

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>Report of the P802.16a Recirculation Ballot Resolution Committee</b>	
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Abstract	This documents reports the activities and progress of the P802.16a Ballot Resolution Committee.	
Purpose		
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# **Report of the P802.16a Recirculation Ballot Resolution Committee**

25 October, 2002

## **Charter**

In its Session #21 Closing Plenary Meeting, the 802.16 Working Group adopted, by vote of 22-0, the following motion: “to appoint a Ballot Resolution Committee and task them to resolve any comments arising from the recirculation of the P802.16a Sponsor Ballot. The final set of resolutions would be forwarded only if unanimously supported by the Committee. The Committee is tasked to technically justify accepting any comments that would reverse earlier technical decisions. The Working Group and Task Group a Chairs will be observers to the Committee. The members of the Ballot Resolution Committee will be the following, and only the following: Brian Eidson, Marianna Goldhammer, Itzik Kitroser, Bob Nelson, Randall Schwartz, Shawn Taylor, and Nico Van Waes. Each member is entitled to resign and name an alternate.”

## **Background**

The recirculation that the group was chartered to resolve ran from 2-11 October and resulted in 32 comments.

Roger Marks set up an email reflector <ballot16a@wirelessman.org> for group communications. This reflector automatically received all recirculation comments as they were received. Brian Kiernan arranged conference call facilities. By email, the group agreed to a conference call on 9 October.

## **Teleconference: 9 October**

IEEE 802.16a Ballot Resolution Committee Conference Call  
WEDNESDAY - 9 October - Local Time per <<http://wirelessman.org/brc.html>>  
Planned Duration: 1 hour  
Chair: Brian Kiernan

### **AGENDA**

1. Introduction and attendance registration (waited until all members and observers in attendance)
2. Approval of the Agenda
3. Review of Ballot Resolution Process and Schedule
  - a. Comment availability date
  - b. Creation of Draft Resolutions
  - c. Follow-up Conference Call (14th?)
  - d. Need for face-to-face meeting (?)
  - e. Final Resolution Package
  - f. Draft 6 & Sponsor Confirmation Ballot
4. Discussion of Points and Issues
5. Adjourn

The agenda was agreed to and followed. The group agreed to a teleconference on 15 October. Committee Roger Marks agreed to post the recirculation comments in a Commentary database by 13 October. It was agreed that this database would be placed on the web, with an announcement to the 802.16 reflector that reactions should be directed to the committee email reflector or individual committee members.

## **Teleconference: 15 October**

IEEE 802.16a Ballot Resolution Committee Conference Call  
TUESDAY - 15 October - Local Time per <<http://wirelessman.org/brc.html>>  
Planned Duration: 90 minutes  
Chair: Roger Marks

### **AGENDA**

1. Introduction and attendance registration (waited until all members and observers in attendance; however, Brian Kiernan could not attend)
2. Approval of the Agenda
3. Process Review: need to agree on resolutions by 22 Oct.
  - a. 32 comments available in Commentary since 13 Oct.
  - b. Need proposed resolutions in writing by 17 Oct.
  - c. Review in conference call on 18 Oct.
  - d. Need for possible face-to-face meeting or conf. call on 21 Oct.
5. Review of comments one by one
  - a. Agree on the basic principles of resolution of each
  - b. Agree on assigning a BRC member to draft each resolution
6. Adjourn

The agenda was agreed to and followed. Comments, and reply-comments, were reviewed. Tentative resolutions were proposed and entered into a Commentary database, which was later circulated to the group. Many of the resolutions pointed to document C802.16a-02/90r2. Volunteers offered to draft resolutions of some comments, On other comments, there was no agreement on the basic principles of resolution for a few comments. A teleconference was scheduled for 18 October.

### **Teleconference: 18 October**

IEEE 802.16a Ballot Resolution Committee Conference Call

TUESDAY - 18 October - Local Time per <<http://wirelessman.org/brc.html>>

Planned Duration: 90 minutes

Chair: Brian Kiernan

#### **AGENDA**

1. Introduction and attendance registration (waited until all members and observers in attendance, except Itzik Kitroser, who was late and missed the start)
2. Approval of the Agenda
3. Process Review: need to agree on resolutions by 22 Oct.
  - a. Review of proposed comment resolutions.
  - b. Need for possible face-to-face meeting or conf. call on 21 Oct.
  - c. What if we cannot reach agreement?
4. Review of proposed comment resolution database
  - a. Agree on the resolution of each comment
  - b. Agree on the comment resolutions, as a package
  - c. Agree on the creation of D6, based upon the comment resolutions
5. Agree on proceeding to Sponsor Confirmation ballot
6. Adjourn

The agenda was agreed to and followed, through 4a. On Comments 331 and 332, resolutions proposed by Bob Nelson were accepted in principle, but detailed wording was not completed. On the remaining comments, except 328, 329, and, 355, resolutions (including the references to an updated C802.16a-02/90r3) were completed without objection. The group could not make further progress on 328, 329, and, 355, A teleconference was scheduled for 21 October. The disagreements were noted in an updated Commentary database.

