

## Call for Contributions on Project 802.16e:

### ***Mobility Enhancements to IEEE Standard 802.16/802.16a***

#### **Deadline: 10 January 2003**

On 11 December 2003, the IEEE-SA Standards Board approved Project Authorization Request (PAR) P802.16e to develop an amendment to IEEE Standard 802.16 (as amended by IEEE 802.16a and 802.16c). The PAR (IEEE 802.16-02/48r4 <[http://ieee802.org/16/docs/02/80216-02\\_48r4.pdf](http://ieee802.org/16/docs/02/80216-02_48r4.pdf)>) includes the scope statement:

*This document provides enhancements to IEEE Std 802.16/802.16a to support subscriber stations moving at vehicular speeds and thereby specifies a system for combined fixed and mobile broadband wireless access. Functions to support higher layer handoff between base stations or sectors are specified. Operation is limited to licensed bands suitable for mobility between 2 and 6 GHz. Fixed 802.16a subscriber capabilities shall not be compromised.*

A new 802.16 Task Group e <<http://ieee802.org/16/tge>> has been assigned to develop the draft. Contributions are solicited on topics including:

- Changes to the Standard required to support various levels of mobility, up to vehicular
- Reference System Deployment Scenario
  - Multi-cell, macro and/or micro
  - Omni-directional or sectorized antennas or both
  - Frequency reuse and cell-to-cell interference (FDD & TDD)
  - Level of Cell network interconnect and handoff
- Mobile Channel Effects, including simulation or field test results
  - Doppler
  - Dispersive Multipath – Fast Fading
- Impact of the mobile environment on the current 802.16a parameters and performance, including:
  - Synchronization & Timing
  - Ranging
  - Power Control
  - Channel Coding
  - Measurement methods and messaging for handoff support
  - Effect on Advanced Antenna Systems
  - MAC Protocols
- Service Impacts
  - QoS and Latency
  - Data Rate and BER
- Appropriate Frequency Bands

Contributions will be considered non-confidential and will be posted for public access on the 802.16 Web Site <<http://WirelessMAN.org>>.

Submit your contribution by the **deadline of 10 January 2003** following the instructions at <<http://WirelessMAN.org/submit.html>>. Make use of the “TGe” upload directory <<http://tge.WirelessMAN.org>>

For further information, contact either of the following:

- Task Group Chair: Brian Kiernan <<mailto:Brian.Kiernan@InterDigital.com>>
- IEEE 802.16 Working Group Chair: Roger Marks <<mailto:marks@nist.gov>>