2007 NEXT GENERATION INTERNET NETWORKS
3rd EURO-NGI CONFERENCE on Next Generation Internet Networks
Design and Engineering for Heterogeneity
May 21-23, 2007. Trondheim, NORWAY

Technical cosponsors

Purpose of the conference

The 3rd Euro-NGI conference is the continuation of the series of conferences organized by the Network of Excellence EURO-NGI (http://www.eurongi.org), on the next generation Internet networks. It follows the successful conferences in Rome and Valencia. The conference is a key event contributing to reach the Euro-NGI targets of integrating the European research effort in the Next Generation Internet domain and to strengthen the collaboration with non European researchers and institutions. NGI 2007 will provide an international forum for the presentation of high quality, peer-reviewed papers on design, engineering and Quality-of-Service (QoS) issues in the heterogeneous next generation Internet.

Heterogeneity in networks relates to both technology and services. Networks and applications are changing in today's telecommunications world, moving to satisfy an increasingly various, multi-service and composite end user environment. The challenge for NGI will be to support, from nowadays voice, video and data, a continuous introduction of new and more sophisticated services, and to adapt promptly in a scalable, incremental and cost effective way. The heterogeneity of technology poses challenging problems to be solved, e.g. related to the global mobility, the multiplicity in access technologies and network types, as well as the handling of ambient intelligent services. The heterogeneity of the content and requirements of the services in the next generation Internet networks require handling of an extended set of QoS parameters, encompassing dependability, security, predictable performance, as well as optimization of resource usage and operational expenses. The ensuing service differentiation will have a profound impact on engineering and dimensioning, and will govern salient architectural and design issues. The current Internet architecture has shown its limitations to cope with these evolutions. Contributions are therefore welcome on the future Internet, its design, service architectures, innovative engineering for QoS, and management.
Of particular interest is the following, non exclusive, list of principal topics:

- All IP cellular networks
- Application, network co-operation
- Cross layer design
- Congestion control
- Control plane architectures
- Convergence networks
- Cost models and pricing
- Evolution of the IP network architecture
- Heterogeneous access
- Infrastructure and management for new services
- Integration of fixed and mobile networks
- Interworking with wireless sensor networks
- Internetworking
- Location based and context aware services
- Measurements on test bed or real networks
- Methods for network resilience
- MPLS and GMPLS
- Multilayer optimization
- Multicast systems

- Network design tools
- Network management
- Network planning
- Numerical methods and simulation
- Optical networking
- Passive and active measurements
- Peer-to-peer computing
- Platforms and test beds for traffic engineering
- Protection and restoration strategies and algorithms
- QoS in wireless and wired networks
- Robustness of access networks
- Routing in next generation networks
- Security architectures and mechanisms
- Service differentiation
- Spatial modelling
- Traffic characterization and modelling
- Traffic engineering
- Traffic management
- Trust management

Manuscript Submission

All papers should be submitted electronically as PDF, according to the IEEE publisher format.
The papers will be published both in the conference proceedings distributed in CD at the conference and, subsequently, in a book published by the IEEE.
It is intended to publish extended versions of the best papers as a special issue of a major networking journal.

For more information, please see the conference site: http://www.q2s.ntnu.no/eurongi2007
For additional information, please send an e-mail to: info.eurongi2007@q2s.ntnu.no

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