

**NOT APPROVED**

2001-11-16

IEEE 802.16-01/60

## IEEE-SA Standards Board Project Authorization Request (PAR) Form

Note: For use with help hyperlinks offline, download [guide.html](#) and [par2000.html](#) into the same directory. After completing this form, please e-mail it to the [NesCom Secretary](#).  
[Instructions for Downloading the PAR Form](#)

1. **Sponsor Date**  
**of Request**  
**[2001 11 16]**

2. **Assigned Project**  
**Number**  
**[P802.16a]**

3. **PAR Approval**  
**Date**  
\_\_\_\_\_

Copyright release must be submitted with [appropriate signatures](#) by FAX (1-732-562-1571)

[...] PAR Signature Page on File {IEEE Staff to check box}

### 4. **Project Title**, Recorder and Working Group/Sponsor for this Project

Document type and title: {Place an X in only one option below}

- **Standard for** {document stressing the verb "shall"}
- **Recommended Practice for** {document stressing the verb "should"}
- **Guide for** {document in which good practices are suggested}

**Title:** [**Amendment to IEEE Standard for Local and Metropolitan Area Networks Part 16: Air Interface for Fixed Broadband Wireless Access Systems Medium Access Control Modifications and Additional Physical Layer Specifications for 2-11 GHz**]

Name of Working Group (WG): [**802.16 Working Group on Broadband Wireless Access**]

Name of Official Reporter (usually the WG Chair) who must be an SA member as well as an IEEE/Affiliate Member: [**Roger B. Marks**]

IEEE-Standards Staff has verified that the Official Reporter (or Working Group Chair) is an IEEE and an IEEE-SA member: [...] (Staff to check box)

**Contact Information:**

Telephone: [[+1 303 497 3037] FAX: [[+1 303 497 7828]  
E-mail: [r.b.marks@ieee.org]

**Name of Working Group Chair (if different than Reporter):** []

IEEE-Standards Staff has verified that the Working Group Chair is an IEEE and an IEEE-SA member: [...] (Staff to check box)

**Contact Information:**

Telephone: ] FAX: ]  
E-mail: []

**Name of Sponsoring Society and Committee:**

[**Computer Society, LAN/MAN Standards Committee;**  
**Microwave Theory and Techniques Society**]  
[**Paul Nikolich, Chair, LAN/MAN Standards Committ**

Name of Committee Sponsor Chair:

IEEE-Standards Staff has verified that the Sponsor is an IEEE and an IEEE-SA member: [...] (Staff to check box)

**Contact Information:**

Telephone: [?????] FAX: [?????]  
E-mail: [?????]

## 5. Type of Project

### a. Is this an update to an existing PAR? [**Yes**/NO.]

If YES, indicate PAR Number/Approval Date [P802.16a-2001, P802.16b-2001]

If YES, is this project in ballot now? [yes/**no**]

[Indicate changes/rationale for revised PAR in Item #16. This should be no more than 5 lines.]

### b. Choose one from the following:

[...] New Standard

[...] Revision of existing Standard {number and year} []

[**X**] Amendment (Supplement) to an existing standard {number and year}  
[**802.16-2001**]

[...] Corrigenda to an existing standard {number and year} [...]

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## 6. Life Cycle

[**X**] Full Use (5-year life cycle)

[...] Trial Use (2-year life cycle)

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## 7. Balloting Information

**Choose one from the following:**

[**X**] Individual Sponsor Balloting

[...] Entity Sponsor Balloting

[...] Mixed Balloting (combination of Individual and Entity Sponsor Balloting)

**Expected Date of Submission for Initial Sponsor Ballot: [March 2001]**

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## 8. Fill in Projected Completion Date for Submittal to RevCom [2002 Aug. 2]

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## 9. Scope of Proposed Project:

