

IEEE 802.16 Working Group on Broadband Wireless Access<http://WirelessMAN.org>

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Dear P802.16.2 Balloting Group:

Thank you for your participation in the Sponsor Ballot of P802.16.2. The recirculation ballot closed on 26 April 2001. No votes were changed during this recirculation. The results <<http://ieee802.org/16/tg2/ballots/sponsorballot/group.html>> remain:

24 Approve
4 Abstain
0 Disapprove
2 Not Voting

By virtue of this result, the comment resolutions have been approved, and ballot is still considered to have passed.

We received three comments; all editorial. One was a compound comment containing multiple changes. Resolutions were developed by a comment resolution group, chaired by Phil Whitehead. All of the comments were accepted, although in some cases with modifications. I can certify that the originators of all the comments accept these resolutions.

At this time, we are initiating a ten-day recirculation of these comments and resolutions. Attached to this letter is a summary of the disposition of the comments. We expect this to be the final recirculation, so we are at the same time circulating the final draft that we plan submit to the IEEE-SA RevCom. You will find this included in the ballot package as Document P802.16.2/D3-2001.

Please take this opportunity to review this package. You need not reply; if you do not, your current vote will stand. You are entitled to change your vote, or to submit additional comments, if you object to the comment resolutions recorded here or if you object to the way any of the resolutions (in either round of recirculation) were incorporated in the final attached ballot draft. If you do not wish to change your vote or record a comment, please do not submit a new vote.

If you wish to re-vote or comment, please keep the deadline in mind. Instructions have been provided by the IEEE Balloting Center.

Sincerely,

A handwritten signature in black ink that reads "Roger".

Roger Marks

Comments received on P802.16.2, along with resolutions of ballot resolution committee:

(1) From: Scott Marin

Type: Editorial

Comment: The Table of Contents should show the titles of the Annexes.

Suggested Remedy: Add the title for each annex to the table of contents.

Proposed resolution: Accepted; IEEE Staff Project Editor will be instructed to generate complete Table of Contents in appropriate style.

(2) From: Scott Marin

Type: Editorial

Comment: ITU-R Document 9/2 has now been released as Recommendation ITU-R F.1509. The titles of the documents are the same except that Document 9/2 was an internal ITU-R draft and F.1509 is not the publicly available document that should be referenced.

Suggested Remedy:

*page 38, line 5, replace reference to "ITU-R Document 9/2 [9] and Addendum 1 to Document 9/2" with "Recommendation ITU-R F.1509 [9]"

*page 38, line 46 and page 39 line 17 replace "ITU-R Document 9/2" with "Recommendation ITU-R F.1509 [9]"

*page 39 line 23 Replace "ITU-R 9/BL/1 Draft new Rec.F[Doc9/2]" with "ITU-R Recommendation F.1509"

Proposed resolution: Accepted with modifications. Previous comment resolution moved the document from the Bibliography to the References, so references in text will be modified accordingly. The full reference will be “[ITU-R F.1509] Recommendation ITU-R F.1509: “Technical and operational requirements that facilitate sharing between point-to-multipoint systems in the fixed service and the inter-satellite service in the band 25.25-27.5 GHz.”

(3) From: Roger B. Marks

Type: Editorial

Comment: This is a compound editorial comment. Details are in Document IEEE 802.16c-01/08r1

Suggested Remedy:

Proposed resolution: Accepted, with some modifications [see detail below]

Contents of Comment 3, with proposed resolutions inserted:

The following page, line, and figure number refer to P802.16.2/D2-2001:

R01:

*Page 12, Lines 1-3: Replace the sentence with: "This document is not intended to be a replacement for applicable regulations, which would take precedence." This change is to supercede changes under consideration in this recirculation. It is intended to simplify and clarify the wording.

Proposed resolution: Accepted

R02:

*Page 15, Line 33: subscript the "o" in "Bo"

Proposed resolution: Accepted

R03:

*Page 13, Lines 9-10: change definition to "Wireless access in which the connection(s) capabilities are broadband." This change is to supercede changes under consideration in this recirculation.

Reasons:

- (a) The definition should refer to existing definition of "wireless access" so that the two are fully consistent.
- (b) Consistency with ITU-R F.1399. The definition there is "Wireless access in which the connection(s) capabilities are higher than the primary rate." However, P802.16.2 doesn't define "primary rate", so it would be better to make use of its definition of "broadband".

Proposed resolution: Accepted

R04:

*Page 13, Lines 36-38: change definition to "A contiguous portion of spectrum within a sub-band or frequency band, typically assigned to a single operator. NOTE - A collection of frequency blocks may form a sub-band and/or a frequency band." This change is to supercede changes under consideration in this recirculation.

Reason:

- (a) This makes the definition identical to that of ITU-R F.1399.
- (b) One key difference is the word "contiguous". The definitions are very different when the authorized band includes noncontiguous spectrum, as it often does in BWA. It seems that the draft generally seems to be thinking of the ITU-R definition.

Proposed resolution: Accepted

R05:

Figure 3: Fix the unintelligible screen version so that it looks like the printed version.

Proposed resolution: Accepted

R06:

Figure 4: the word “Victim” should be moved so that it’s clearly attached to the nearest arrow

Proposed resolution: Accepted

R07: Figure 6: change “Hub” to “SS”

Proposed resolution: Accepted with modification: change “Hub” to “BS”; change first two sentences following figure to: “The victim subscriber station is shown along with its radiation pattern (ellipses). The BS and several interferers are also shown.”

R08: Figure 8: subscript the “o” in “Bo” (six places); move the large double-headed arrow so it doesn’t lie on top of the “1”; add space between number and “dBW” (five places)

Proposed resolution: Accepted, provided that editable artwork can be obtained. IEEE Staff Project Editor will be directed to make this change when figure is redrawn.

