1. ASSIGNED PROJECT NUMBER: 802.16e

2. SPONSOR DATE OF REQUEST: 2004-07-16

3. TYPE OF DOCUMENT: Standard



4. TITLE OF DOCUMENT: 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: Amendment IEEE 802.16-2004

Modified PAR? Yes 802.16e 2002-12-11 In Ballot? No

7. WORKING GROUP INFORMATION

Name of Working Group: IEEE 802.16 Working Group on Broadband Wireless Access Approximate Number of Expected Working Group Members: 100

8. CONTACT INFO FOR WORKING GROUP CHAIR

Name of Working Group Chair: Roger Marks

Telephone: +1 303 497 3037

FAX:

E-mail: r.b.marks@ieee.org

9. CONTACT INFO OF CO-CHAIR/OFFICIAL REPORTER

Name of Co-Chair/Official Reporter:

Telephone: FAX: E-mail:

10. CONTACT INFO OF SPONSOR

Sponsor: C/LM

Name of Sponsor Chair: Paul Nikolich

Telephone: +1 857 205 0050 FAX: +1 781 334 2255

E-mail: p.nikolich@ieee.org

Standards Coordinator (Power Engineering Society Only):

This is the information you entered:

Name:

Telephone: Fax:

E-mail:

Name:

Telephone: Fax:

E-mail:

CO-SPONSOR INFORMATION (THIS IS BEING SPONSORED BY TWO SPONSORS):

Cosponsor: MTT

Name of Cosponsor Chair: Jeffrey Jargon

Telephone: +1 303 497 3596

FAX:

E-mail: jargon@boulder.nist.gov

Standards Coordinator for Cosponsor (Power Engineering Society Only):

This is the information you entered:

Name:

Telephone: Fax:

E-mail:

This is the information in our database:

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Name:

Telephone: Fax:

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11. TYPE OF SPONSOR BALLOT: Individual

Expected Date of Submission for Initial Sponsor Ballot: 2004-10-01

12. PROJECTED COMPLETION DATE FOR SUBMITTAL TO REVCOM: 2004-12-31 (PAR Expires in December 2006)

13. SCOPE: This document provides enhancements to IEEE Std 802.16-2004 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 below 11 GHz. Fixed 802.16-2004 subscriber capabilities shall not be compromised (See Item #19).

Completion of this document contingent? Yes

IEEE Standard 802.16-2004 (completed; submitted to RevCom on 14 May 2004)

14. PURPOSE: This amendment enhances IEEE Standard 802.16-2004 by providing additional specifications required to support mobile as well as fixed terminals.

14a. Reason: 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.

15. INTELLECTUAL PROPERTY:

Patent Policy: Yes Copyrights: No Trademarks: No

Registration of Object: No

16. SIMILAR SCOPE: Yes

Explanation: ITU-R Working Party 8F, in conjunction with 3GPP and 3GPP2, is developing air interfaces for IMT-2000 and systems beyond IMT-2000 for both mobile and fixed applications. The IEEE P802.20 project targets systems optimized for high mobility and IP transport.

Sponsor: ITU-R

Project Number: ITU-R 8F; IEEE 802.20

Project Date: Project Title:

17. FUTURE ADOPTION - INTERNATIONAL SPONSOR: Yes

Int'l Organization: ITU 8F (R)
Int'l Contact Person: Jose Costa

Telephone: +1 613 763 7574 FAX: +1 613 765 1225 E-mail: j.costa@ieee.org

18. FOCUS ON HEALTH, SAFETY OR ENVIRONMENTAL ISSUES:

Explanation: No.

19. ADDITIONAL NOTES: Item #6 - This PAR is being modified to replace obsolete references to the base standard and to provide for scalable FFT sizes. Item #13 - Subscriber stations and base stations specified herein shall be interoperable with existing physical layer specifications in IEEE Std 802.16-2004 except when using one of their extensions with scaled down FFT sizes (1024, 512, 128). For OFDM (256 FFT)/OFDMA (2048 FFT) implementations as specified in IEEE Std 802.16-2004, there shall be no changes or additions to the mandatory features and backward compatibility shall be maintained. Because the standard will utilize the 802.16-2004 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.

I acknowledge having read and understood the IEEE Code of Ethics I agree to conduct myself in a manner which adheres to the IEEE Code of Ethics when engaged in official IEEE business.

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