

# CTRQ 2015

## Foreword

The Eighth International Conference on Communication Theory, Reliability, and Quality of Service (CTRQ 2015), held between April 19<sup>th</sup>-24<sup>th</sup>, 2015 in Barcelona, Spain, continued a series of events focusing on the achievements on communication theory with respect to reliability and quality of service. The conference also brought onto the stage the most recent results in theory and practice on improving network and system reliability, as well as new mechanisms related to quality of service tuned to user profiles.

The processing and transmission speed and increasing memory capacity might be a satisfactory solution on the resources needed to deliver ubiquitous services, under guaranteed reliability and satisfying the desired quality of service. Successful deployment of communication mechanisms guarantees a decent network stability and offers a reasonable control on the quality of service expected by the end users. Recent advances on communication speed, hybrid wired/wireless, network resiliency, delay-tolerant networks and protocols, signal processing and so forth asked for revisiting some aspects of the fundamentals in communication theory. Mainly network and system reliability and quality of service are those that affect the maintenance procedures, on the one hand, and the user satisfaction on service delivery, on the other hand. Reliability assurance and guaranteed quality of services require particular mechanisms that deal with dynamics of system and network changes, as well as with changes in user profiles. The advent of content distribution, IPTV, video-on-demand and other similar services accelerate the demand for reliability and quality of service.

We take here the opportunity to warmly thank all the members of the CTRQ 2015 Technical Program Committee, as well as the numerous reviewers. The creation of such a high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to CTRQ 2015. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the CTRQ 2015 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that CTRQ 2015 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the field of communication theory, reliability and quality of service.

We also hope Barcelona provided a pleasant environment during the conference and everyone saved some time for exploring this beautiful city.

### **CTRQ 2015 Advisory Committee:**

Eugen Borcoci, Politehnica University of Bucharest, Romania

Joel Rodrigues, Instituto de Telecomunicações / University of Beira Interior, Portugal

Pascal Lorenz, University of Haute Alsace, France

Raj Jain, Washington University in St. Louis, USA