# **Networks 2016**

17th International Network Strategy and Planning Symposium

# Call for Papers

## **Organizing Committee**

General Chair:

Z. Dziong (CA) ETS Montreal

#### General Co-Chair: J. Rak (PL) Gdansk U. of Tech.

TPC Chair:

J.-C. Grégoire (CA) INRS-EMT

#### **TPC Co-Chairs:**

B. Jaumard (CA) Concordia U O. Gonzalez-Soto (ES) ITU Cons.

Industry Relations Chair:

# C. Tremblay (CA) ETS Montreal

Publication Co-Chairs: K.K. Nguyen (CA) ETS Montreal H. Otrok (UAE) Khalifa U

Local Arrangements Chair K.K. Nguyen (CA) ETS Montreal

#### Publicity Co-Chairs:

K. Sohraby (USA)	SDSMT
P. Cholda (POL)	AGH
R. Harris (NZ)	Massey U
H. Otrok (UAE)	Khalifa U
KJ. Park (RoK)	DGIST
Y. Zhou (CH)	Shenzhen U

## International Management and Scientific Committee

Chair (2015-2016):

Z. Dziong (CA) ETS Montreal

#### Members:

A. Ciarniello (IT) Telecom Italy T. Cinkler (HU) BME-TMIT O. Gonzalez-Soto (ES) ITU Cons. J. Gross (DE) Vodafone R. Harris (NZ) Massey U A. Inoue (JP) Chiba Inst.of Tech. B. Liau (FR) Orange H. Lim (KR) GIST Gwangju F. Matera (IT) FUB R. Nagarajan (US) Accenture R. Nitsch (DE) Deutsche Telekom M. Pioro (PL.SE) WUT. Lund U Gdansk U. of Tech. J. Rak (PL) A. Teixeira (PT) Aveiro II

Conference Web Site <u>networks2016.etsmtl.ca</u>



Networks 2016 is the 17<sup>th</sup> conference in the series of the International Telecommunications Network Strategy and Planning Symposia held every two years. Past events have been held on four continents (Europe, Asia, Australia, and North America) and have attracted participants from all branches of network research activities ranging from operators via industry to universities. Networks symposia are among the best places to share ideas about developments in strategies and planning of the evolution of networks, services and technologies, as well as the techno-economic impact of the rapidly changing business environment. Networks 2016 is technically co-sponsored by IEEE Communications Society.

The prime focus of Networks 2016 is on new challenges in network design, planning, management and operations. These challenges are induced by several recent technological developments such as: Software Defined Networking (SDN), Cloud Networking, Big Data Networking, omnipresent virtualization of resources leading to Virtual Networks Operations (VNO), as well as the increased diversity of overlaid large-scale infrastructures (Smart Cities, Smart Grid, Internet of Things). Some of these issues will be also addressed by keynote speakers from Ciena, Ericsson, GENI (Global Environment for Network Innovations) and SAVI (NSERC Strategic Network for Smart Applications on Virtual Infrastructures).

Prospective authors are invited to submit via EDAS their papers describing original, previously unpublished results. Accepted and presented papers will be published in the conference proceedings and submitted to IEEE Xplore as well as other Abstracting and Indexing (A&I) databases. Best Paper and Best Student Paper will be awarded.

Networks 2016 topics cover (but are not limited to) the following:

#### Emerging Topics in Network Planning & Ops

- Software Defined Networking,
- Network Function Virtualization,
- Cloud networking,
- Big data analytics,
- Cybersecurity issues and solutions,OTT services and impact on
- service providers,Social networks and impact on
- new services,Vehicular and 5G networks and
- their challenges,Smart cities,
- Internet of Things,
- Peer to peer networking,
- New paradigms.

#### Economic Aspects of Network Planning & Ops

- CAPEX vs. OPEX tradeoffs,
- Cost modelling and pricing,
- Network neutrality,
- Frequency management,
- Dynamic tariff optimization per customer requirement and network status,
- Infrastructure and spectrum sharing,
- Virtual Network Operators.

Network Design and Planning Methods

- Network topology design and optimization at different layers: physical optical, media and control,
- Network design methods for multimedia services,
- End-to-end service performance evaluation,
- Quality of Service, Quality of Resilience, performance and SLA,
- Networks interconnection,
- Ad-hoc and sensor networks,
- Network resilience: survivability, protection, restoration and availability,
- Energy efficiency,
- Content delivery and media services.

#### Network Planning Support Processes

- Methods and Tools,
- Multilayer planning process Business planning,
- Optical network, access planning, NGN planning methods and tools, LTE+ and 5G planning,
- Network management support,
- Hybrid planning methods and tools
- Migration and dismantling of legacy equipment planning.

## Traffic Measurements and Modelling

September 26-28, 2016, Montreal, CANADA

- Multiservice traffic measurement, analysis, characterization and simulation at network level,
- Application of measurements for network design and planning,
- Data collection and analysis,
- Methods and tools for traffic measurements and predictions,
- Network monitoring and anomaly detection,
- Traffic measurements and models related to Emerging Topics.

#### Routing, Traffic Flows and Optimization

- New signaling and control in multimedia/multiservice systems,
- P2P (peer---to---peer) traffic flows and implications on network demand,
- Intra-domain and inter-domain routing, traffic engineering and resilience,
- Optimization process with technical and economic criteria,
- Routing strategies to reduce power consumption,
- Impact of cloud and grid services.



Submission Deadline Extended: April 18<sup>th</sup>, May 2<sup>th</sup> 2016 (firm) Notification of Acceptance: June 6<sup>th</sup>, June 20<sup>th</sup> 2016 Final Paper Submission: June 20<sup>th</sup>, July 4<sup>th</sup> 2016