



INTERNATIONAL TELECOMMUNICATION UNION

**RADIOCOMMUNICATION
STUDY GROUPS****Document 8A/IEEE-1-E
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English only**

Received:

Subject: [Question ITU-R 212-2/8](#), [Question \[8A-BWA\]](#)**Institute of Electrical and Electronics Engineers (IEEE)****BROADBAND WIRELESS ACCESS STANDARDS IN THE MOBILE SERVICE**

This contribution was developed by IEEE Project 802, the Local and Metropolitan Area Network Standards Committee ("IEEE 802"), an international standards development committee organized under the IEEE and the IEEE Standards Association ("IEEE-SA").

The content herein was prepared by a group of technical experts in IEEE 802 and industry and was approved for submission by the IEEE 802.16 Working Group on Wireless Metropolitan Area Networks, the IEEE 802.18 Radio Regulatory Technical Advisory Group, and the IEEE 802 Executive Committee, in accordance with the IEEE 802 policies and procedures, and represents the view of IEEE 802.

IEEE thanks ITU-R for the liaison statement in Document [IEEE L802.16-05/055](#) requesting input for the progression of the work on Broadband Wireless Access (BWA) standards in the Mobile Service.

We note that Attachment 1 to [IEEE L802.16-05/055](#) is largely based on previous IEEE contributions and we support this proposed Recommendation for nomadic applications.

It is also noted that Attachment 2 to [IEEE L802.16-05/055](#) contains multiple standards, including the IEEE 802.16 standard. Considering the definition of "ITU-R Recommendation" provided in the liaison statement, it is noted that when multiple standards are recommended there is a need to do an evaluation and provide guidance for when to use each standard. In order to assist WP 8A in your work we propose the following criteria for evaluation of BWA standards to be included in Attachment 2 to [IEEE L802.16-05/055](#):

1. Capable of supporting minimum peak data rate of 10 Mbit/s per 5 MHz channel in the downstream direction
2. Capable of supporting multiple users at broadband data rates
3. Be able to operate in frequency bands allocated to the Mobile Service under 6 GHz
4. Be able to support broadband services for mobile station vehicular speeds greater than 120 km/h.
5. Be able to support handover for mobility
6. Satisfy the ITU-R definition of "broadband" (i.e., services per user at greater than 1.544 Mbit/s)

The IEEE Std 802.16e-2005 meets all these criteria; for further information about the standard please refer to the overview in the working documents.

IEEE does not have any input on characteristics of BWA systems for sharing studies (Attachment 3 to Doc. [IEEE L802.16-05/055](#)). The focus in IEEE 802.16 is on the development of interoperability standards, and the characteristics necessary for sharing studies might not be contained in these standards. Therefore, it is preferable that industry groups dealing with implementation and certification issues, such as the WiMAX Forum, provide the information directly to WP 8A.

IEEE looks forward to continue cooperating with Working Party 8A on the development of Recommendation(s) Broadband Wireless Access (BWA) standards in the Mobile Service.
