IEEE 802.16 Working Group on Broadband Wireless Access

http://WirelessMAN.org



Dr. Roger B. Marks, Chair 325 Broadway, MC 813.00 Boulder, CO 80305 USA Tel: +1 303 497 3037 mailto:r.b.marks@ieee.org 21 October 2003

Dear IEEE-SA RevCom:

This submittal is an application for approval of P802.16/Conformance02/D4 ("Draft Standard for Conformance to IEEE Standard 802.16 – Part 2: Test Suite Structure and Test Purposes (TSS&TP) for 10-66 GHz WirelessMAN-SC Air Interface").

Attached to this letter, please find the following:

Page 2-5: IEEE-SA Standards Board Form for Submittal of Proposed Standards

Page 6-10: Summary of initial ballot results (33 affirmative, 0 negative, 6 abstain, 7 not voting, 146 comments)

Page 11: Recirculation ballot cover letter

Page 12-13: PAR

Page 14-16: PAR Approval Letter
Page 17: PAR Renumbering Letter

Page 18: Coordination comments & responses

The draft itself (P802.16/Conformance02/D4) will be included separately in PDF format and supplied to the IEEE Staff Project Editor in FrameMaker format.

The Ballot Resolution Committee (duly authorized by the IEEE 802.16 Working Group at its Session #27) made substantive changes to the draft as a result of the ballot comments. On 21 October, the IEEE-SA Balloting Center opened a 15-day recirculation ballot (a "confirmation ballot") on draft D4. The recirculation package includes the cover letter attached herein, along with draft D4 and the file http://ieee802.org/16/docs/03/80216-03_40r2.pdf> detailing the associated changes and comment responses. We noticed that 23 of the comments, from a single balloter, were intended not for this ballot but for the Draft P802.16.2a/D6 ballot. We rejected them but forwarded them to the P802.16.2a/D6 Ballot Resolution Committee, which addressed them.

The PAR answers "Yes" to the question regarding trademarks. The relevant trademarks that stimulated this answer are those belonging to IEEE (including 802® and WirelessMAN®). The editorial staff is aware of these issues.

The draft says "Grateful acknowledgment is made to the Worldwide Interoperability for Microwave Access (WiMAX) Forum for the permission to use the following source material: "Test Suite Structure and Test Purposes for IEEE Standard 802.16, © Copyright 2003, WiMAX Forum." I am working with WiMAX to obtain the permission letter.

Please feel free to contact me with any questions or concerns.

Sincerely,

Roger B. Marks

IEEE-SA STANDARDS BOARD FORM FOR SUBMITTAL OF PROPOSED STANDARDS

| 1. PROJECT NUMBER: P802.16/C | onformance02/D4 | 2. DATE: 21 Oct 2003 |
|---|---|--|
| 3. TITLE: Draft Standard for Conf (TSS&TP) for 10-66 GHz WirelessMA | | 16 Part 2: Test Suite Structure and Test Purposes |
| 4. SPONSOR (Full name of society/co | ommittee): Computer Society/LM | SC + Microwave Theory & Techniques Society |
| 5. BALLOTING COMMITTEE: 80 | 2.16 Working Group + Microwave | Theory and Techniques Society |
| 6. NAME OF WORKING GROUP: | 802.16 Working Group on Broadb | pand Wireless Access |
| 7. NAME AND ADDRESS OF SUB | MITTER | |
| Roger B. Marks NIST 325 Broadway, MC 813.00 Boulder, CO 80305 USA | | |
| Telephone: +1 303 497 3037 | Fax: +1 303 497 3122 | E-Mail: r.b.marks@ieee.org |
| 8. DESCRIPTION OF DOCUMENT | (Check one from each column.) | |
| X New ☐ Revision ☐ Reaffirmation ☐ Withdrawal | ☒ Standard ☐ Recommended Practice ☐ Guide ☐ Amendment/Corrigenda to standard (Indicate number) | |
| 8A. REAFFIRMATION ONLY: | | the balloting group agrees that this standard s current form and contains no significant mation. |

