IP/MPLS FORUM

DRIVING THE GLOBAL SUCCESS OF IP/MPLS

INTRODUCTION

Founded Spring '91

Founded Fall '91

Founded Spring '00

Merged in April '03 to form MPLS & Frame Relay Alliance

Formed in July '05 by merging ATM Forum & MPLS & FR Alliance

Changed name to IP/MPLS Forum in Sept. '07 to reflect current scope of activities

OUR MISSION

The IP/MPLS Forum is an international, non-profit association of service providers, equipment vendors, testing centers and enterprise users.

The Forum's mission is to drive the global success of IP/MPLS-based technology, networks, and services while focusing on application and deployment solutions.

OUR OBJECTIVES

IP/MPLS FORUM

Unify service providers, suppliers and end users on common vision of IP/MPLS based solutions.

Awareness	Migration	Systems-Level Solutions
▪ Promote global awareness of IP/MPLS benefits ▪ Empower the telecom industry to migrate from legacy technologies to IP/MPLS-based next generation networking.	▪ Guide the telecom end user to make the leap from legacy technologies to IP/MPLS-based services	▪ Drive implementation of standards for IP/MPLS-based solutions ▪ Validate implementations and advance interoperability of standardized IP/MPLS-based solutions.

OUR DELIVERABLES

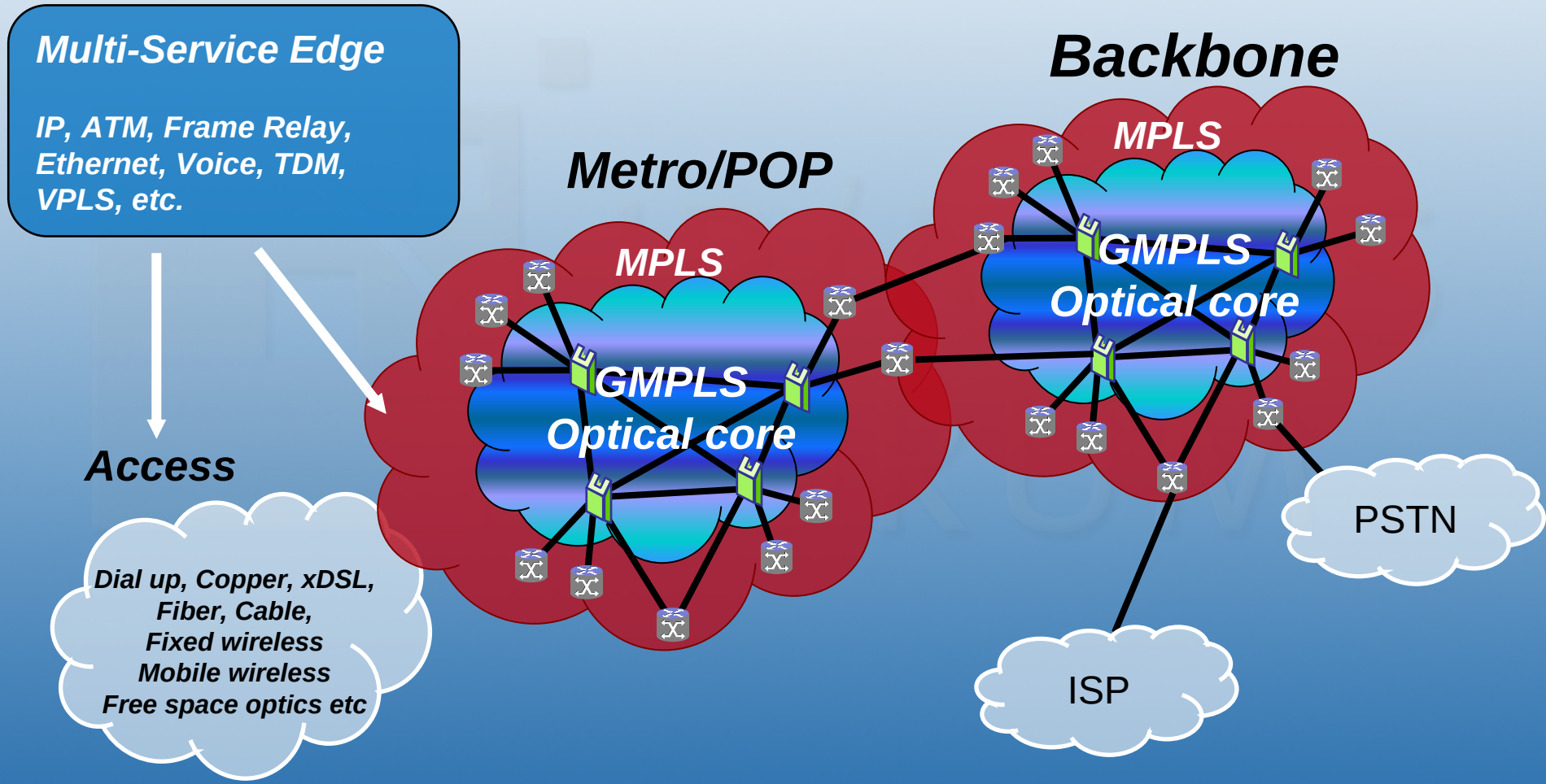
- **Technical Specifications**
  - *Detail solutions based on new and existing standards*
- **Test Plans**
  - *Interoperability and certification*
- **Technical Tutorials**
  - *Broaden understanding of the technology and benefits of the solutions*
- **Collateral**
  - *Promote the benefits of IP/MPLS in carrier networks*