### **Teleconference: 21 October**

IEEE 802.16a Ballot Resolution Committee Conference Call

MONDAY - 21 October - Local Time per <<http://wirelessman.org/brc.html>>

Planned Duration: 2 hours

Chair: Brian Kiernan

#### **AGENDA**

1. Introduction and attendance registration (waited until all members and observers in attendance)
2. Approval of the Agenda
3. Review of unresolved comments

- a. 331
  - b. 332
  - c. 355
  - d. 329
  - e. 328
4. Review of proposed comment resolution database [either (a) or (b)]
- a. Agree on the comment resolutions, as a package
    - i. Agree on the creation of D6, based upon the comment resolutions
    - ii. Agree on proceeding to Sponsor Confirmation ballot
  - b. Disagree on the comment resolutions, as a package
    - i. complete the comment resolution database, including differing views, for presentation to Working Group
6. Adjourn

The agenda was followed, through 3. Marks noted that the 802.16 motion creating the BRC said “The Committee is tasked to technically justify accepting any comments that would reverse earlier technical decisions.” The committee had not yet carried out this task/

The group agreed to resolutions of 331 and 332. This brought the group into agreement on all but three resolutions in the database (including the references to an updated C802.16a-02/90r4). Discussion of 355, 329, and 328 led to little progress. Marianna Goldhammer announced an objection to the resolution of 345. In summary:

Goldhammer objected to a proposed resolution of 328, which would allow OFDMA and SC, along with OFDM, as co-mandatory modes in license-exempt bands. Her specific objection was to including SC.

Taylor and van Waes objected to a proposed resolution of 355 on grounds that it would not ensure that all OFDMA AAS SSs can operate in AAS mode with all BSs. Van Waes also states that he objects to any period longer than 200 ms without broadcast DL-MAP (as specified in Table 118) but that the proposed period is 9019.934 ms.

No agreement was reached on how to address 329, particularly with 355 and 328 inconclusive,

Goldhammer objected to the resolution of 345, with a concern about network entry.

Another conference call was scheduled for 23 October, one hour later than previous calls.

The meeting was adjourned 2 hours and 8 minutes after the scheduled opening.

## **Teleconference: 23 October**

IEEE 802.16a Ballot Resolution Committee Conference Call

WEDNESDAY - 23 October - Local Time per <<http://wirelessman.org/brc.html>>

Planned Duration: 2 hours

Chair: Brian Kiernan

### **AGENDA**

1. Introduction and attendance registration (began at 9 minutes past the scheduled time, with all members and observers in attendance)
2. Approval of the Agenda
3. Review of unresolved comments
  - a. 355
  - b. 345
  - c. 328
  - d. 329
4. Review of proposed comment resolution database [either (a) or (b)]

- a. Agree on the comment resolutions, as a package
- i. Agree on the creation of D6, based upon the comment resolutions
- ii. Agree on proceeding to Sponsor Confirmation ballot
  - b. Disagree on the comment resolutions, as a package
    - i. complete the comment resolution database, including differing views, for presentation to Working Group
- 5. Discussion on Final Report
- 6. Adjourn

On Comment 355, progress was made toward reaching an agreement to address the van Waes/Taylor objection to any period longer than 200 ms without broadcast DL-MAP. Schwarz will coordinate a resolution of this problem, to be submitted to the Committee within 24 hours after the end of the teleconference.

Even with that issue addressed, van Waes and Taylor still object to the proposed resolution of 355 on grounds that it would not ensure that all OFDMA AAS SSs can operate in AAS mode with all BSs. This issue was discussed at great length, without resolution, until 1 hour and 18 minutes past the scheduled teleconference opening. Ultimately, only van Waes restated his objection to this proposed resolution on these grounds.

Comment 345 was discussed. Goldhammer objects to the resolution on grounds that the OFDM subchannelization should allow network entry on any subchannel. She proposed the following addition to the resolution:

In the note below Table 118at of C802.16a-02/90r5, change:

“a. When sub-channelization is active (see REF 8.4.4.3.5), only UIUC's 5 through 13 shall be used.”

to:

“a. When sub-channelization is active (see REF 8.4.4.3.5), only UIUC's 1 or 5 through 13 shall be used.”

Also: in that same table, change “Duration 5 bits” to “Duration 9 bits”

This issue was discussed at great length. Taylor and van Waes did not agree with the proposed changes. Ultimately, Goldhammer was the only member objecting to the proposed resolution.

Comment 329 was discussed. It was agreed to resolve this comment by marking it “Superseded by resolution of Comment 355.”

Comment 328 was discussed. Goldhammer was the only member objecting to this resolution, on grounds that she opposed including the SCa mode in license-exempt bands.