| List the interest of Working Guide f | | | | | | | | d Operations Manual and lassification. | d the |
|---|---|--|---|--|-------------------|---|-------------------|---|-----------|
| User | 6 | Pro | ducer | 11 | Genera | al Interest | 14 | Government | 2 |
| Interest Category | No. | Inte | erest Category | No. | Interes | t Category | No. | Interest Category | No. |
| | | | SUMMA | RY OF ELIC | GIBLE B | ALLOTS | | | |
| | | | INITIAL BA | TOLLA | | REC | TRCIII. | ATION BALLOT (if app | olicable) |
| | | Draft D3 | | l: date: 2003- | -09-03 | | ft D4 | Date Closed: 2002- | |
| | | Number | Percentage | | | Nı | umber | Percentage | |
| Ballots Mailed | | 46 | 100% | | | | | 100% | |
| Ballots Returned | | 39 | 85 | | | | | | |
| Affirmatives | | 33 | 100 | | | | | | |
| Negatives | | 00 | N/A | | | | | N/A | |
| Abstentions | | <u>06</u> | 15 | | | | | | |
| Reasons for abstent | ions: | Lack | of time = $\underline{5}$ | - | Lack o | of expertise | = 1 | Other = $\underline{0}$ | |
| A. Have un votes be B. Have su 11. COORDINATI Using the abbrev coordination and if applicable. | ey have nresolveen circ bstant: ION A iations includ | e an opportured comment culated? <i>Inc.</i> ive document .CTIVITY (stisted below | nity to change is accompanying the saccompanying | e their votes. Ing negative and negative con circulated? for reaffirm response rece | ation) eived from | Yes cand rebutta Yes commeach command authorizing | No d. No mittee/o | r and the rebuttal, and ha X No unresolved comm ☐ No substantive chan organization required for nation by common mem Not received | nents |
| Committee | | | | Resp | | Committee/ | | | . 7 |
| SCC10 (IEI SCC14 (Qu | EE Dio antitie | ctionary) | Letter Symbol f | NR | | | | | _ |
| Indicate below any | unreso | olved probler | ns from coord | lination activi | ties. | | | | |
| None. Editorial c | omme | nt was accep | oted and imple | emented. | | | | | |
| 12. PATENT/COP | YRIG | HT and RE | GISTRATIO | N ISSUES | | | | | |
| A. Is there any pa | | | | | □ Yes | X No | | nally indicated on the PA | |
| If yes, include | | | | | | | not ii | ncluded in the final docu | ment |
| B. Is there any co | | | | ed standard? | X Yes | □ No | | | |
| If yes, include C. Is the registration the proposed stopy the IEEE-S. | ion of tandar | objects and/od? If yes, inc | or numbers a pelude a propos | al for review | □ Yes | Xi No □ | □ Alrea | dy approved by RAC | |

9. BALLOT INFORMATION

| 13. INTERNATIONAL STANDARDS ACTIVITIES (Not require Is this document intended to be the basis of or included in an intended to be the basis of the ba | |
|--|--|
| 14. UNIT OF MEASUREMENT (check one) | |
| ☑ International System of Units (SI) - Metric ☐ Inch/Pound | ☐ Both ☐ Not measurement sensitive |
| □ Other | |
| 15. Source Materials Submitted to IEEE Standards Department | ; |
| A. Have electronic versions of the source documents (text and fig been provided? | gures) X Yes \square No Format: FrameMaker |
| B. Will a diskette or other online material be required to accompany published standard? | any the □ Yes Xi No |
| 16. Submission checklist (X = included in submittal package | N/A = Not applicable) |
| Submission Package Item List | IIRL if online |

| | ` ` ` | 11 / |
|-----|---|---|
| | Submission Package Item | List URL if online |
| X | This submittal form | http://ieee802.org/16/docs/03/80216-03_48.pdf |
| X | Ballot summary form(s) (1 per ballot cycle) | http://ieee802.org/16/docs/03/80216-03_48.pdf |
| N/A | Copies of unresolved negatives & rebuttals | |
| X | PAR and PAR approval letter | http://ieee802.org/16/docs/03/80216-03_48.pdf |
| X | Coordination comments and responses | http://ieee802.org/16/docs/03/80216-03_48.pdf |
| X | .pdf of final balloted draft # <u>D4</u> | http://ieee802.org/16/private/drafts/tgc/P80216_Conf02_D4.zip |
| X | Permissions & copyright releases | http://ieee802.org/16/ipr/copyrights/letters/I80216-03_07.pdf |
| N/A | Delegation of balloting authority | |