ANALYST PERSPECTIVE

"IP and MPLS continue to be high growth technologies which many network operators are leveraging as they migrate to next generation wireline and wireless packet transport and services. By focusing solely on IP/MPLS, the IP/MPLS Forum has the opportunity to articulate the benefits and applicability of IP/MPLS to the broad market place, as well as providing timely development of critical specifications not being addressed by other industry bodies."

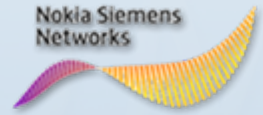
- Mark Seery, Vice President, Switching and Routing at Ovum RHK.

THE CONVERGED NETWORK VISION



MEMBERS

IP/MPLS FORUM



Interoperability Lab Members

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FORUM ACTIVITIES

- **Service Provider Council (SPC)**
  - Carriers only - open discussion for carrier requirements without vendors in the room
- **Market Awareness and Education**
  - Half and full day tutorials
  - Conferences and seminars
- **Conformance and Interoperability Testing**
  - Conformance test plans
  - Interoperability test plans

PUBLIC INTEROPERABILITY EVENTS

MPLS WORLD CONGRESS

Paris, February 2003:

BGP/VPN Scalability,
MPLS Fast Reroute (FRR)

Paris, February 2004:

MPLS enabling service guarantees

Paris, February 2005:

Hierarchical VPLS,
LSP ping and traceroute

Paris, February 2006:

Converged MPLS Services

Paris, February 2007:

Inter-carrier connectivity solutions, Multicast VPN services, and Multi-vendor service provisioning and fault management

Paris, February 2008:

Mobile backhaul transport

SUPERCOMM
Explore the Whole World of Communications

Atlanta, June 2002:

MPLS traffic engineering, Layer 2 and 3 Virtual Private Networks (VPNs)

Atlanta, June 2003:

Frame Relay, ATM, Ethernet/VLAN over MPLS, Virtual Private LAN Services (VPLS), MPLS Fast Reroute (FRR)

Chicago, June 2004:

Metro Services and Enhanced Applications, including VoIP, over MPLS

NGN NEXT GENERATION NETWORKS

Boston, October 2002:

Generalized MPLS (GMPLS)

CTIA WIRELESS 2008
A Division of CTIA–The Wireless Association®

Las Vegas, April 2008:

Mobile Backhaul Transport

TECHNICAL COMMITTEE

- **17 published specifications to date, most recently concentrating on multi-service interworking of pseudowires and PNNI/MPLS signaling interworking**

- **IP/MPLS work builds upon and conforms to IETF and ITU-T specifications**
  - Fills in “missing pieces” and/or provides source material via liaisons
  - New work in areas not covered by the IETF and ITU-T

CURRENT WORK ITEMS

- **MPLS in Mobile Backhaul Initiative (MMBI)**
  - With MMBI the IP/MPLS Forum enables the operators to migrate from separate, legacy ATM and TDM networks to more cost-effective converged IP/MPLS-enabled multi-purpose backhaul networks.

