802.16.1 MAC Task Group CALL FOR CONTRIBUTIONS ON MAC-LAYER MODELING Session #6 Deadline: 29 February 2000

Session #6 of the IEEE 802.16 Working Group on Broadband Wireless Access will be held on 6-9 March 2000 in Albuquerque, New Mexico, USA.

The Working Group's 802.16.1 Medium Access Control (MAC) Task Group invites contributions addressing MAC-layer modeling. Systems to be simulated are specified in the current set of 802.16.1 MAC proposals (Documents IEEE 802.16.1mc-00/01 and IEEE 802.16.1mc-00/07). Optional features in the proposals should be simulated both turned on and off. For channel-model assumptions to be applied to the physical layer, see the accompanying Call for Contributions for the physical layer simulations http://ieee802.org/16/phy/docs/802161p-00_01.pdf>.

Conditions to be simulated should reflect the Functional Requirements Document (IEEE 802.16s-99/00r1). This includes the various bearer services given there in Table 1, using assumptions consistent with that document. Also, total throughput and throughput for individual services should be reported, as well as delay and jitter on an overall and per-service basis. The number of users assumed should likewise be consistent with the functional requirements, with locations randomly assigned within the cell served by the base station. Signal strength assumptions should be line of sight in clear weather. Simulation should also cover cases with rain fade at several levels of severity up to 40 dB, and should include cases where only a fraction of users are subject to rain fade. Assumptions about the scheduling process should be stated explicitly.

It is desirable that work in this area be done in two stages: in the first stage, a proposal that will cover simulation methodology (what simulation program and other relevant details). The proposals should also specify the parameters and the ranges of these parameters to be used in the simulations. These proposals should be made at 802.16 Session #6 (Albuquerque, New Mexico, USA on 6-9 March 2000).

Following discussions at that meeting and possible revision of proposals, results of the simulations are requested for Session #7 (Gaithersburg, Maryland on 1-5 May 2000).

Contributions must be submitted using Revision 7 or higher of the 802.16 Document Submission Template <<u>http://ieee802.org/16/docs/802_16_template.doc</u>>. Submissions will be considered non-confidential and will be posted, as soon as possible following receipt, for public access on the 802.16 Web Site.

Submit your contributions to all of the following:

- Jung Yee (802.16.1 MAC Chair) <mailto:jyee@newbridge.com>
- Baya Hatim (802.16.1 MAC Secretary) <mailto:bayahatim@aol.com>
- Lou Olsen (802.16.1 Chair) <mailto:louis.olsen@teligent.com>
- Roger Marks (802.16 Chair) <mailto:marks@nist.gov>