PROJECT NUMBER: P802.16/Conformance02/D4

DATE: 21 Oct 2003

| v i | lance with the policies and procedures of the Sponsor and I am authorized |
|--|---|
| by those policies and procedures to make this sub- | mittal. |
| Roge B. Mark | Chair, IEEE 802.16 Working Group |
| Signature of Submitter | Title (role in Sponsor) |
| FOR STAN | NDARDS DEPARTMENT USE ONLY |
| | SA Standards Board Chair itle Date |

Return to:

IEEE Standards Department RevCom Secretary 445 Hoes Lane PO Box 1331 Piscataway, NJ 08855-1331

Ballot Summary

P802.16/Conformance02/D3 Closing date: 2003-09-03

1. This ballot has met the 75% returned ballot requirement.

```
46 eligible people in this ballot group.

33 affirmative votes
0 negative votes with comments
0 negative votes without comments
6 abstention votes

=====
39 votes received = 84% returned
15% abstention
```

2. The 75% affirmation requirement is being met.

```
33 affirmative votes
0 negative votes with comments
====
33 votes = 100% affirmative
```

Ballot Details

Coordination Responses Only

| IEEE/Coord Number | Name | Role | Phone / E-mail | Coordination Ballot Received | Coordination Comment(s) Received |
|-------------------|-------------------|-----------|----------------|------------------------------|----------------------------------|
| 00601054 | Bruce Barrow | SCC14 | | yes | - |
| 00001000 | SCC10 Coordinator | SCC10 | | - | - |
| 00001001 | Michelle Turner | Editorial | | yes | yes |

Balloters

| Number | Name | Phone / E-mail | Vote | Т | E | Graphics | Status Notes | Interest Category |
|----------|--------------------|----------------|------------------------------------|---|---|----------|-----------------|-------------------|
| 40189595 | Selim Aissi | | - | - | - | - | | Producer |
| 04503512 | <u>Ed Callaway</u> | | Approve, comments (Y1) | - | 1 | - | | General Interest |
| 01454685 | Edward Carley | | Abstain for lack of expertise (A2) | - | - | - | | User |
| | Amalavoyal Chari | | Approve, no comments (Y) | - | - | - | | Producer |
| | Keith Chow | | Approve, no comments (Y) | - | - | - | | General Interest |
| 03210820 | Todor Cooklev | | Approve, no comments (Y) | - | - | - | | Government |

| 41383763 André Sion Corrêa | Approve, no comments (Y) | - | - | - | General Interest |
|------------------------------|-------------------------------|---|---|----|------------------|
| 06503270 Jose M. Costa | Approve, no comments (Y) | - | - | - | Producer |
| 41498366 Robert Crutchfield | - | - | - |]- | User |
| 40199311 Thomas Dineen | Approve, no comments (Y) | - | - | - | Producer |
| 08972887 Dr. Sourav Dutta | Abstain for lack of time (A1) | - | - | - | General Interest |
| 41385184 Carl Eklund | Approve, no comments (Y) | - | - | - | Producer |
| 06525786 John Eng | Abstain for lack of time (A1) | - | - | - | General Interest |
| 08518995 Avraham Freedman | Approve, no comments (Y) | - | - |]- | General Interest |
| 41348507 Theodore Georgantas | Abstain for lack of time (A1) | - | - |]- | Producer |
| 40306847 Simon Harrison | Approve, no comments (Y) | - | - |]- | General Interest |
| 40357068 STUART KERRY | Approve, no comments (Y) | - | - |]- | Producer |
| | | | | | |

| 05995253 | Brian Kiernan | Approve, no comments (Y) | - | - | - | General Interest |
|----------|-----------------|--------------------------|---|---|---|------------------|
| 41304605 | Pi-Cheng Law | - | <u> </u> | | - | User |
| 40255444 | Christina Lim | Approve, comments (Y1) | - | 1 | - | General Interest |
| 01622778 | Randolph Little | Approve, no comments (Y) | - | | - | General Interest |
| 05845615 | Gregory Luri | Approve, no comments (Y) | - | - | - | User |
| 41273459 | Ryan Madron | - | - | - | - | General Interest |
| 41265401 | Nikolai Malykh | Approve, comments (Y1) | - | 7 | - | User |
| 08122103 | Roger Marks | Approve, comments (Y1) | - | 1 | 1 | Government |
| 40183512 | Kyle Maus | Approve, no comments (Y) | - | - | - | User |
| 40266634 | Ingolf Meier | Approve, comments (Y1) | 1 | | 1 | Producer |
| 01271899 | George Miao | Approve, no comments (Y) | | | - | General Interest |
| 02626273 | Hiroshi Miyano | Approve, no comments (Y) | | | - | User |
| | | | | L | | |

