

# ITC-22

## Call for Papers

Amsterdam, Netherlands

September 7-9, 2010



## 22<sup>nd</sup> International Teletraffic Congress

[www.i-teletraffic.org/future-itc-congresses/](http://www.i-teletraffic.org/future-itc-congresses/)

[www.i-teletraffic.org/itc22/call-for-papers/](http://www.i-teletraffic.org/itc22/call-for-papers/)

ITC provides a venue for researchers interested in understanding and improving the way traffic is handled in communication networks. The rapid evolution of these networks, driven by the proliferation of broadband applications, mobility, new usage models and advances in technology, raises a critical need for continuous reappraisal of traffic management procedures and mechanisms.

In parallel with the effort to improve network efficiency and performance, there is major activity worldwide on the design of new architectural principles and concepts for future networks. How will technological innovations and content-centric networking impact our ability to control traffic flows? What architectural elements and business models are needed to meet user expectations for service quality and reliability in a cost-effective way?

ITC-22 solicits submission of papers with original contributions relating to traffic and performance issues in computer networks and communication systems. While technical correctness is an obvious requirement, it is not sufficient, and ITC-22 in particular welcomes contributions that address novel issues, pioneer disruptive paradigms, or propose innovative models and techniques. Specific topics of interest include, but are not limited to:

### Network technologies and paradigms

Cognitive radio networking  
Content delivery and storage networks  
Delay-tolerant and opportunistic networking  
Future Internet design  
IP/MPLS/Carrier Ethernet networks  
Multi-carrier networks  
Optical networks  
Sensor networks  
UMTS, WiFi, WiMax and LTE networks  
Wireless adhoc and mesh networks

### Applications

Application layer networks and overlays  
Virtualization  
Distributed, grid and cloud computing  
Efficient content delivery technologies  
Internet of Things  
IPTV, WebTV  
P2P and distributed lookup  
Social networks  
Tele-medicine, -education, -metry  
Web-services and SOA

### Publications and awards

All accepted contributions will appear as full papers in the conference proceedings with oral presentations. In order to guarantee the high visibility of the conference, the proceedings will be available through IEEE Xplore. ITC offers two prestigious awards: a General Best Paper Award and a Best Student Paper Award. For a paper to be eligible in the latter category, the student must be first author and presenter of the work. Please check the ITC-22 website for further details.

### Important dates

- Paper registration deadline: January 18, 2010
- Submission deadline: January 25, 2010
- Acceptance notification: April 16, 2010
- Final version: May 14, 2010
- Conference: September 7-9, 2010

### Network planning, QoS and associated performance issues

Capacity planning methods and tools  
Planning for multi-carrier networks  
Performance and reliability tradeoffs  
Robustness and reliability issues  
Web-based applications  
Network design methods  
Performance of wireless/wired networks  
Pricing and billing  
Business models for QoS  
SLA monitoring

### Models and techniques

Cross-layer design and optimization  
Game-theoretic models  
Self-optimization approaches  
Performance models for voice, video, data and P2P applications  
Random graph models  
Resource allocation and management  
Scheduling algorithms  
Simulation methods and tools

### Traffic management and measurement

Admission control  
Application traffic management  
Dynamic bandwidth management  
Intelligent adaptive routing  
Location and mobility management  
Multi-domain issues  
Network tomography, traffic matrices  
Overload and congestion control  
Protection, switching and restoration  
Traffic and performance monitoring

### Security-related issues

Anomaly detection  
Detection of DoS attacks  
Attack mitigation methods  
Epidemiological models  
Worm and virus propagation  
Privacy and trust

### General Co-Chairs

Hans van den Berg (TNO & Twente University)  
Rob van der Mei (CWI & VU University)

### TPC Co-Chairs

Sem Borst (Alcatel-Lucent Bell Labs & TU Eindhoven)  
Michel Mandjes (University of Amsterdam)  
Mark Squillante (IBM Research)