A Special Issue of Computer Networks (Elsevier) Journal on “Mobile WiMAX”

Mobile services enable voice communications at home, office, and outdoors. Thus, we are accessible all the time. Similarly, wireless data networks enable data connectivity even when we are away from our desktop computers. Thus, we are online all the time. In a nutshell, wireless networks have been shaping the life styles of the users for the last two decades. Nevertheless, the tide has turned, and now the user requirements are once again shaping the technology. Today, the users want the bandwidth at the desktop to be made available in a ubiquitous manner for different devices such as laptops, netbooks, and smartphones. DSL-equivalent bandwidth should be made available anywhere, even on-the-move. To make things worse, mobile devices and applications are becoming more bandwidth hungry day by day to have enhanced user experience. Applications that were once available only to desktop computers are now ported on mobile devices. Most notebook computers run on wireless even at home or office. With the deployment of IPTV services, we are now discussing triple- and quad-play. Therefore, today’s wireless wide-area technologies must provide high data rates with proper QoS provisioning for nomadic and mobile users.

This is where Mobile WiMAX diverges from most other wireless networks. Designed for high data rate and QoS provisioning as the primary objectives, Mobile WiMAX is the best candidate for next-generation wireless technology. Mobile WiMAX is now under consideration by ITU to become IMT-Advanced technology to provide very high speed Mobile Internet with superior QoS for our next-generation wireless communication needs. Thus, research on Mobile WiMAX has fostered to support very high data rates with better QoS support while enabling more seamless mobility.
About the Mobile WiMAX Special Issue

This special issue is dedicated to capture the state-of-the-art and the recent advances in WiMAX technology. Papers describing mathematical models, algorithms, protocols, tools, evaluation methods, and experimental studies of computing and communication architectures are solicited for this special issue. Topics of interest include (but are not limited to):

- Modulation and Coding for WiMAX
- Channel estimation, Measurement, and Modelling
- Antenna and MIMO techniques
- MAC, Scheduling, QoS provisioning
- Mobility Management and Handover
- Radio resource allocation, Cross-layer design
- Power management (sleep mode, idle mode, DCR mode)
- Co-existence with other radio networks
- Network planning, Spectrum management, and Regulations
- Deployment, Field Trials, Inter-operation, New Services
- New Service Models
- End-to-End Network Architecture

Submission format

The submitted papers must be written in English and describe original research which is not published nor currently under review by other journals or conferences. Author guidelines for preparation of manuscript can be found at www.elsevier.com/locate/comnet.

Submission Guideline

All manuscripts and any supplementary material should be submitted through Elsevier Editorial System (EES). The authors must select as “Special Issue: Mobile WiMAX” when they reach the “Article Type” step in the submission process. The EES website is located at: http://ees.elsevier.com/comnet

Guide for Authors

The guide for authors can be found on the journal homepage (http://www.elsevier.com/locate/comnet). This site will guide you stepwise through the creation and uploading of your article. Submissions must be in single-column format, double-spaced, use a font size of at least 11 points, and should not exceed 25 pages including all figures and references.