| 41505402 | Rajesh Moorkath | Approve, no comments (Y) | - | - | - | General Interest |
|----------|------------------|-------------------------------|---|--------|---|------------------|
| 41454280 | Charles Ngethe | - | - | - | - | User |
| | | | | | | |
| 07858459 | Paul Nikolich | Abstain for lack of time (A1) | - | - | - | General Interest |
| 03350758 | Chris Osterloh | Approve, no comments (Y) | - | - | - | General Interest |
| 41478659 | Arpan Pal | - | - | - | - | User |
| 41458692 | Ashley Peacock | - | - | - | - | General Interest |
| 01453273 | Vikram Punj | Approve, no comments (Y) | - | - | - | Producer |
| 40266494 | Eugene Robinson | Approve, no comments (Y) | - | - | - | Producer |
| 01109156 | Gil Shultz | Approve, no comments (Y) | - | - | - | General Interest |
| 41392686 | Kenneth Stanwood | Approve, comments (Y1) | 1 | - | 1 | Producer |
| 40224483 | Carl Stevenson | Approve, no comments (Y) | - | - | - | Producer |
| 41315013 | Mark Tillinghast | Approve, comments (Y1) | 1 | 1 | 1 | Producer |

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| 06676449 | James Tomcik | | Approve, no comments (Y) | - | - | - | General Interest |
|---------------------------|---|--|-------------------------------|--------------------|-------|-----------|------------------|
| 41278416 | Hung-yu Wei | | Abstain for lack of time (A1) | - | - | - | General Interest |
| 05907266 | Oren Yuen | | Approve, no comments (Y) | - | - | - | User |
| 41441328 | ernesto garcia | | Approve, no comments (Y) | - | - | - | User |
| 41442511 | Kevin karcz | | Approve, no comments (Y) | - | - | - | General Interest |
| | | | Comment Totals * | | | | |
| (*) You have consist of o | ve at least these many comments: each wone or hundreds of individual T and E co | instructured binary file (i.e., Word imments. | d) is counted as a single | \overline{G}_{j} | file, | which may | |

Summary of Eligible Voters by Interest Category

| Interest Category | Affirmative(s) | Negative(s) with Comments | Negative(s) without Comments | Abstention(s) | Not Returned | Total |
|-------------------|----------------|---------------------------|------------------------------|---------------|--------------|-------|
| User | 6 | 0 | 0 | 1 | 4 | 11 |
| Producer | 11 | 0 | 0 | 1 | 1 | 13 |
| General Interest | 14 | 0 | 0 | 4 | 2 | 20 |
| Government | 2 | 0 | 0 | 0 | 0 | 2 |
| Voting Tally | 33 | 0 | 0 | 6 | 7 | 46 |

| - 17 | | | 1 |
|------|---------------------|---|---|
| | Abstention details: | 5 for lack of time (A1) 1 for lack of expertise (A2) 0 for other reasons (A3) | |

2003-10-16 IEEE 802.16-03/47

IEEE 802.16 Working Group on Broadband Wireless Access

http://WirelessMAN.org



Dr. Roger B. Marks 325 Broadway, MC 813.00 Boulder, CO 80305 USA Tel: +1 303 497 3037 mailto:r.b.marks@ieee.org 16 October 2003

Dear P802.16/Conformance02 Balloting Group:

Thank you for your participation in the Sponsor Ballot for P802.16/Conformance02, which closed on 3 September 2003. The results are, in summary, 33 Approve, 0 Disapprove, 6 Abstain, and 7 Not Voting. By virtue of these numbers, the ballot is considered to have passed, pending recirculation of comments and changes.

We considered and responded to the 146 comments we received. Resolutions were developed by a Ballot Resolution Committee appointed by the IEEE 802.16 Working Group on Broadband Wireless Access. The committee, chaired by Ken Stanwood, included Carl Eklund, and Lars Lindh.

