



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

(2001-Rev 1)

1. Sponsor Date of Request	2. Assigned Project Number	3. PAR Approval Date (to be completed by staff)
2001 Feb 09	P802.16.2	2001-03-17

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

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, stressing the verb "may"}

Title: **Local and Metropolitan Area Networks — Recommended Practice for Coexistence of Fixed Broadband Wireless Access Systems**

Name of Working Group (WG): **IEEE 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 and/or 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**

Name of Committee Sponsor Chair: **Jim Carlo, Chair, LAN/MAN Standards Committee**

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

Contact Information:

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5. Type of Project

a. Is this an update to an existing PAR? [Yes]

If YES, indicate PAR Number/Approval Date [P802.16.2-1999]

If YES, is this project in ballot now? [No (but anticipated to begin on 2001 Feb 27)]

[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} [...]

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

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

6. Life Cycle

Full Use (5-year life cycle)

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

7. Balloting Information

Choose one from the following:

Individual Sponsor Balloting

[...] Entity Sponsor Balloting

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

Expected Date of Submission for Initial Sponsor Ballot: [2001 Feb 27]

8. Fill in Projected Completion Date for Submittal to RevCom: 2001 May 04

9. Scope of Proposed Project:

This project covers development of a Recommended Practice for the design and coordinated deployment of fixed broadband wireless access (BWA) systems operating from 10-66 GHz (with a focus on 23.5-43.5 GHz) in order to minimize interference so as to maximize system performance and/or service quality. This practice will provide for coexistence using frequency and spatial separation and will cover three areas. First, it will recommend limits of in-band and out-of-band emissions from BWA transmitters through parameters including radiated power, spectral masks and antenna patterns. Second, it will recommend receiver tolerance parameters, including noise floor degradation performance, for interference received from other BWA systems. Third, it will provide coordination parameters, including separation distances, and power flux density limits, to enable successful deployment of BWA systems with tolerable interference. The scope includes interference between systems deployed across geographic boundaries in the same frequency band and systems deployed in the same geographic area in different frequency bands (including different systems deployed by a single license-holder in sub-bands of the licensee's authorized bandwidth). The scope does not cover coexistence issues due to intrasystem frequency re-use within the operator's licensed band, and it does not consider the impact of

interference created by BWA systems on non-BWA terrestrial and satellite systems.

10. Purpose of Proposed Project:

The purpose of this recommended practice is to provide coexistence guidelines to license holders, service providers, deployment groups, and system integrators. The equipment parameters contained within this practice will benefit equipment and component vendors and industry associations by providing design targets. The benefits of this practice will include:

- Coexistence of different systems with higher assurance that system performance objectives will be met.
- Minimal need for case-by-case interference studies and coordination between operators to resolve interference issues.
- Preservation of a favorable electromagnetic environment for deployment and operation of BWA systems, including future systems compliant to IEEE 802.16 interoperability standards.
- Improved spectrum utilization.
- Cost-effective system deployment.

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 the possibility of any copyrights relevant to this project? **Yes**

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

Are you aware of possible registration of objects or numbers due to this project? **No**

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

Yes

Explanation: Administrations are developing general coordination criteria and procedures to allow BWA operators to deploy systems. Detailed co-existence guidance, such as described in this PAR, is in its early stages of development in other regional and international standards bodies. Studies addressing certain aspects of the coexistence issues are being developed by or have been completed by organizations such as:

1. International Telecommunications Union (ITU): ITU-R JRG 8A/9B and ITU-R 9B
2. European Telecommunications Standards Institute (ETSI): Technical Committee TM (Transmission and Multiplexing), Working Group TM4 (Fixed Radio Systems)
3. Inter-American Telecommunication Commission (CITEL): Permanent Consultative Committee III: Radiocommunications (PCC-III)
4. Association of Radio Industries and Businesses (ARIB): R&D Group for the Fixed Wireless Access System
5. National Spectrum Managers Association (NSMA)
6. Radio Advisory Board of Canada (RABC)

We will coordinate with these groups as appropriate.

13. International Submissions

Will this standard (in part or in whole) be submitted to an international organization for consideration/adoption?

Yes

If Yes, please answer the following questions:

Which International Organization/Committee **ITU-R**

International Contact Information:

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

No

15. Mandatory Coordination

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

Additional communication and input from other organizations or other IEEE Standards Sponsors should be encouraged through participation in the working group or the balloting pool.

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

5a) This revision simplifies the title and slightly reduces the scope. The PAR is also brought into the current format.