



PAR FORM

PAR Status: Amendment of Standard

PAR Approval Date: 2002-12-11

PAR Signature Page on File: Yes

Review of Standards Development Process: No

1. Assigned Project Number: 802.16e

2. Sponsor Date of Request: 2002-11-01

3. Type of Document: Standard for

4. Title of Document:

Draft: Amendment to IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems - Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands

5. Life Cycle: Full Use

6. Type of Project:

6a. Is this an update to an existing PAR? No

6b. The Project is a: Amendment to Std. 802.16-2001

7. Contact Information of Working Group:

Name of Working Group: IEEE 802.16 Working Group on Broadband Wireless Access

Name of Working Group Chair: Roger B Marks

Telephone: 303-497-3037 **FAX:** 509-756-2642

Email: r.b.marks@ieee.org

8. Contact Information of Official Reporter (If different than Working Group Chair)

Name of Official Reporter: (if different than WG contact)

Telephone: FAX:

Email:

9. Contact Information of Sponsoring Society or Standards Coordinating Committee:

Name of Sponsoring Society and Committee: Computer Society Local and Metropolitan Area Networks/Microwave Theory & Techniques

Name of Sponsoring Committee Chair: Paul Nikolich

Telephone: 857-205-0050 **FAX:** 781-334-2255

Email: p.nikolich@ieee.org

Name of Liaison Rep. (If different than Sponsor Chair):

Telephone: FAX:

Email:

10. The Type of ballot is: Individual Sponsor Ballot

Expected Date of Submission for Initial Sponsor Ballot: 2003-11-14

11. Fill in Projected Completion Date for Submittal to RevCom: 2004-05-14

Explanation for Revised PAR that Completion date is being extended past the original four-year life of the PAR:

12. Scope of Proposed Project:

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 (See Item #18).

13. Purpose of Proposed Project:

This standard will increase the market for broadband wireless access solutions by taking advantage of the inherent mobility of wireless media. It will fill the gap between very high data rate wireless local area networks and very high mobility cellular systems. It will support fixed and mobile services for both enterprise and consumer markets.

14. Intellectual Property:

Sponsor has reviewed the IEEE patent policy with the working group? Yes

Sponsor is aware of copyrights relevant to this project? No

Sponsor is aware of trademarks relevant to this project? Yes

Sponsor is aware of possible registration of objects or numbers due to this project? No

15. Are you aware of other standards or projects with a similar scope? Yes

The ETSI BRAN HIPERMAN Project is currently focusing on licensed frequencies between 2 and 11 GHz and license-exempt frequencies in the 5.725-5.875 GHz band. No mobility is supported. T1P1.4 is currently developing air interface standards for medium data rate, low speed mobility. The individual user data rates specified by this group range from 8 Kb/s to 2 Mb/s. IEEE 802.11, ETSI HIPERLAN/2 and 802.15 address primarily short range WLAN and WPAN applications, respectively. This amendment is specifically directed towards longer-range wireless point to multipoint MAN systems that provide access to core public networks. ITU-R Working Party 8F in conjunction with 3GPP and 3GPP2 are developing air interfaces for IMT-2000 both mobile and fixed applications. The work targets CDMA and W-CDMA, with relatively low spectral efficiency and data rate per user, as compared with 802.16 solutions.

Similar Scope Project Information:

16. Is there potential for this standard (in part or in whole) to be submitted to an international organization for review/adoption?:

Yes

If yes, please answer the following questions:

Which International Organization/Committee? ITU-R

International Contact Information? Jose M Costa
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17. Will this project focus on Health, Safety or Environmental Issues? No

18. Additional Explanatory Notes: (Item Number and Explanation)

Item #12 - Subscriber stations specified herein, when stationary, shall interoperate with base stations specified in IEEE Std 802.16a. Base stations specified herein shall interoperate with stationary subscriber stations specified in IEEE Std 802.16a. Because the standard will utilize the 802.16/802.16a medium access control layer, it will support multimedia services requiring differentiated Quality of Service, and it will support adaptive physical link control so that subscriber stations can receive higher-rate service when they move more slowly, include more effective antennas, or are otherwise in better link conditions.