We are requesting that the IEEE Balloting Center initiate a fifteen-day recirculation of the comment resolutions (see file **80216-03_40r2.pdf**) and of the resulting new draft P802.16/Conformance02/D4 (file **P80216_Conf02_D4.pdf**). Should you prefer the database version of the resolutions for use with the program *Commentary*, it is available at http://ieee802.org/16/docs/03/80216-03_40r2.zip. We have included in the package all 146 comments, though none were cast by Disapprove voter since the approval vote was unanimous.

Please take this opportunity to review the package. You are not obligated to reply; if you do not, your current vote will stand. Based on the changes to the draft or on the Disapprove comments and responses, you may change your vote and/or submit additional comments. If you wish to re-vote or comment, please keep the deadline in mind. Instructions have been provided by the IEEE Balloting Center.

Sincerely,

Roger Marks

Chair, IEEE 802.16 Working Group on Broadband Wireless Access

PAR FORM

PAR Status: New PAR
PAR Approval Date: 2002-12-11
PAR Signature Page on File: Yes

Review of Standards Development Process: No

1. Assigned Project Number: 1802.16.2

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

3. Type of Document: Standard for

4. Title of Document:

Draft: Standard for Conformance to IEEE Standard 802.16 - Part 2: Test Suite Structure and Test Purposes (TSS&TP) for

10-66 GHz WirelessMAN-SC Air Interface

5. Life Cycle: Full Use

6. Type of Project:

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

6b. The Project is a: New Standard

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

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: 2003-03-14

11. Fill in Projected Completion Date for Submittal to RevCom: 2003-09-14

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 standard represents the Test Suite Structure and Test Purposes (TSS&TP), per ISO/IEC Standards 9646-1, and 9646-2 (1995) and ITU-T Standards X.290 and X.291, for conformance specification of base stations and subscriber

1 of 2 5/2/2003 2:35 PM

stations based upon the WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16.

13. Purpose of Proposed Project:

This document describes the structure of the suite of tests and the test purposes for WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16. It therefore provides the second of three specifications (per ISO/IEC 9646-1 and 9646-2) required to support conformance and interoperability testing of devices built to the specifications in IEEE 802.16.

14. Intellectual Property:

Sponsor has reviewed the IEEE patent policy with the working group? Yes Sponsor is aware of copyrights relevant to this project? Yes

Sponsor is aware of copyrights relevant to this project. Tes

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 there other documents or projects with a similar scope? No

Similar Scope Project Information:

16. Is there potential for this document (in part or in whole) to be submitted to an international organization for review/adoption? Do not Know

If yes, please answer the following questions:

Which International Organization/Committee?

International Contact

Information?

 $17. If the project will result in any health, safety, or environmental guidance that affects or applies to human health or safety, please explain, in five sentences or less. \\No$

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

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12/16/2002 11:55 AM

To: p.nikolich@ieee.org

cc: M.Klerer@flarion.com, r.b.marks@ieee.org, tony@jeffree.co.uk, tak@cisco.com,

bheile@ieee.org, Stuart.Kerry@philips.com

Subject: New Projects

12 December 2002

Mr. Paul Nikolich Broadband Access Systems 18 Bishops Lane Lynnfield, MA 01940

| • | | |
|-----|------------|---|
| Re: | P802.1ad | Standard for Local and Metropolitan Area Networks - Virtual Bridged Local Area Networks - Amendment 4: Provider Bridges |
| | P802.1D | Standard for Local and Metropolitan Area Networks: Media Access Control (MAC) Bridges |
| | P802.11j | Amendment to STANDARD [FOR] Information Technology - Telecommunications and information exchange between systems - Local and Metropolitan networks-Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: 4.9 GHz - 5 GHz Operation in Japan |
| | P802.11k | Amendment to STANDARD [FOR] Information Technology - Telecommunications and information exchange between systems - Local and Metropolitan networks-Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Radio Resource Measurement of Wireless LANs |
| | P802.15.3a | Amendment to Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Higher Speed Physical Layer Extension for the High Rate Wireless Personal Area Networks (WPAN) |
| | P802.15.4 | STANDARD FOR Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 15: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Low Rate Wireless Personal Area Networks (WPAN) |
| | P802.16d | Amendment to IEEE Standard for Local and metropolitan area networks - Part 16: Air Interface for Fixed Broadband Wireless Access Systems - Detailed System Profiles for 2-11 GHz |
| | P802.16e | 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 Fix and Mobile Operation in Licensed Bands |
| | P802.17a | Standard for Information Technology - Telecommunications and Information |

