# CALL FOR PROPOSALS

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### **CALL FOR PROPOSALS**

The following list of topics is not exhaustive and authors may propose other subjects in keeping within the thematic framework.

Abstracts must not exceed one page. They may be submitted by email at: info@upperside.fr or remi. scavenius@wanadoo.fr

### **DEADLINE**

Deadline for turning in abstracts: June 15, 2012

### **End-to-end MPLS**

- Unified MPLS
- Requirements for a common packet transport architecture
   MPLS TP features
- Network designs
- Scalability issues
- Migration strategies
- Control and management plane

### **Software Driven Networks**

- Role of MPLS
- Different Standard efforts
- Cloud Network Framework, ALTO, PCE, MPLS, L2/L3 VPNs, CCAMP
- IEEE DCB
- MEF Dynamic Responsive Ethernet ONF Open Flow
- MPLS and SDN Use cases (BoD Bandwidth on Demand, VM, DCN applications, SPIT)
- Resiliency, Performance and High-Availability issues

### MPLS and Network/Infrastructure Virtualization (Cloud Services)

- Seamless VM mobility
- Virtualized Network Architectures
- Convergence and Resiliency in Data Center Networks
- Scaling and management of Data Center networks
- MPLS and Data Center Interconnect (inter-DC, Intra-DC)
- Impact of IPv6 transition to Cloud Services
- SP, Cloud Service Providers Case Studies

### MPLS and next generation mobile packet networks:

- MPLS in LTE
- Seamless MPLS and mobility
- Various options for backhaul
- MPLS synchronization for LTE networks
- Fixed mobile convergence and mobile broadband
- WiFi offload
- Scaling MPLS and Pseudowires
   Lightweight MPLS and Pseudowire based aggregation

### **GMPLS** and Optical Networking:

- Current standard issues
- Lambda switchingOptical VPNs
- Signaling at the edge between optical access devices/metro DWDM devices Applicability of GMPLS in non-optical technology areas

- PCE/PCC 100G and beyond
- GMPLS control plane challenges
- Planning and optimization









### Service providers deployments reports:

- MPLS TP OAM Issues
- VPLS Multicast Deployment
- VPN deployments
- Experience in MPLS Services scalability
- Experience in managing MPLS networks
- VPLS vs LAN Emulation: what makes the former more successful than the later Experiences with FRR, Diff-Serv aware TE
- Deployment of hierarchical LSPs
- Operational challenges of running MPLS networks Migrating legacy services to MPLS Transition efforts case studies

- Final studies
   Emulating ATM over MPLS
   Deployment of Layer 2 VPNs
   Deployment of MPLS Point-to-multipoint LSPs
   VPN Multicast Deployment

### MPLS-TP:

- ICC and Global-IDs in MPLS-TP Identifiers
   MPLS-TP OAM and Resilency mechanisms
   OTM (MPLS way or Ethernet way)
- Ring protection

### Multicast issues:

- MPLS Architecture enhancements for multicast

- MPLS point-to-multipoint LSPs
   MPLS point-to-multipoint OAM
   MPLS point-to-multipoint LSP Hierarchy
- Multicast in L3 VPNs challenges, new solutions
- Multicast in VPLS challenges, new solutions Multicast in L2 VPNs challenges, new solutions Can LDP and RSVP-TE multicast co-exist in same network?

### Access and Core: Packet Transport Technologies

- Lightweight MPLS to the CE
- Role of MPLS pseudo-wires in the access
   Role of MPLS in access broadband networks (MPLS to the DSLAM)
- Packet transport in the aggregation infrastructure
   Packet transport in core networks
- Technical challenges in packet transport -- performance monitoring, provisionina. QoS. resilience
- Technologies for overcoming the above challenges

### MPLS VPNs and Pseudo-Wires:

- MPLS for offering L2 and L3 pseudo-wires VPNs
  Traffic Engineering issues
  Ethernet services using MPLS

- Scalability
- VPN security
- Future trends: new architectures
- Mixed or Hybrid VPN environments: how to integrate IPSEC VPN & MPLS VPN?

### MPLS in the enterprise:

- Enterprise best-practices
- Deployment experiences
- Should Enterprise have more control over path their traffic take in Service Provider network?

### Quality of Service and Resiliency:

- QoS strategies for L2/L3 VPNs
- Fault tolerance/graceful restart
- MPLS guaranteed bandwidth
- Fault isolation and resource partitioning in multi-service MPLS networks





### Video over MPLS:

- Video Transport in Metro/Aggregation
- Video aware Networks
- Improving Video Quality of Experience

### Management and Planning for MPLS:

- Application of policy management to MPLS
- Provisioning/monitoring/trouble-shooting
- LSP provisioning management LSP verification tools/procedures
- SLA verification/monitoring
- SLA verification/monitoring
   Planning tools for designing, modeling, and simulating MPLS-based networks and services
   Network management for MPLS practices and tools
   Billing in MPLS networks
   Setting accurate SLAs
   Verifying negotiated SLAs
   SLAs for MPLS-based Layer2 VPNs

### Performance Issues:

- Scaling requirements for systems and protocols
   Impact of current infrastructure or system limitations
   Experience in Multicast MPLS deployment performance
- Fast convergence of MPLS enabled networks

### Inter-provider and inter-domain case studies:

- Inter-domain and inter-provider 2547 VPNs
- Inter-domain and inter-provider VPLS
- Inter-domain and inter-provider pseudo-wires
- Inter-domain and inter-provider L2 VPNs

### Reports from interoperability testing:

- Lessons learnt
- Issues found
- Guidance for MPLS development going forward for standards, vendors, and providers



### The Scientific Committee

The organizers of MPLS & Ethernet World Congress have gone out of their way to prevent the Conference from becoming a pretext for simply promoting branded products and services.

With this in mind, a scientific committee will select the most appropriate and interesting proposals submitted from the call for papers.

Upperside Conferences would like to once again thank the members of the committee for their precious collaboration.

Dr. Yakov Rekhter, Juniper Networks Loa Andersson, MPLS IETF WG Chairman, Ericsson Luyuan Fang, Cisco Kireeti Kompella, Juniper Fellow Clarence Filsfils, Cisco Heikki Jekunen, Tellabs Andrew G. Malis, Broadband Forum, Verizon Communications Dr. Xipeng Xiao, Huawei George Swallow, MPLS IETF Chairman, Cisco Jean-Marc Uze, Juniper Networks David Allan, Ericsson Matthew Bocci, Alcatel-Lucent André Danthine, University of Liège Giacomo Mirelli, Alcatel Lucent Hector Avalos, Ericsson Thomas Nadeau, Juniper Networks Elisa Bellagamba, Ericsson Bilel Jamoussi, ITU Standardiation Bureau Ananda Sen Gupta, OSI Vishal Sharma, Metanoia, Inc. Rajiv Papneja, Huaweï David Moses, Telco Systems

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