At this point, the status of the resolution database was that resolutions were drafted for all 32 comments, with agreement on 29 of them. Of the remainder (328, 345, and 355), each faced an objection by one member. Since the resolutions had been changed during the discussions, the details remained less than exact. However, the members seemed to believe that they had a good understanding of the proposed resolution package.

Kiernan asked for objections to submitting the database package for ballot recirculation. Only Goldhammer objected. Since the Committee is not chartered to initiate a recirculation without unanimous approval, the package was not approved for recirculation at this time.

Nelson moved (and Eidson seconded) a motion to submit a Committee report to the Working Group, to include the resulting resolution proposal database along with a report of the teleconference minutes, including the expressed minority views regarding objection to proposed resolutions.

Discussion of this motion identified a difficulty in that the database on which the motion is based does not currently exist in definitive form.

An additional teleconference was scheduled to begin 47 hours after the scheduled start of the current teleconference (Friday, at the starting time of the first four teleconferences). It will start within one minute of the

scheduled time and last no more than 30 minutes. At this meeting, the group will have an opportunity to discuss the final database. Should the members agree unanimously to forward it for recirculation, the Editor and Working Group Chair will attempt to carry it out in time to make the RevCom deadline. The motion of Nelson was tabled until after discussion of this issue.

Marks will issue an updated database today (as 802.16-02/54r1) for review by the group in advance of Friday's decision. Schwarz will have until 24 hours after the adjournment of the teleconference to provide recommended text to partially resolve Comment 355, in accordance with the discussion reported above. This will be incorporated in 802.16-02/54r2.

Marks reminded the group that "The Committee is tasked to technically justify accepting any comments that would reverse earlier technical decisions." Should the Committee agree to a recirculation, development of these reasons needs to be in parallel with the implementation of the changes in the draft.

The meeting adjourned 3 hours after its scheduled opening.

## **Teleconference: 25 October**

IEEE 802.16a Ballot Resolution Committee Conference Call

FRIDAY - 25 October - Local Time per <<http://wirelessman.org/brc.html>>

Planned Duration: 30 minutes, maximum

Chair: Brian Kiernan

### **AGENDA**

1. Introduction and attendance registration (began at 5 minutes followed the scheduled opening, with all members and observers present. Due to a preannounced scheduling conflict, Roger Marks withdrew from the call approximately 15 minutes after the scheduled opening.)
2. Approval of the Agenda
3. Decision on forwarding 802.16-02/54r2 (and accompanying P802.16a/D6) for Sponsor Ballot Recirculation
4. Take up tabled motion of Nelson to submit a Committee report to the Working Group, to include the resulting resolution proposal database (802.16-02/54r2) along with a report of the teleconference minutes, including the expressed minority views regarding objection to proposed resolutions.
5. Adjourn

On comment 355, the resolution developed by Kitroser, Schwartz, van Waes, and Taylor was accepted by the Committee. This resolution had already been incorporated into the comment database, 802.16-02/54r2.

Comment 345 was further discussed and rejected by the Committee. Detailed technical rationale for the rejection was developed and incorporated into the database. A new database, 802.16-02/54r3 will be issued today with the technical rationale incorporated.

Some minor editorial changes were made to C802.16a-02/90r6, and a -02/90r7 version will be issued today. The 802.16-02/54r3 database will update its pointers to the r7 version.

Goldhammer wanted to ensure that her concerns with the rejection of 345 were addressed at the upcoming WG meeting in Hawaii. Kiernan reiterated, in reference to a Committee email discussion, that there is an existing mechanism through submission of a comment under the second recirculation. Such comments will be resolved by the Working Group at Session #22. Non-binding comments could be rejected at Session #22 without instigating an additional recirculation,

Kiernan then called for a motion regarding proceeding to Sponsor Ballot Recirculation. Nelson moved (seconded by Schwartz) the following:

"Move to create a new Draft Standard P802.16a/D6, based upon the comment resolutions contained in 802.16-02/54r3, and proceed to Sponsor Ballot Recirculation."

Kiernan called for a roll call vote with the following results:

Nelson	Approved
Goldhammer	Approved
Schwartz	Approved
Kitroser	Approved
Taylor	Approved
van Waes	Approved
Eidson	Approved

Motion passed unanimously.

Based upon the above vote, Nelson rescinded his motion, which had been tabled from the previous meeting.

Kiernan then reminded everyone (especially any Disapprove voters) of their obligation to inform Roger Marks if they felt the resolutions satisfied their prior comments and that they are changing their existing votes based upon the outcome of the resolution process. It was further pointed out that, even if they continued to disapprove some specific comment resolution(s), it was critical that they inform Marks of any satisfied comments so that the recirculation package would be complete, accurate, and simple. They were also specifically requested to contact their peers with regards to the resolutions and the need for them to respond to Marks as stated above.

Having completed the work of the Ballot Resolution Committee, Kiernan thanked everyone for the spirit of cooperation that the committee had exhibited and the great effort that they put into the development of the comment resolutions.

The meeting adjourned at approximately 45 minutes after the schedule opening.