Exchange Between Systems - Local and Metropolitan Area Networks - Common

Specifications - Part 3: Media Access Control (MAC) Bridges

P802.20 Local and Metropolitan Area Networks - Standard Air Interface for Mobile Broadband

Wireless Access Systems Supporting Vehicular Mobility - Physical and Media

Access

Control Layer Specification

P1802.16.2 Standard for Conformance to IEEE Standard 802.16 - Part 2: Test Suite Structure and

Test Purposes (TSS&TP) for 10-66 GHz WirelessMAN-SC Air Interface

Dear Paul:

I am pleased to inform you that on 11 December 2002 the IEEE-SA Standards Board approved the above referenced projects until December 2006, with the exception of P802.15.4, which has been approved until December 2004. Changes were made to the following projects:

- P802.11k Change the scope to read as "This project will definie Radio Resource Measurement enhancements to provide interfaces to higher layers for radio and network measurements."
- P802.17a Change the purpose to read as "The purpose is to amend the 802.1D transparent bridge standard recognition of the 802.17 Media Access Control (MAC).

Copies of the files are attached in .pdf format.

Now that your projects have been approved, please forward a roster of participants involved in the development of these projects. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2f under Duties of the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects"

Attached is an Excel spreadsheet for your convenience. Please forward these lists to me via e-mail at j.haasz@ieee.org no later than 1 March 2003.

Please visit our website. IEEE Standards Development Online (

http://standards.ieee.org/resources/development/index.html), for tools, forms and training to assist you in the standards development process. Also, we strongly recommend that a copy of your draft be sent to this office for review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor balloting begins.

If you should have any further questions, please contact me at 732-562-6367 or by email at j.haasz@ieee.org.

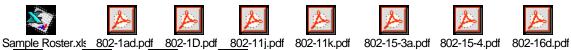
Sincerely,

Jodi Haasz

Senior Administrator

IEEE-SA Governance and Electronic Processes

PS - The information in the .pdf file is viewable in Adobe Reader, version 5.0 or higher. If you do not have this software, please go to http://www.adobe.com/products/acrobat/readstep.html to download the free version.

















802-16e.pdf 802-17a.pdf 802-20.pdf 1802-16-2.pdf

Jodi Haasz Senior Administrator IEEE-SA Governance and Electronic Processes Standards Activities Phone +1 732 562 6367 FAX +1 208 460 5300

Email: j.haasz@ieee.org

Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940

Dear Paul:

On 12 June 2003, the IEEE-SA Standards Board approved a change in project number for the above-referenced projects. The new project numbers are shown below:

P802.16/Conformance01-200x (was P1802.16.1) (C/LM) Standard for Conformance to IEEE Standard 802.16 - Part 1: Protocol Implementation Conformance Statement (PICS) Proforma for 10-66 GHz WirelessMAN-SC Air Interface

P802.16/Conformance02-200x (was P1802.16.2) (C/LM) Standard for Conformance to IEEE Standard 802.16 - Part 2: Test Suite Structure and Test Purposes (TSS&TP) for 10-66 GHz WirelessMAN-SC Air Interface

P802.16/Conformance03-200x (was P1802.16.3) (C/LM) Standard for Conformance to IEEE Standard 802.16 - Part 3: Radio Conformance Tests (RCT) for 10-66 GHz WirelessMAN-SC(TM) Air Interface

If you should have any questions regarding this action, please feel free to contact me.

Best regards,

Email: j.haasz@ieee.org

Jodi Haasz
Program Manager
International Stds Programs and Governance
Standards Activities
Phone +1 732 562 6367
FAX +1 208 460 5300

Document under Review: P802.16/Conf02/D3 Ballot Number: 0000505

Comment Date 2003/08/14

Comment # 001 Comment submitted by: Michelle Turner

Comment Type Coordination

MEMO:

FROM: Michelle Turner Date: 14 August 2003

Re: Editorial Review of P802.16/Conformance02-D3 Upon editorial review of IEEE P802.16/Conformance02.

For further guidance in preparing an IEEE Standard, here's the URL for access to

the on-line version of the IEEE

1) In some of the tables 1802.16.1 is used. Please change to the correct designation. IEEE Std 802.16/Conformance01-2003.

Note also this followup:

Michelle,

We'll address Point (1). Did you mean to include a Point (2)?

