

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>IEEE 802.16a Task Group 3 Session #15 Minutes</b>	
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Re:	IEEE 802.16a Task Group 3 Session #15 (Denver, Colorado, US September 10-14, 2001)	
Abstract		
Purpose	To record meeting minutes.	
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**Minutes of P802.16a Session #15  
A Task Group of IEEE 802.16  
Denver, Colorado, US  
10-14, September 2001**

**Call to Order Joint Task Group 3 and Task Group 4 Meeting**

Brian Kiernan and Durga Satapathy called the meeting to order at 3:30pm, September 10, 2001.

**Agenda**

The group reviewed the agenda for both Task Group 3 and Task Group 4. In addition, Ken Pierce reviewed the MAC agenda.

**Ad Hoc Reports**

***ARQ***

Huanchan Ye led this adhoc group and the results accepted by the group are listed in contribution IEEE802.16abc-01/28. 29 people signed up for the group with about a dozen active members.

***FEC***

Garik Markarian led this adhoc group and the results accepted by the group are listed in contributions IEEE802.16abc-01/33 and IEEE802.16abc-01/25. 28 people expressed interested in this ad hoc with up to 15 people active at any time. The goal was to reduce the overall number of coding schemes. The group voted 11-1 for the results in this document.

***MAC/PHY Interface***

Vladimir Yanover led this adhoc group and the results accepted by the group are listed in contributions IEEE802.16abc-01/26, IEEE802.16abc-01/32 and IEEE 802.16abc-01/34.

***OFDM Preamble***

Hikmet Sari led this group and the results accepted by the group are listed in contributions IEEE. Over 20 people participated in this group. The group has a number of proposals and would like to meet tomorrow all day to select the appropriate preamble.

***Comments***

There are a total of 90 comments to the various documents listed in the commentary database.

***Contribution***

802.16abc-01/29 Channel Estimation, Diversity and Preamble Requirements for Broadband Wireless Using OFDM (Lek Ariyavisitakul, 01/09/05).

The above contribution covers a number of different areas and covered as a tutorial for the group. Lek Ariyavisitakul presented it.

Agenda TG4 PHY John presented the agenda for the PHY TG4 meeting.

The meeting was adjourned at 5:10pm.

## **Call to Order on Tuesday Sept. 11 (Joint Task Group 3 and Task Group 4 PHY)**

Brian Kiernan called the meeting to order at 8:00am.

### **Comment Resolution**

Nico Van Waes reviewed the revision 2 of the comment resolution database in the joint PHY portion of the document. Detailed information regarding comments and resolutions is mentioned in an updated version of the commentary database.

After resolving a few comments, the meeting was adjourned at 8:30am until 1:00pm.

## **Call to Order (Joint Task Group 3 and Task Group 4 PHY)**

Brian Kiernan called the meeting to order at 1:00pm.

### **Comment Resolution**

Nico Van Waes reviewed the revision 2 of the comment resolution database in the joint PHY portion of the document. Detailed information regarding comments and resolutions is mentioned in an updated version of the commentary database.

### ***FEC Comments***

Garik Markarian reviewed the results of the FEC ad hoc group. The ad hoc recommended a table 192 to be modified as follows.

**Motion #1** to approve comment #301 the output of the ad hoc group on FEC

**Motion #1** carries 32-5.

**Motion #2** to make convolutional coding the only FEC mode for 64 FFT, unlicensed PHY only.

**Motion #2** fails 5-24

The meeting was adjourned at 5:30pm.

## **Call to Order Wednesday Sept. 12 (Joint Task Group 3 and Task Group 4 PHY)**

John Liebetreu called the meeting to order at 8:30 am.

Joseph Kwak presented his PHY ARQ (PARQ) proposal. After question and discussion period, it was decided to defer the decision of adoption of the PARQ proposal to a joint MAC / PHY adhoc group. Adhoc meeting will take place tonight at 7:00 pm.

## **Comment Resolution**

Nico Van Waes reviewed the revision 2 of the comment resolution database in the joint PHY portion of the document. Detailed information regarding comments and resolutions is mentioned in an updated version of the commentary database.

## **Ad Hoc Reports**

### ***OFDM Preamble Selection***

Hikmet Sari led this adhoc group and the results were deferred to 3:30pm and adhoc should come back with separate TG3 and TG4 comments for adopting the adhoc group's results.

The meeting was adjourned at 12:00 pm.

### **Call to Order (Joint Task Group 3, 4 and MAC)**

John Liebetreu called the meeting to order at 1:30pm.

### **MAC / PHY Comment Resolution**

Nico Van Waes reviewed the revision 2 of the comment resolution database in the joint MAC and PHY portion of the document.

