P802.16.1

Submitter Email: r.b.marks@ieee.org
Type of Project: New IEEE Standard
PAR Request Date: 18-Mar-2011
PAR Approval Date: 16-Jun-2011
PAR Expiration Date: 31-Dec-2015
Status: PAR for a New IEEE Standard

1.1 Project Number: P802.16.1 1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard for WirelessMAN-Advanced Air Interface for Broadband Wireless Access Systems

3.1 Working Group: Broadband Wireless Access Working Group (C/LM/WG802.16)

Contact Information for Working Group Chair

Name: Roger Marks

Email Address: r.b.marks@ieee.org

Phone: 1 619 393 1913

Contact Information for Working Group Vice-Chair

None

3.2 Sponsoring Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee (C/LM)

Contact Information for Sponsor Chair

Name: Paul Nikolich

Email Address: p.nikolich@ieee.org

Phone: 857.205.0050

Contact Information for Standards Representative

None

3.3 Joint Sponsor: IEEE Microwave Theory and Techniques Society/Standards Coordinating Committee (MTT/SCC)

Contact Information for Sponsor Chair

Name: Michael Janezic

Email Address: janezic@boulder.nist.gov

Phone: 303-497-3656

Contact Information for Standards Representative

Name: Michael Janezic

Email Address: janezic@boulder.nist.gov

Phone: 303-497-3656

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 09/2011

4.3 Projected Completion Date for Submittal to RevCom: 02/2012

${f 5.1}$ Approximate number of people expected to be actively involved in the development of this project: 100

5.2 Scope: This standard specifies the WirelessMAN-Advanced air interface, including the medium access control layer (MAC) and physical layer (PHY), of a broadband wireless access (BWA) system supporting multiple services. The WirelessMAN-Advanced air interface supports ITU's IMT-Advanced requirements.

5.3 Is the completion of this standard dependent upon the completion of another standard: Yes **If yes please explain:** Completion is co-contingent on the IEEE Std 802.16 revision project initiated in 2011. In that revision, the WirelessMAN-Advanced air interface will be split from IEEE Std 802.16 and moved to IEEE Std 802.16.1.

- **5.4 Purpose:** This standard enables rapid worldwide deployment of innovative, cost-effective, and interoperable multivendor broadband wireless access products, facilitates competition in broadband access by providing alternatives to wireline broadband access, encourages consistent worldwide spectrum allocation, and accelerates the commercialization of broadband wireless access systems. The standard serves as a basis for IMT-Advanced recommendations within the ITU.
- **5.5 Need for the Project:** This project will extract the WirelessMAN-Advanced air interface specification from IEEE Std 802.16 (following its introduction to the standard by the amendment 802.16m-2011), moving it to the new

standalone standard IEEE Std 802.16.1. Such a split will result in more practical maintenance of the two radio interfaces. It will also ease the ongoing activities of maintaining the ITU's IMT-Advanced recommendations, which reference WirelessMAN-Advanced, and the ITU's IMT-2000 recommendations, which reference the WirelessMAN-OFDMA air interface in the earlier revision of IEEE Std 802.16. To assure that WirelessMAN-Advanced remains specified by an IEEE 802 standard, the revision and this new standard are co-contingent.

5.6 Stakeholders for the Standard: International Telecommunication Union - Radiocommunication Sector (ITU-R), Association of Radio Industries and Businesses (ARIB), Telecommunications Technology Association (TTA), WiMAX Forum, vendors developing IEEE 802.16 products, operators using IEEE 802.16 products.

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: Yes If yes please explain: IEEE Std 802.16-2009 says:

Grateful acknowledgment is made to Cable Television Laboratories for the permission to use the following source material:

Radio Frequency Interface Specification (version 1.1), part of Data-Over-Cable Service Interface Specifications, (C) Copyright 1999, Cable Television Laboratories.

Baseline Privacy Plus Interface Specification, (C) Copyright 1999, Cable Television Laboratories.

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: Yes If yes please explain: IEEE Std 802.16-2009 says:

The 24-bit Operator ID shall be assigned as an IEEE 802.16 Operator ID by the IEEE Registration Authority.

7.1 Are there other standards or projects with a similar scope?: No

7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes (Item Number and Explanation): (7.3) Section 7.3 was completed using the on-line PAR form to refer to the potential of adoption by ITU-R Working Party 5D. However, the content of Section 7.3 was not included when the system generated the PAR output.

Regarding 7.3, it is anticipated that the participants among the WirelessMAN-Advanced Transposing Organizations (WATO) will "transpose" this standard. In particular, IEEE has signed agreements with ARIB and TTA to do so.

Note: "WirelessMAN(R)" is an IEEE trademark.

Note: IMT is an ITU designation referring to "International Mobile Telecommunications."