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Upcoming Events

June 17-19, 2008

NXTcomm08

Las Vegas, NV – USA

OIF Booth #SL7212



June 23-27, 2008

**IIR WDM and Next Generation
Optical Networking**

Cannes, France



July 22-24, 2008

**OIF Q308 Technical and MA&E
Committee Meeting**

Montreal, Quebec - Canada

September 22-24, 2008

ECOC 2008

Brussels, Belgium

OIF Booth #67



Brussels
ecoc2008

October 6-7, 2008

Optical Expo

Dallas, Texas



Words from the OIF Leadership



In the modern era of telecommunications, 10 years is an eternity. 2008 marks the 10th anniversary of the founding of the OIF, which has established itself as a consensus builder and thought leader in the optical networking industry. As a leader of the OIF, it is extremely gratifying to see the impact of our work as it is broadly adopted across the telecom landscape. The OIF continues to be a forum of substance, meeting the needs of its members across the entire spectrum -

from service providers to system vendors to component suppliers.

At OFC/NFOEC 2008, the contributions of OIF were evident in both the physical layer (the OFC side) and the Networking arena (the NFOEC side). As the industry continues its quest toward 100G, the CEI-25 electrical interface specifications will be an important cornerstone in reaching that goal. The approval of UNI 2.0 is a major milestone, enabling enhanced services while allowing service providers to utilize a variety of transport plane technologies. UNI 2.0 allows providers to extend the life of their legacy TDM infrastructure while bridging the gaps toward packet transport networking.

On the educational front, at its May meeting, the OIF completed a two-part educational series entitled "Packet Transport Workshop," bringing together experts on T-MPLS, PBB-TE and Carrier Ethernet.

Looking back on 10 years of accomplishments, the OIF has been true to its goal of uniting the data and optical industries to meet the needs of its members as technology and business models have evolved. We are excited about our future as we continue on the leading edge, anticipating industry needs and providing timely, targeted solutions.

Jim Jones

OIF Vice President of Marketing

Alcatel-Lucent

Contact Us

Want to contribute something in the next issue? We'd like to hear from you!

Send comments and ideas to Kimberly Chiu, OIF Project Manager, at kchiu@oiforum.com

OIF

48377 Fremont Blvd, Ste 117

Fremont, CA 94538 USA

+1.510.492.4040

www.oiforum.com

Optical Networking – Delivering on the Promise: A Mini-Seminar Program

June 17-19, 2008

Las Vegas, NV – USA

The OIF will present “Optical Networking – Delivering on the Promise,” June 17-19 at NXTcomm’s Forum Theater. Attendees will have an opportunity to hear and learn about some of the hottest trends in communications, interoperability and industry development. OIF’s presentations will be available at the show as well as online after the show at www.oiforum.com. **Also visit the OIF at Booth #SL7212**

Tuesday, June 17

11:00 am-11:30 am

Creating Services for a New Era in Optical Networking, Presenter: Hans-Martin Foisel, Deutsche Telekom

11:30 am-noon

Building Bridges – 40/100G Ethernet Transport over OTN, Presenter: Ghani Abbas, Ericsson

Wednesday, June 18

1:00 pm-1:30 pm

Enabling On-Demand Ethernet Services, Presenters: Hans-Martin Foisel, DT & Dave Brown, Alcatel-Lucent

1:30 pm-2:00 pm

Controlling Tomorrow’s Optical Network, Presenter: Lyndon Ong, Ciena

Thursday, June 19

1:00 pm-1:30 pm

Creating Services for a New Era in Optical Networking, Presenter: Hans-Martin Foisel, Deutsche Telekom

1:30 pm-2:00 pm

Building Bridges – 40/100G Ethernet Transport over OTN, Presenter: John McDonough, NEC Corporation of America

Analyst Corner

CurrentALERT Update – February 2008

Jason Marcheck, Current Analysis

“We are taking a positive stance on the OIF’s announcement that it has produced an implementation agreement (IA) related to its UNI 2.0 initiative. An extension of its previous UNI 1.0 IA, UNI 2.0 helps to standardize a variety of control mechanisms dealing with EPL, EVPL and G.709 connections for ODU and OTU switching and low order SONET/SDH services in a Carrier Ethernet Transport (CET) environment. To this end, carriers, equipment vendors and software vendors all have agreed upon marching orders for defining the control mechanisms needed to support a range of CET services. This should help the industry move forward more quickly to implement several services that will be critical to the validation and widespread adoption of Ethernet services beyond the LAN environment. Going further, arriving at an IA on UNI 2.0 should free up the OIF to focus increased attention on other important aspects of carrier Ethernet network control such as the E-NNI 2.0 initiative it is working on in conjunction with the Metro Ethernet Forum (MEF).”