Roger

No, sorry about that. I should have just left the one comment unnumbered.

Thanks.

Michelle Turner

Decision of Group: Accepted



October 23, 2003

Dr. Roger B. Marks
IEEE 802.16 Working Group on Broadband Wireless Access Standards
325 Broadway MC 813.00
Boulder, CO 80303
mailto: r.b.marks@ieee.org

Dear Dr. Marks:

On behalf of the WiMAX Forum, I hereby grant permission to the Institute of Electrical and Electronics Engineers, Inc. ("IEEE"), to modify, distribute, make derivative works of, and print material the materials outlined below. Such materials developed and hereby submitted by the WiMAX Forum.

IEEE Project Number: P802.16/Conformance02

IEEE Project Title: "Draft Standard for Conformance to IEEE Standard 802.16 - Part 2: Test Suite Structure and Test Purposes (TSS&TP) for 10-66 GHz WirelessMAN-SC Air Interface"

Copyrighted material:

Title: Test Suite Structure and Test Purposes for WirelessMAN-SC Author(s): Carl Eklund, Editor
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Worldwide Interoperability for Microwave Access Forum

Margaret LaBrecque

President

October 28, 2003

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Ballot Summary

P802.16/Conformance02/D4 Recirculation

Closing date: 2003-11-05

This is a recirculation ballot. The report collates the results from the following groups: 0000505 0000658.

1. This ballot has met the 75% returned ballot requirement.

```
46 eligible people in this ballot group.

35 affirmative votes
0 negative votes with comments
0 negative votes without comments
6 abstention votes
=====
41 votes received = 89% returned
14% abstention
```

2. The 75% affirmation requirement is being met.

```
35 affirmative votes

0 negative votes with comments

=====

35 votes = 100% affirmative
```

Ballot Details

Coordination Responses Only

| IEEE/Coord Number | Name | Role | Phone / E-mail | Coordination Ballot Received | Coordination Comment(s) Received |
|-------------------|-------------------|-----------|----------------|-------------------------------------|----------------------------------|
| 00601054 | Bruce Barrow | SCC14 | | yes | - |
| 00001000 | SCC10 Coordinator | SCC10 | | - | - |
| 00001001 | Michelle Turner | Editorial | | yes* | yes |

Balloters

| Number | Name | Phone / E-mail | Vote | Т | E | Graphics | Status Notes | Interest Category |
|----------|------------------|----------------|------------------------------------|---|---|----------|-----------------|----------------------|
| 40189595 | Selim Aissi | | - | - | - | - | | Producer |
| 04503512 | Ed Callaway | | Approve, comments (Y1) | - | 1 | - | | General Interest |
| 01454685 | Edward Carley | | Abstain for lack of expertise (A2) | - | - | - | | User |
| 41458955 | Amalavoyal Chari | | Approve, no comments (Y) | - | - | - | | Producer |
| 40237493 | Keith Chow | | Approve, no comments (Y) | - | - | - | | General Interest |
| 03210820 | Todor Cooklev | | Approve, no comments (Y) | - | - | - | | Government |

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| 41383763 | André Sion Corrêa | Approve, no comments (Y) |]- | - | - | General Interest |
|----------|---------------------|-------------------------------|-----------------------|--------|---|---------------------|
| 06503270 | Jose M. Costa | Approve, no comments (Y) | | - | - | Producer |
| 41498366 | Robert Crutchfield | - |]- | - | - | User |
| 40199311 | Thomas Dineen | Approve, no comments (Y) | | - | - | Producer |
| 08972887 | Dr. Sourav Dutta | Abstain for lack of time (A1) |]- | - | - | General Interest |
| 41385184 | Carl Eklund | Approve, no comments (Y) |][- | - | - | Producer |
| 06525786 | John Eng | Abstain for lack of time (A1) |]- | - | - | General Interest |
| 08518995 | Avraham Freedman | Approve, no comments (Y)* |]- | - | - | General Interest |
| 41348507 | Theodore Georgantas | Abstain for lack of time (A1) |]- | - | - | Producer |
| 40306847 | Simon Harrison | Approve, no comments (Y)* |]- | - | - | General Interest |
| 40357068 | STUART KERRY | Approve, no comments (Y) | | - | - | Producer |
| 05995253 | Brian Kiernan | Approve, no comments | <u> </u> - | - | - | General |