### ***MAC / PHY Interface Ad Hoc Report***

Vladmir Yanover led this adhoc group and the results were presented. Detailed information regarding comments and resolutions is mentioned in an updated version of the commentary database.

### ***OFDM Preamble Ad Hoc Report***

Hikmet Sari presented the latest adhoc group results for TG3 and TG4.

**Motion #3** Naftali Chayat to accept 5 recommendations of the preamble adhoc group to prepare a comment based on this recommendation, 2<sup>nd</sup> by Zion Hadad.

**Motion #3** Carries 24-0.

**Motion #4** Shawn Taylor to table motion #3 to the next comment resolution session, 2<sup>nd</sup> Bob Ward.

**Motion #4** Fails 7-22.

### **Call to Order (Joint Task Group 3, 4 and MAC)**

Brian Kiernan called the meeting to order at 8:35am.

## **Comment Resolution**

### ***PHY ARQ***

There was a presentation Wed night by Joe regarding Physical Layer ARQ by Joseph A. Kwak. At this time, the group discussed the possibility of including this as an option within the draft specification.

A number of comments were discussed were mentioned regarding PARQ.

Comment #304 to 305 were accepted with no objections.

**Motion #5** To approve comment #304  
**Motion #5** Carries by unanimous vote.

Comments #305 was approved by voice vote with no objections.

**Motion #6** Naftali Chayat to table comments #306-310 until session #16, 2<sup>nd</sup> Paul Strusaker to table comment 306 through 310 until session #16.  
**Motion #6** Carries 24-4.

The group decided to table all comments in the PARQ area. Various people requested the following information regarding PARQ.

- 7dB gain claim - see results that verify this using layer 2 ARQ plus layer 2 and addition of PARQ
- Provide parameters of the simulation – whole block and potentially a sub block
- Details of first CDMA channel implementation, analysis of what elements in the system that need to be changed

**Motion #7** Naftali Chayat to reconsider previous motion #5 and table comments 304 and 305 to session #16.  
 2<sup>nd</sup> Brian Edison.  
**Motion #7** Carries 13-4.

## ***PHY comments***

An ad hoc group was created to insert a section on RSSI and CCI measurements for each PHY mode. John Sydor is the chair.

## **Contributions**

### ***Ranging Contributions and Comments***

The following contributions were presented:

Contribution 802.16abc-01/24 Comments on OFDMA Ranging Scheme described in IEEE 802.16ab-01/01r1 (Jerry Krinock, Manoneet Singh, Mike Paff, Vincent Tien, Arvind Lonkar, Lawrence Fung, and Chin-Chen Lee, 01/08/28)

Contribution 802.16abc-01/23 [Presentation 802.16abp-01/23]  
 Ranging Process Analysis And Improvement Recommendations (Chin-Chen Lee, 01/08/28)

### ***OFDM Preamble***

There was quite a bit of discussion regarding comment #337.

**Motion #7** to accept comment #337  
**Motion #7** fails 21-10

**Motion #8** to split comment #337 into two comments  
**Motion #8** carries 13-10

**Motion #9** Comment to approve #337 part 1  
**Motion #9** fails 19-11.

**Motion #10** Comment #337 part 2

**Motion #10** fails 19-11.

The meeting was adjourned at 1:00pm

### **Call to Order (Task Group 3 PHY)**

Brian Kiernan called the meeting to order at 2:20pm.

### **Channel Model**

**Motion #11** Einan Regev to accept contribution 802.16.3c-01/79 (channel models for 30km and 50km range (Avi Freedman, et al., 01/09/06)) as the long-range channel model 2<sup>nd</sup> Zion Hadad.

**Motion #11** fails 10-6.

By a straw poll, the channel model ad hoc group is complete and will not be renewed.

The meeting was adjourned at 2:15pm.

### **Call to Order on Friday Sept. 14 (Task Group 3)**

Brian Kiernan called the meeting to order at 8:30am

Agenda of the day was reviewed and accepted.

**Motion #12** Anader Benyamin-Seeyar, 2<sup>nd</sup> Zion Hadad. Approve Minutes from Session #14.

Motion#12 passed unanimously.

**Motion #13** To approve the comment resolution database 80216ab-01/07r4.

Motion#13 passed unanimously.

**Motion #14** To approve the submission of document 802.16ab-01/01r1 and 802.16ab-01/07r4 updated comment resolution database approved in Session#15 to the Working Group for initiation of Working Group Review.

Motion#14 passed unanimously.

Session#16 Comment process was presented by the Chair. No objection was raised.

**Motion #15** Walt Roehr, 2<sup>nd</sup> Anader Benyamin-Seeyar, to adjourn the meeting. Motion passed unanimously.

The meeting was adjourned at 9:00 am.