- **MPLS Inter-Carrier Interconnect (ICI) Phase 1**
  - The purpose of this work is to specify capabilities that enable inter-carrier MPLS services. It is targeted to equipment vendors to specify the necessary Autonomous System Border Router (ASBR) requirements and to service providers to provide guidance on how to use these capabilities.

- **Packet-Based GMPLS Client to Network Interconnect (CNI)**
  - The purpose of the CNI is to provide a means to create and manage a Traffic Engineered (TE) Label Switched Paths (LSPs) overlay network. This overlay network interconnects client equipment over a packet-switched network, providing bandwidth guarantees, and enhanced resiliency features.

The Forum is also planning several industry-driven future work Items. Please contact the Forum directly for more information.

CURRENT WORK ITEMS

- **Generic Connection Admission Control (GCAC) for IP/MPLS networks**
  - Operates across network elements in a distributed manner to deliver consistent and objective Quality of Service (QoS) for specified constraints (e.g., latency, delay variation, loss).
- **Certification Abstract Test Suites**
  - The certification tests and resulting test program will provide assurances between vendors and customers that certified equipment or services meet base technology standards saving the vendor and customers time and resources in running redundant verification tests.
- **MPLS over Aggregated Interfaces (MPLSoAI) (Ethernet Link Aggregation, Multilink PPP, etc.)**
  - The intent of the MPLSoAI work is to have a single set of requirements and an implementation agreement that the vendors can use to guide their implementation of this functionality.

The Forum is also planning several industry-driven future work Items. Please contact the Forum directly for more information.

