Document under Review: P802.16a/D7 Ballot Number: Third Recirculation Comment Date

Comment # 381 Comment submitted by: Ed Callaway 2002-11-29

Starting Page # 277 Starting Line # 12

Section B.2.2.4

Fig/Table#

I am uncomfortable stating flatly that RLANs cannot coexist in the same channel with BWA devices. I am hoping that the situation is not quite so bleak, but I cannot agree with the following line that RLANs will not be used in residential areas--especially since many people I know already have them in their homes, and consider their biggest advantage to be the ability to sit outside on the porch with a laptop and work. What is such a person to do if a rooftop BWA device apprears next door? Simply saying it won't happen very often doesn't seem to be good

engineering practice at a time when home RLANs are a growing market.

Type Technical, Non-binding

Suggested Remedy

Comment

Delete p. 277, l. 12, and include a coexistence analysis similar to those in B.2.4.2, but with an outdoor BWA transmitter, an indoor RLAN AP, and an outdoot RLAN user.

Resolution of Group

Do not recirculate.

Reason for Group's Decision/Resolution

- (1) Since the balloter submitting this comment voted Approve, the comment is not an unresolved Disapprove comment and need not be recirculated.
- (2) This comment is out of scope. No relevant comments or changes were under review in this Third Recirculation.
- (3) This comment (although not the remedy) is a near duplicate of Comment 123, the response to which was recirculated and approved by the Sponsor Ballot Group.
- (4) Per 5.4.3.2 of the IEEE-SA Standards Board Operations Manual, "once 75% approval has been achieved, the IEEE has an obligation to the majority to review and publish the standard quickly. Therefore, once 75% approval has been achieved, the IEEE requirements for consensus have been met. Efforts to resolve negative votes may continue for a brief period; however, should such resolution not be possible in a timely manner, the Sponsor should forward the submittal to RevCom. "Accordingly, the Ballot Resolution Committee believes that a further recirculation is not appropriate.
- (5) The comment incorrectly states that the draft says "that RLANs will not be used in residential areas." RLANs are and will be used in residential areas. The draft specifically analyses the most common case, in which the RLANs are indoors. The comment specifically requests a coexistence analysis of the outdoor use of an RLAN terminals in conjunction with an indoor RLAN access point. Since there are many different propagation examples to be made, this scenario would be extremely complicated to analyze, and the resulting analysis would be so dependent on the assuptions as to be inconclusive. The analysis is therefore not included. The bottom line is that, in license-exempt bands, interference is expected and inevitable. In such bands, the draft makes DFS mandatory in order to address this issue. Detection of "unknown transmissions (such as RLAN transmissions)" in the channel is mandatory.

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Comment # 382 Comment submitted by: John Barr 2002-12-04

Comment Type Technical, Binding Starting Page # Starting Line # Fig/Table# Section general

Comment 326 has been satisfied by the recirculation of a complete updated draft. Comments 123, 124, and 325 are still unsatisfactory.

Suggested Remedy

Correct draft to include methods for realistic coexistence with other IEEE 802 radios that are designed to share the license-exempt bands or remove operation of 802.16a in any of the license-exempt bands to prevent interference with privately owned WLANs or other radios using the license-exempt bands that conform to realistic coexistence rules. Also, the 802.16 committee should vote against any other IEEE 802 standard proposed for license-exempt bands that does not also provide for realistic coexistence with other IEEE 802 radios in those bands. Stating that since others do not do this is not realistic. This is a new standard that is claiming operation in the same license-exempt bands already being used by other IEEE 802 radios. Adding a new radio to those bands should not cause interference.

Resolution of Group

Do not recirculate.

Reason for Group's Decision/Resolution

- (1) This comment is out of scope. No relevant comments or changes were under review in this Third Recirculation.
- (2) This comment is a duplicate of Comments 123, 124, and 325, all submitted by this balloter. Comment 325 simply reiterated Comments 123 and 124. Therefore, this is not a new comment but a repeat of an old comment.
- (3) Each of the three comments and responses has already been reviewed in the First or Second Recirculation. No additional relevant comments arose for consideration in this Third Recirculation. Therefore, the Ballot Resolution Committee believes that its rebuttal has already been accepted by the Sponsor Ballot Group.
- (4) Per 5.4.3.2 of the IEEE-SA Standards Board Operations Manual, "once 75% approval has been achieved, the IEEE has an obligation to the majority to review and publish the standard quickly. Therefore, once 75% approval has been achieved, the IEEE requirements for consensus have been met. Efforts to resolve negative votes may continue for a brief period; however, should such resolution not be possible in a timely manner, the Sponsor should forward the submittal to RevCom. "Accordingly, the Ballot Resolution Committee believes that a further recirculation of this comment is not appropriate.

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Comment # 383 Comment submitted by: John Barr 2002-12-04

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The MAC protocol relies on a higher layer (TCP/IP) functions like DHCP, UDP, and Time-of-Day services to provide configuration information to the MAC and is specified to be the 'communication channel' between the Base Stations and the Subscriber stations (for example in 6.2.15 MAC Management Message tunneling in Mesh Mode).

This causes architectural problems - ideally protocol layer (n) should be indepent of protocol layer (n+1). In the case of 802.16a, if the higher layer functionality is not working, then the layer 2 network does not operate correctly.

Suggested Remedy

Restrict node state, MAC messaging and inter-node communications within layer 2 and do not be reliant an any higher layer functionality.

Resolution of Group

Do not recirculate.

Reason for Group's Decision/Resolution

- (1) This comment is out of scope. No relevant comments or changes were under review in this Third Recirculation.
- (2) This comment is a virtual duplicate of Comment 006. Therefore, it is not a new comment but a repeat of an old comment.
- (3) The Ballot Resolution Committee's responses to the old comment (006) were subject to review in the First Recirculation and did not result in comments then, nor in the Second Recirculation (in which it was included in the ballot package for completeness). Therefore, the Ballot Resolution Committee believes that its rebuttal has already been accepted by the Sponsor Ballot Group.
- (4) Per 5.4.3.2 of the IEEE-SA Standards Board Operations Manual, "once 75% approval has been achieved, the IEEE has an obligation to the majority to review and publish the standard quickly. Therefore, once 75% approval has been achieved, the IEEE requirements for consensus have been met. Efforts to resolve negative votes may continue for a brief period; however, should such resolution not be possible in a timely manner, the Sponsor should forward the submittal to RevCom. "Accordingly, the Ballot Resolution Committee believes that a further recirculation is not appropriate.