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| | | (Y) | | | | Interest |
|----------|-----------------|---------------------------|-----------------------|--|---|---------------------|
| 41304605 | Pi-Cheng Law | Approve, no comments (Y)* |]- | - | - | User |
| 40255444 | Christina Lim | Approve, comments (Y1) | | 1 | - | General Interest |
| 01622778 | Randolph Little | Approve, no comments (Y)* | | - | - | General Interest |
| 05845615 | Gregory Luri | Approve, no comments (Y) |][- | - | - | User |
| 41273459 | Ryan Madron | Approve, no comments (Y)* | | - | - | General Interest |
| 41265401 | Nikolai Malykh | Approve, comments (Y1) |]- | 7 | - | User |
| 08122103 | Roger Marks | Approve, comments (Y1) |]- | 1 | 1 | Government |
| 40183512 | Kyle Maus | Approve, no comments (Y)* |]- | - | - | User |
| 40266634 | Ingolf Meier | Approve, no comments (Y)* | 1 | - | 1 | Producer |
| 01271899 | George Miao | Approve, no comments (Y)* | | - | - | General Interest |
| 02626273 | Hiroshi Miyano | Approve, no comments (Y) |]- | - | - | User |
| 41505402 | Rajesh Moorkath | Approve, no comments (Y)* |] <u> </u>] - |] <u> </u> | - | General Interest |

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| | | | | | | 1 |
|----------|------------------|-------------------------------|---------------|--|---|---------------------|
| 41454280 | Charles Ngethe | - |][- | | - | User |
| 07858459 | Paul Nikolich | Abstain for lack of time (A1) | | - | - | General Interest |
| 03350758 | Chris Osterloh | Approve, no comments (Y) | | - | - | General Interest |
| 41478659 | Arpan Pal | - | | - | - | User |
| 41458692 | Ashley Peacock | | | | | General |
| | | | | | | Interest |
| 01453273 | Vikram Punj | Approve, no comments (Y)* | - | - | - | Producer |
| 40266494 | Eugene Robinson | Approve, no comments (Y) | - | - | - | Producer |
| 01109156 | Gil Shultz | Approve, no comments (Y)* |]- | - | - | General Interest |
| 41392686 | Kenneth Stanwood | Approve, comments (Y1) | 1 | - | 1 | Producer |
| 40224483 | Carl Stevenson | Approve, no comments (Y) |][- | - | - | Producer |
| 41315013 | Mark Tillinghast | Approve, comments (Y1) | 1 | 1 | 1 | Producer |
| 06676449 | James Tomcik | Approve, no comments (Y) |]][-] |] <u> </u> | - | General Interest |

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| 41278416 | Hung-yu Wei | | Abstain for lack of time (A1) | - | - | - | | General Interest |
|-------------|--|---|-------------------------------|-----|-------|-------------|---|---------------------|
| 05907266 | Oren Yuen | | Approve, no comments (Y) |][- | - | - | | User |
| 41441328 | ernesto garcia | | Approve, no comments (Y) |]- |][- | - | | User |
| 41442511 | Kevin karcz | | Approve, no comments (Y) | | - | - | | General Interest |
| | | | Comment Totals * | | | | | |
| (*) You hav | re at least these many comments: each uns undreds of individual T and E comments. | tructured binary file (i.e., Word) is c | counted as a single G file, | whi | ich n | nay consist | | |
| | oter cast this ballot in the current circulation | n of this recirc ballot. | | | | | ı | |

Summary of Eligible Voters by Interest Category

| Interest Category | Affirmative(s) | Negative(s) with Comments | Negative(s) without Comments | Abstention(s) | Not Returned Total |
|-------------------|----------------|---------------------------|------------------------------|---------------|--------------------|
| User | 7 | 0 | 0 | 1 | 3 11 |
| Producer | 11 | 0 | 0 | 1 | 1 13 |
| General Interest | 15 | 0 | 0 | 4 | 1 20 |
| Government | 2 | 0 | 0 | 0 | 0 2 |
| Voting Tally | 35 | 0 | 0 | 6 | 5 46 |

| Abstention details: | 5 for lack of time (A1) | 1 for lack of expertise (A2) 0 for other reasons (A3 | 3) |
|---------------------|-------------------------|--|----|
|---------------------|-------------------------|--|----|