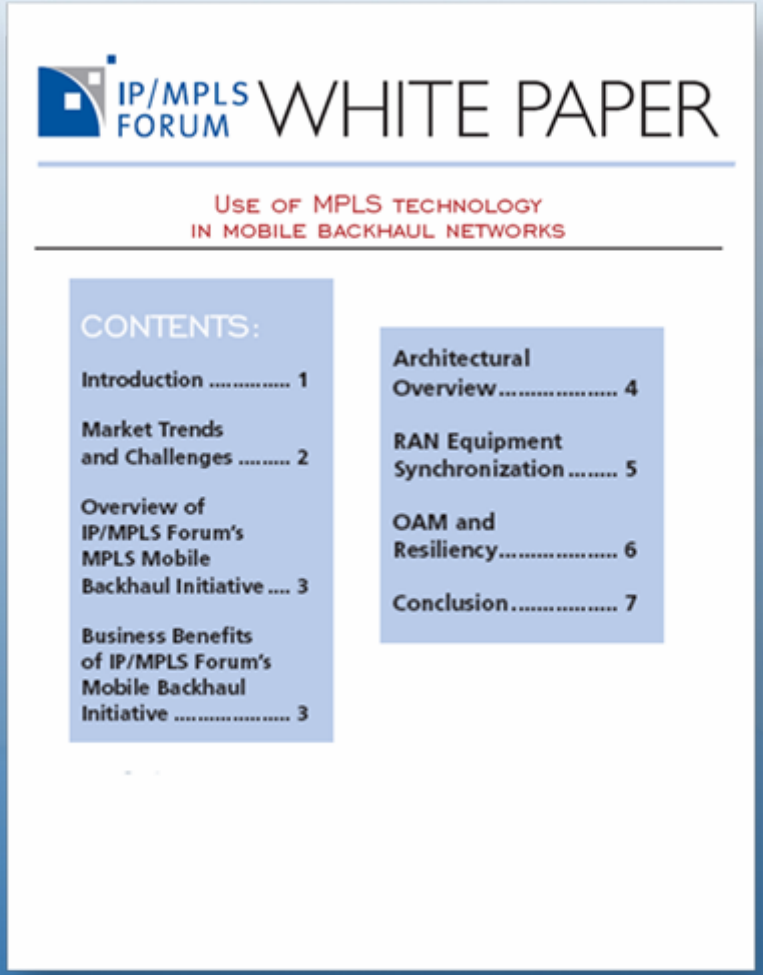
RELATIONSHIPS WITH OTHER BODIES

- Formal liaison relationship
- Strong common participation between IETF and IP/MPLS Forum
- Specifications based on IETF RFCs, no duplication of work

- A4 and A5 liaison status with ITU-T
- Communicating with Study Groups 11, 13, 15, and 17 regarding such topics as T-MPLS, NGN, MPLS OAM, MPLS/PNNI signaling interworking, VoMPLS carriage and signaling

Also have liaison relations with:

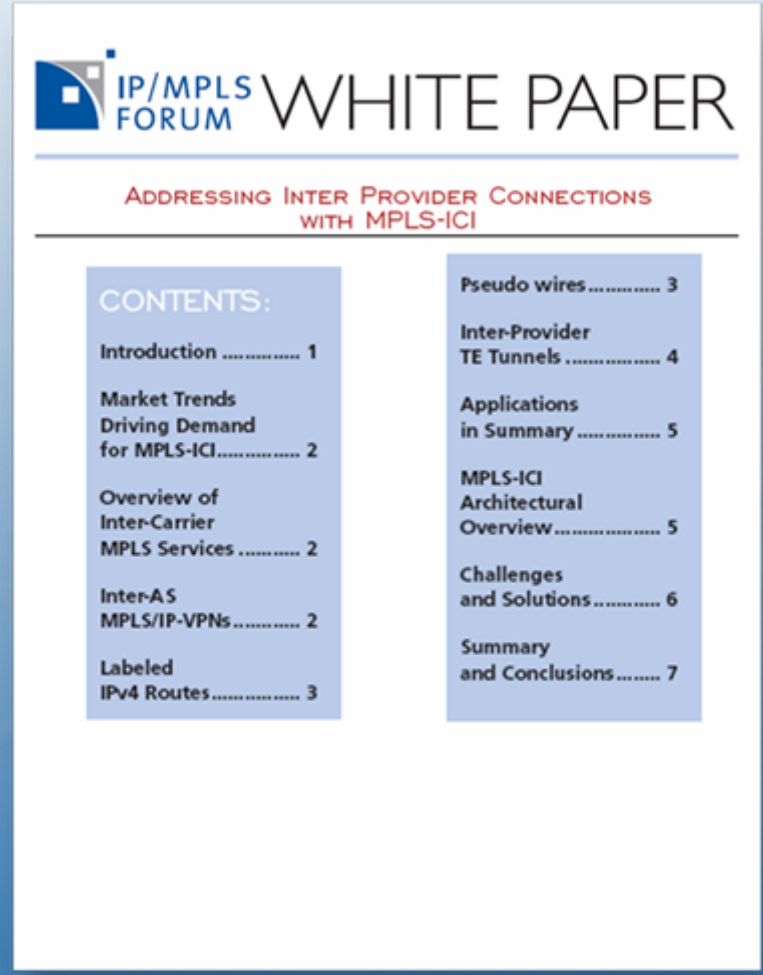
NEW WHITEPAPERS!



IP/MPLS FORUM WHITE PAPER

USE OF MPLS TECHNOLOGY IN MOBILE BACKHAUL NETWORKS

CONTENTS:



IP/MPLS FORUM WHITE PAPER

ADDRESSING INTER PROVIDER CONNECTIONS WITH MPLS-ICI

CONTENTS:

Copies available at our booth or download from www.ipmplsforum.org

For more information please visit
www.ipmplsforum.org