 1998, the OIF is the first industry group to unite representatives from data and optical networking disciplines, including many of the world's leading carriers, component manufacturers and system vendors. The OIF promotes the development and deployment of interoperable networking solutions and services through the creation of Implementation Agreements (IAs) for optical, interconnect, network processing, component and networking systems technologies. The OIF actively supports and extends the work of standards bodies and industry forums with the goal of promoting worldwide compatibility of optical internetworking products. Information on the OIF can be found at http://www.oiforum.com.