

CALL FOR PAPERS

ELMAR 2016 Special Session

From 3G to 5G

Summary:

According to some forecast projects, annual 45 percent growth in global mobile data traffic is expected to continue till 2021. In this context, maintaining good network performance and satisfactory user experience in increasing usage of 3G and 4G cellular networks creates a host of new challenge. Moreover, demands for 5G are set and lots of research of promising technologies for 5G is underway. This translates into a need to:

- Overcome the challenges of LTE deployment
- Create effective traffic load balancing strategies over legacy 2G, 3G and 4G networks
- Understand the benefits of mobile data offload solutions
- Determine the right moment for HetNet, Small Cel and SON solutions
- Utilize advanced antenna techniques in 4G deployment
- Investigate advances antenna techniques for 5G
- Define all possible drivers for 5G in the future

Therefore, this session will be focused on activities related to implementation of HSPA+ and LTE standards, traffic balancing and offloading strategies using legacy or cooperative networks, VoLTE and IMS solutions, advanced antenna techniques utilization, state-of-the-art in upcoming 5G etc.

The topics for this special session should cover:

- QoS and QoE monitoring
- Software defined\ cognitive radio
- Mobile data traffic load balancing and offloading strategies
- Capacity, coverage and energy consumption optimization
- Handling voice service in a 4G network: VoLTE, CSFB, VoIP
- DAS, MIMO and massive MIMO techniques
- Smart antennas and beamforming
- HetNet, SmallCell, Wifi integration and SON solutions
- 4G standards and functionalities: current and emerging
- 5G future – Internet of Things, new modulation formats, deployment of mmWave band etc.

Submission

Authors should prepare their papers according to [ELMAR-2015 paper sample](#), convert them to PDF (based on IEEE requirements), and submit them by **April 29, 2016** to one of the e-mail addresses listed below.

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