OIF Carrier Members Define Requirements for Transport SDN
Carrier Perspective Addresses Transport Networks for SDN Architectures

Fremont, CA – September 23, 2013 – The Optical Internetworking Forum (OIF) Carrier Working Group has completed a carrier requirements document addressing the transport network relevant part of a Software Defined Networking (SDN) architecture. The document, “OIF Carrier Working Group Requirements on Transport Networks (TN) in SDN Architectures” has been a work-in-progress since March 2013. The document supports the evolution of transport networks towards SDN architectures, summarizing what is already available and highlighting new features and functionalities to support the deployment of SDN applications, services and technologies.

Using the completed carrier requirements document as a foundation, OIF members have begun developing an SDN framework document that will provide future SDN related specifications and Implementation Agreements and also give structure to future OIF interoperability demonstrations.

“I am more than happy that we have achieved our first milestone in defining carrier requirements on Transport SDN,” said Hans-Martin Foisel of Deutsche Telekom and the OIF Carrier Working Group chair and OIF board member. “This will not only guide our next steps in the creation and implementation of technology to support Transport SDN but also will focus our communications with other SDOs and forums so that we can work together to streamline the different aspects of Transport SDN.”

The OIF’s focus on Transport SDN involves the management, control and data plane layers of the network, as well as the new Orchestrator – coordinating actions among
data centers and transport networks. Among carriers, there is a strong desire for a consistent set of SDN related standards and specifications to enable a seamless migration to SDN architectures. With a carrier requirements document in hand, equipment vendors can work to specify interfaces among SDN components such as network elements, different types of controllers and orchestration instances.

“The key to a thriving SDN ecosystem is the separation of management, control and transport planes by means of well defined interfaces and standardized protocols,” said Jonathan Sadler of Tellabs and the OIF Technical Committee chair. “To reach the desired level of interoperability between network components, vendor implementations, carrier network domains, and Data Center functions, it is important to understand carrier requirements.”

This document works to identify the following:
- Functions that need to be provided by a Control Plane enabled TN to an SDN controller or Orchestrator for realizing SDN use cases, applications and services
- Orchestrator functional requirements to ensure the desired coordination between functions and services spanning across multiple layers in a TN and crossing multiple SDN domains to achieve end-to-end service orchestration
- The combination of TN-relevant SDN architecture components – Data Plane, Control and Management Plane, and Orchestrator – and the relationship among them are referred to as “Transport SDN”

OIF president Vishnu Shukla of Verizon and Hans-Martin Foisel will speak to ECOC attendees in London on “The Requirements and Technologies for Transport SDN” in the Market Focus Theater on the show floor, Tuesday, Sept. 24th at 1:15 pm.

Additional OIF SDN-Related Activities
The OIF has planned a public workshop on “Transport SDN: Cutting Through the Hype - Enabling Technologies, Practical Use Cases, and Apps” for Monday, February 10, 2014 in San Jose, CA. In addition, the OIF is in the planning stages for a 2014 interoperability demonstration that would address Transport SDN.

**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](http://www.oiforum.com).