[This standard specifies the physical layer and medium access control layer of the air interface of interoperable fixed broadband wireless access systems (e.g., those supporting data rates of DS1/E1 or greater). The specification enables access to data, video, and voice services with a specified quality of service in licensed bands designated for public network access and license-exempt bands. It applies to systems operating between 2 and 11 GHz, where such services are permitted. This Amendment expands the scope of the IEEE Standard 802.16 by extending it to bands between 2-11 GHz (whereas the scope of the original project was limited to 10-66 GHz).  
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## 10. Purpose of Proposed Project:

[To enable rapid worldwide deployment of innovative, cost-effective and interoperable multi-vendor broadband wireless access products. To facilitate competition in broadband access by providing wireless alternatives to wireline broadband access. To facilitate coexistence studies, provide mechanisms for coexistence with other license-exempt band systems such as 802.11 and 802.15, encourage consistent worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum. Utilization of frequencies from 2 to 11 GHz will address a market that includes residences, Small Office-Home Office (SOHO), telecommuters and Small and Medium Enterprises (SME).]

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## 11. Intellectual Property {Answer each of the questions below}

Has the sponsor reviewed the IEEE patent policy with the group? **Yes**

Are you aware of any copyrights relevant to this project? **Yes**

Are you aware of any trademarks relevant to this project? **Yes**

Are you aware of any registration of objects or numbers relevant to this project?  
**Yes**

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## 12. Are you aware of any other standards or projects with a similar scope?

[Yes]{Yes, with detailed explanation below / No}

- 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.
  - T1P1.4 is currently developing air interface standards for Fixed Wireless Access to the PSTN Network. The primary focus of the group is wireless access to POTS, ISDN and Fractional T1/E1 services delivered via the public circuit switched telephone network, although their charter does include packet data services. The individual user data rates currently contemplated 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. The amendment is specifically directed towards longer-range wireless point to multipoint MAN systems that provide access to core public networks. These systems typically serve large numbers of dispersed subscribers.
  - ITU-R Working Party 8F is developing air interfaces for IMT-2000 and access systems beyond IMT-2000 for both mobile and fixed applications.
  - Broadband Wireless Internet Forum (IEEE ISTO/BWIF) is developing industry specifications for similar frequency bands and applications.
  - DVB-RCT (EN 301 958) is an ETSI standard for video distribution and broadband wireless access.
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### 13. International Harmonization

Is this standard planned for adoption by another international organization?

[Yes] {Yes/No/?? if you don't know at this time}

If Yes: Which International Organization [ITU]

International Contact Information:

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Email: [costa@nortelnetworks.com](mailto:costa@nortelnetworks.com)

### 14. Is this project intended to focus on health, safety or environmental issues?

[No] {Yes/No/?? if you don't know at this time}

If Yes: Explanation [...]

### 15. Proposed Coordination/Recommended Method of Coordination

#### Mandatory Coordination

SCC 10 (IEEE Dictionary) by **DR** {Circulation of **DR**afts}  
 IEEE Staff Editorial Review by **DR**  
 SCC 14 (Quantities, Units and Letter symbols) by **DR**

#### Coordination requested by Sponsor:

[ITU] by [DR] {circulation of **DR**afts/**LI**aision memb/**CO**mmon memb}  
 [ETSI BRAN] by [DR,LI] {circulation of **DR**afts/**LI**aision memb/**CO**mmon memb}  
 [.....] by [...] {circulation of **DR**afts/**LI**aision memb/**CO**mmon memb}  
 [.....] by [...] {circulation of **DR**afts/**LI**aision memb/**CO**mmon memb}

#### Coordination Requested by Others:

[...] {added by staff}

### 16. Additional Explanation Notes: {Item Number and Explanation}

5a) This PAR updates P802.16a to encompass P802.16b and should be accompanied by the withdrawal of the latter. In the process of developing P802.16a and P802.16b drafts, the documents have been integrated technically and editorially and are anticipated to draw largely overlapping ballot pools. Proceeding with separate projects is no longer beneficial.

The [PAR Copyright Release and Signature Page](#) must be submitted by FAX to 732-562-1571 before this PAR will be sent on for NesCom and Standards Board approval.