R09: Figures 11-18: delete title inside figure frame (this is redundant with caption)

Proposed resolution: Accepted

R10: Figures 11-18: change “dBrel” to “pdf relative to 0° (dB)”; make same change in Tables 3-10

Proposed resolution: Accepted with modification: in Figures 11-18 and Tables 3-10, change “dBrel” to “relative gain (dB)”

R11: Figures 11-18: change “deg.” to “degrees”

Proposed resolution: Accepted

R12: Figures 11-20: delete frame around figure

Proposed resolution: Accepted

R13: Figure 19: delete title inside figure frame; delete legend (the box showing the symbol for “Availability”); add to end of caption the words “ R=3.6 km”); put “%” in parenthesis in vertical axis label; put “dB” in parentheses in horizontal axis label; delete hyphen before “dB” in horizontal axis label

Proposed resolution: Accepted

R14: Figure 20: delete title inside figure frame; delete legend (the box showing the symbol for “Series 1”); add to end of caption the words “ of 99.995%”); put “km” in parenthesis in vertical axis label; put “dB” in parentheses in horizontal axis label; delete hyphen before “km” in vertical axis label

Proposed resolution: Accepted

R15: Figure 22: delete Figure 22; change final sentence of 8.1.5 from “Figure 21 provides an example.” to “Figure C.5 provides an example.”; [If this is not acceptable, then: label the axes; delete legend (the box showing the symbol for “Series 1”); delete frame around figure.]

Proposed resolution: Accepted primary suggestion; delete Figure 22 and make change in 8.1.5

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R16: Figure A.1: move the arrows on “Min Sep’n” to clarify what they are pointing to; change “Min Sep’n” to “Minimum Separation”

Proposed resolution: Accepted, provided that editable artwork can be obtained. IEEE Staff Project Editor will be directed to make this change when figure is redrawn.

R17: Figure C.1: subscript the “i” in “Ri”

Proposed resolution: Accepted

R18: Figure C.2: subscript the “rc” in “Drc” and the “c” in “Rc”

Proposed resolution: Accepted

R19: Figure C.3: subscript the “c” in “Rc”

Proposed resolution: Accepted

R20: Figure C.7: change “Atm= 0.21 dB/km” to “Attenuation = 0.21 dB/km”

Proposed resolution: Accepted with modification: change "Atm=" to "Atmospheric attenuation ="

R21: Figure C.7: delete “O” below upper square

Proposed resolution: Accepted

R22: Figure C.8: change “Locus ofx 60 km psfd Test Probe” to “Locus of 60 km psfd Test Probe”; change “LMDS Deployment” to “Deployment” (two places); change “sq km” to “km²” [where the ‘2’ is superscripted]

Proposed resolution: Accepted

R23: Fig C.9: change “rx” to “Rx”; change “tx” to “Tx”; change “sub” to “subscriber”

Proposed resolution: Accepted; IEEE Staff Project Editor will be directed to make this change when figure is redrawn.

R24: Figure D.1: change “Pfd” to “pfd” (5 places); add space in “30days”

Proposed resolution: Accepted

R25: Figure F.1: change “Pfd” to “pfd” in note

Proposed resolution: Accepted

R26: Change first sentence of Recommendation 8 from “Utilize antennas for the base station and subscriber stations at least as good as shown in 6.2.” to “Utilize antennas for the base station and subscriber stations at least as good as the Class 1 antennas described in 6.2.”

Reason: to clarify that it is the Class 1 antennas that this sentence refers to.

Proposed resolution: Accepted

R27: Change the first two paragraphs of 6.2.2.1 from “The performance of BS antennas is divided into two electrical classes. Depending on the deployment environment, the specific antenna class may be chosen to provide suitable coverage. The distinguishing factor between the classes is the severity of interference into other transceivers. Although it is outside the scope of this document to address intra-system interference, selection of antennas may be principally determined by interference arising from within an operator's own network rather than from external sources.” to:

“The performance of BS antennas is here divided into two electrical classes. Class 1 represents the minimum recommended performance. Class 2 antennas have enhanced RPEs and represent more favorable coexistence performance.”

Reason: To distinguish the two classes by stating the Class 1 is recommended.

Proposed resolution: Accepted

R28: Change introduction to 6.2.3 (“Fixed BWA systems employ SS antennas that are highly directional, narrow-beam antennas. Although it is not as important for coexistence as the BS RPE, the RPE of the SS antenna is a factor in determining inter-system interference.”) by adding a second paragraph:

“The performance of SS antennas is here divided into three electrical classes. Class 1 is defined with moderate sidelobe characteristics and represents the minimum recommended performance. Class 2 and Class 3 antennas have enhanced RPEs and represent increasingly favorable coexistence performance.”

Reason: To introduce the concepts of antenna classes on the SS side, and to distinguish the classes by stating the Class 1 is recommended.

Proposed resolution: Accepted

R29: From this sentence in 6.2.2.1.1: “Figure 10 and Figure 11 illustrate the recommended azimuth co-polar and cross-polar RPEs for the two Electrical Classes of antenna.”

delete the word “recommended”.

Reason: because the word “recommended” should only be applied to Class 1

Proposed resolution: Accepted

R30: From this sentence in 6.2.2.1.2:

“Figure 12, Figure 13, and Figure 14 illustrate the recommended elevation RPEs for Classes 1 and 2. Some specific data points are provided in Table 5, Table 6, and Table 7; between these points, linear interpolation is used.”

delete the word “recommended”.

Reason: because the word “recommended” should only be applied to Class 1

Proposed resolution: Accepted