

IEEE 802.16 Task Group 3
CALL FOR CONTRIBUTIONS: PROPOSED MAC ENHANCEMENTS, KEY
CHARACTERISTICS AND EVALUATION CRITERIA: Session #11
Deadline: January 17, 2001

a) Proposed MAC Enhancements

Task Group 3 of the IEEE 802.16 Working Group on Broadband Wireless Access is preparing to define the MAC layer protocols for a broadband wireless access network standard for licensed bands from 2 to 11 GHz. The standard will be in the form of enhancements to the 802.16.1 MAC. Increasing detail will be required as the process progresses. Mergers and improvements will be encouraged, with selection scheduled for July 2001 and refinement to follow.

The Task Group is calling for initial contributions proposing MAC solutions to requirements as given in the Functional Requirements for the 802.16.3 Interoperability Standard <http://ieee802.org/16/tg3/docs/802163-00_02r4.pdf>. Contributors will be granted time on the Task Group presentation agenda during Session # 11 (22-26 January 2001 in Ottawa, Canada) to present and discuss the merits of their proposal.

Contributions must follow the guidelines below:

- Proposals shall be presented as enhancements to the current 802.16 Task Group MAC described in [IEEE 802.16.1-00/01](#) (currently at Revision 4, with Revision 5 to be available by 22 December 2000), rather than as independent stand-alone MAC solutions. In this regard, see 802.16.3p-00/56, "Using the TG1 MAC for TG3 Purposes" <http://ieee802.org/16/tg3/contrib/802163p-00_56.pdf>, especially pages 16-27, for general guidance and examples.
- Discuss method of over the air transport, granularity of bandwidth assignment, frame structure, and overhead characteristics.
- Explain how the proposed MAC enhancements relate to existing standards and note any differences.
- Describe the benefits of the proposed enhancements, including any unique features.
- Describe all drawbacks of the proposed MAC enhancements.
- Explain how the proposed enhancements meet and are consistent with the Functional Requirements described in 802.16.3-00/02r4.
- Include a statement on intellectual property rights and how 802.16 may utilize the proposed enhancements in a standard.
- Include a descriptive title.

b) Key Characteristics and Evaluation Criteria

Contributions are invited on the key characteristics and criterion against which specific MAC proposals can be evaluated. These contributions will be used to complete the MAC portion of "Key Characteristics of 802.16.3 Air Interface Standard" (IEEE 802.16.3-00/07r1 <http://www.ieee802.org/16/tg3/docs/802163-00_07r1.pdf>) and establish the criteria by which MAC contributions will be evaluated. At this initial stage, the Functional Requirements represent the only criteria available. It is desired that these

requirements be refined into specific MAC characteristics and criteria, including delay, scalability, security, etc. Contributions in this area should follow the guidelines below:

- Include a descriptive title of the proposed Characteristic or Evaluation Criteria.
- Include a description and discussion of the proposed Characteristic or Criteria
- Describe how a proposed Criteria can be used to assess MAC proposals

These evaluation criteria will be refined and then utilized on a continuing basis for MAC evaluation purposes.

Contributions will be considered only if they are submitted using Revision 8.2 or higher of the 802.16 Document Submission Template

<http://ieee802.org/groups/802/16/docs/802_16_template.doc>. The template requires a cover page and a narrative. Any accompanying presentations must be submitted using Revision 8.2 or higher of the 802.16 Presentation Submission Template.

Contributions will be considered non-confidential and will be posted, as soon as possible following receipt, for public access on the 802.16 Web Site <<http://ieee802.org/16>>.

Email your contribution, for receipt by the **deadline of 17 January 2001**, to the following:

IEEE 802.16.3 Chair, Brian Kiernan brian.kiernan@interdigital.com

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