

# Call for Papers

Symposium on Next Generation Mobile Networks (NGMN 2010)

<http://www3.ntu.edu.sg/home/dniyato/ngmn2010/>

International Wireless Communications and Mobile Computing  
Conference (IWCMC 2010)

Next generation mobile networks are expected to allow subscribers to transparently access broadband multimedia services via multiple wireless and wireline access networks. Evolution towards next generation mobile networks is already taking place through the interworking of third generation (3G) cellular systems such as UMTS and cdma2000 with other broadband wireless access technologies such as WiFi hotspots and WiMax to provide mobile users with anytime anywhere access to broadband multimedia services over the Internet. Dynamic spectrum access and cognitive radio techniques will be essential for maximizing the radio resource utilization in future generation mobile networks. The next generation mobile networks will also be shaped by emerging standards for wireless access from mobile terminals, e.g., IEEE 802.20, and for integration of heterogeneous wireless access networks, e.g., IEEE 802.21. Due to the heterogeneity in the wireless access techniques and the requirements of multimedia services, the issue of QoS provisioning and enforcement in the future generation mobile networks will become a critical issue for the wireless access equipment vendors, networks service providers, and customers. Cross-layer protocol engineering along with application-oriented signaling protocols, and creation of new services will be required for efficient network resource utilization and to bring profitability to the service providers.

The symposium on “Next Generation Mobile Networks” will provide a timely technical forum for the dissemination of new results in this exciting research area. It will cover key aspects of B3G/4G mobile networks, particularly architectures, protocols and management techniques. Papers addressing areas such as protocol engineering, resource management, mobility management, handoff management, QoS provisioning, authentication, authorization and accounting, performance analysis and optimization models are encouraged.

## Symposium Topics

- Topics include but are not limited to:
- Next generation broadband wireless mobile network architectures and protocols
- Heterogeneous wireless mobile networks
- Internetworking among heterogeneous wireless and wire-line networks
- Radio resource management in broadband wireless mobile networks (e.g., IEEE 802.16e)
- Next generation WLANs and wireless mesh networks
- Cognitive techniques and dynamic spectrum management for mobile networks
- Modeling, performance evaluation, simulation, and optimization techniques
- Mobility, location, and handoff management in heterogeneous mobile networks
- Multimedia QoS and traffic management in mobile networks

- Multi-protocol architectures and devices for mobile networks
- Proxies and middleware for wireless mobile networks
- Next generation broadband satellite systems
- Cross-layer protocol engineering for wireless mobile networks
- Wireless mobile network security and privacy
- Authentication, Authorization, Accounting (AAA) over heterogeneous mobile networks
- Emerging applications of wireless mobile networks (e.g., wireless telemedicine)

#### Important Dates

- Paper submission deadline: 15 December 2009
- Notification of acceptance: 15 March 2010
- Camera-Ready Version and Copyright Form Submission: 1 April 2010

#### Submission Guidelines:

All papers are limited to 6 pages and must be in standard IEEE double-column format. All submissions will be handled electronically and must be in PDF format. All papers will be peer reviewed.

#### Symposium Chair:

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#### Symposium Co-Chairs:

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