Educational Outreach

OIF Workshop: Packet Transport Workshop Series - "Focus on Provider Ethernet Networks"

Provider Ethernet Networks are a new emerging class of networks based on IEEE 802 standards. Provider Ethernet Networks offer scalability, OAM, reliability, resilience, traffic engineering and service management capabilities that make them suitable for access, metro and backbone networks. The workshop provided an introduction to Provider Ethernet Networks, their evolution, the enabling standards, and examples of their application in multi-service, convergent networks for business and residential services. Held February 4, 2008, this was the first of a series of workshops on Packet Transport Technology. Presentations from this workshop can be viewed online at <http://www.oiforum.com/public/meetOIW020408.html>

- * **Ethernet Evolution and PBB-TE**, presented by Mike Lerer, Soapstone Networks
- * **Converged Carrier Ethernet Transport Opportunities and Challenges**, presented by Shinya Nakamura, NEC America
- * **PE Standards Status**, presented by Paul Bottorff, Nortel Networks
- * **Requirements and Multilayer Carrier Ethernet Network Architecture with PBB-TE**, presented by Claus Gruber, Nokia Siemens Networks

OIF Workshop: Packet Transport Workshop Series - "Focus on T-MPLS"

T-MPLS or Transport MPLS is a connection-oriented packet-switched network layer technology based on ITU-T standards. T-MPLS uses a subset of the existing MPLS standards and is designed specifically for application in transport networks. This workshop provided attendees an introduction to T-MPLS networks, their evolution, the enabling standards, and examples of their application in multi-service, converged networks for business and residential services.

The workshop, hosted at Telecom Italia Labs on May 5, 2008, was the second of a series of workshops on Packet Transport Technology. Presentations from the "T-MPLS" workshop can be viewed online at <http://www.oiforum.com/public/meetOIW050508.html>

- * Introduction by Hans-Martin Foisel, Deutsche Telekom, OIF President
- * **T-MPLS Overall Standards Status**, presented by Huub van Helvoort, Huawei
- * **Update on ITU-T and IETF T-MPLS Joint Working Team**, presented by Stephen Shew, Nortel
- * **T-MPLS Control Plane**, presented by David Huo, ZTE
- * **Benefits of T-MPLS in Network Applications for Broadband Services**, presented by Antonella Sanguineti, Ericsson
- * **T-MPLS/MPLS Interconnectivity Models for End-to-End Operations**, presented by Italo Busi, Alcatel-Lucent

Technology Update

At the Q3 Technical Committee meeting in Montreal, Quebec in July, there will be an all Working Group Session, "Developing a Next Generation OIF Physical Link Layer Roadmap," at which special presentations will be made by carriers and system providers. The expected outcome of the session includes refining and documenting the common input from carrier and system providers, performing a gap analysis of missing elements of the next generation technologies, and seeking ways to foster the rapid, cost-effective development of new technologies for optical internetworking. For more information contact Jeff Hutchins, jeff@coreoptics.com

Current Projects in the Physical and Link Layer Working Group:

- 40Gbps Optical Modulation Techniques
- Common Electrical Interface - 25Gb (CEI-25)
- Electronic Dispersion Compensation (EDC) Modeling
- Integrable Tunable Transmitter Assembly (ITTA)
- Scalable SERDES Framer Interface (SFI-S)

Current Projects in the Networking Working Group:

- E-NNI 2.0 Signaling
- Extensions for the Interface Management API
- Control Plane Security

Additional working group projects are highlighted below:

Implementation Agreement for 100G long-distance DWDM Transmission

The Optical Internetworking Forum's Physical and Link Layer Working Group (PLL WG) designated a new work project to address 100G long-haul DWDM. The 100G long-haul project will result in a DWDM transmission implementation agreement (IA) focused on a specific modulation format and receiver approach. It will seek to reach agreement on a Forward Error Correction (FEC) algorithm suitable for the long-haul 100G application. This implementation agreement will complement and build upon the work already underway defining 100G Ethernet in the IEEE, and the new 100G level of the Optical Transport Hierarchy (OTH) in the ITU-T. For more information on this project contact David Stauffer, PLL WG chair at dstauffe@us.ibm.com

E-NNI 2.0 Routing

The E-NNI 2.0 Routing project addresses additional routing support for multilayer UNI and E-NNI signaling. For more information on this project contact Jonathan Sadler, Architecture & Signaling Working Group Chair at jonathan.sadler@tellabs.com

Integrable Tunable Laser Assembly-MSA Interface Compliance Benchmark

The OIF-ITLA-MSA-01.2 is scheduled to complete final balloting this June. To ensure vendors implement the MSA correctly, the Software Working Group has initiated an ITLA-MSA Interface Compliance Benchmark Project. The project will consist of IA documents for performing and reporting the tests. In addition, a reference toolkit will be included that performs the specified benchmark to produce a report of the test results. For more information on this project contact Raj Batra, Software WG chair at raj_batra@emcore.com

Working Group Highlight – Physical and Link Layer Working Group

The OIF Physical and Link Layer (PLL) Working Group develops Implementation Agreements related to physical and data link layer interfaces between Optical Internetworking elements and between their internal components, reusing existing standards when applicable. The OIF PLL Working Group is guided by the requirements developed by the OIF's Physical Layer User Working Group. Recent IAs that have passed and are available to the public include the Serial Look-Aside, and the TFI-5/TDM-P Clause in CEI-P. Current projects include SFI-S and ITTA.

Additionally the PLL WG is developing a number of white papers and is soliciting members who would like to help write and edit these documents. The first white paper provides an overview of market requirements driving the need for serial electrical links in the 20-28 Gbps range. Both short reach and long reach requirements are covered in the document. Common Electrical I/O Building for the New Future is available for download at http://www.oiforum.com/public/documents/WP_CEI-25_final.pdf

The second white paper will describe optics technologies that will be in play at 40G/100G, and which will drive the market need for Serdes-Framer electrical links in the 20-28 Gbps range. The third white paper will describe the state-of-the-art in backplane technology, with a concentration on manufacturable technology. If you are interested in collaborating on one of these white papers or for more information on the PLL Working Group, contact Dave Stauffer at dstauffe@us.ibm.com

OIF Officers

Raj Batra of Emcore was recently elected as Software Working Group Chair and Dave Stauffer of IBM was re-elected as Physical and Link Layer Working Group Chair. Each will serve a two year term. The OIF BoD recently appointed Rod Smith, Tyco Electronics, as the Market Awareness & Education Co-Chair – PLL.

Newest OIF Members



OIF in the News & Completed Implementation Agreements

Press Releases

<http://oiforum.com/public/pressreleases.html>

May 23, 2008

[OIF to Address 100G Long-Haul DWDM Market Needs](#)

April 16, 2008

[New Interface Agreements from OIF Aim to Satisfy the Telecom Industry's Need for Speed](#)

Interoperability Agreements Support CEI for Interconnection

February 25, 2008

[OIF's UNI 2.0 Implementation Agreement Delivers to Emerging Carrier Ethernet Market](#)

IA Allows Carriers to Offer New Services

Latest Implementation Agreements

<http://www.oiforum.com/public/impagreements.html>

[OIF-CEI-P-02.0](#) (March 2008)

Common Electrical I/O – Protocol (CEI-P) IA

[OIF-UNI-02.0-Common](#) (February 2008)

User Network Interface (UNI) 2.0 Signaling Specification: Common Part

[OIF-UNI-02.0-RSVP](#) (February 2008)

User Network Interface (UNI) 2.0 Signaling Specification: RSVP Extensions for User Network Interface (UNI) 2.0

[OIF-SLA-01.0](#) (December 2007)

Serial Look Aside Interface Implementation Agreement