

### Minutes of IEEE 802.16 Session #13

An Interim Session of IEEE 802.16 Working Group on Broadband Wireless Access Orlando, FL, USA
May 14-18, 2001

### 1) Opening Plenary, Monday, 05/14/2001

At 8:30 A.M. Roger Marks, 802.16 Chair, called Session #13 to order.

Marks presented the Opening Plenary agenda <a href="http://ieee802.org/16/meetings/mtg13/opening.html">http://ieee802.org/16/meetings/mtg13/opening.html</a>.

Marks presented the schedule for the week <a href="http://ieee802.org/16/meetings/mtg13/schedule.html">http://ieee802.org/16/meetings/mtg13/schedule.html</a>>.

Marks announced that the participation requirement for Session #13 is 6 of 9 intervals.

Motion#1: To approve the agenda as presented by Roger Marks: Dean Chang, Zion Hadad 2<sup>nd</sup> Voice vote: all for, none opposed Motion#1 carries.

Marks presented information about the group's file server. The plenary room has a wireless hub as well as a table with wired (Ethernet) cable connections. FTP access with "attendee" as the user name and "attendee" as the password is operational. Windows user "attendee" access is allowed. Incoming documents go in the "attendee" directory. Anyone can see these documents in this directory until they are moved into the new document's web page.

Marks reviewed the 802.16 processes including the rights of all attendees and rights of members.

Carl Bushue, 802.16 Acting Secretary, introduced the attendance and membership-token books. Four attendance books (one for each task and study group) will be used.

Membership and voting was discussed.

Voting tokens for members are located in the TG3 attendance book that is circulating the meeting room. Members should place the tokens on their name badge.

Rights of all, rights of observers, rights of members were presented.

Participation is by individuals, not companies.

Group process steps, rules, legal/antitrust and patent policy (in detail) were covered <a href="http://ieee802.org/16/meetings/mtg13/opening\_chair.pdf">http://ieee802.org/16/meetings/mtg13/opening\_chair.pdf</a>.

## **Approvals:**

Task Group reports:

Roger Marks, TG1 Chair, reported on TG1. The Task Group has been working on a Working Group letter ballot with >800 comments to resolve. The Letter Ballot passed with more than 80% approval. Most comments were resolved. The latest draft is named D3d2 and 200 new comments are on the web site.

A key issue with the draft is the existence of two PHY modes, particularly because the proponents of Mode A are no longer a part of the process. That section is no longer being editorially maintained. Marks provided notification that,

this week, TG1 will consider deletion of Mode A. He requested a show of hands from those who would object to such deletion. Only Anader Benyamin-Seeyar, Rémi Chayer, and Gene Robinson objected. Marks provided notification that a meeting to discuss deletion of Mode A would be scheduled and that all those concerned with the issue should notify him to coordinate the time.

Brian Kiernan, TG3 Chair, reported on TG3. The schedule of the week was discussed. TG3 and TG4 are working on joint MAC issues during this session. Motions are expected at the Closing Plenary.

Durga Satapathy, TG4 Chair: There will be a PHY session plus joint meetings with TG3. There will not be separate TG4 MAC meetings this week; the TG3 and TG4 MAC teams will meet only **in** joint **session**.

Phil Whitehead, TG2 Chair, reported on TG2. The Working Group Draft has completed Sponsor Ballot. Recirculation is in progress and will close Wednesday. Whitehead also spoke as Chair of the Coexistence Study Group looking into an amendment to 802.16.2. The Study Group's draft agenda <IEEE 802.16-01/25> was presented. Work will begin at this meeting. A joint meeting will be held with TG3 on Thursday morning. Marks discussed the Sponsor Ballot and building a PAR for the new project this week.

#### **Liaison Issues:**

David Chauncey discussed Liaison issues regarding TG4 coexistence. Chauncey noted plans for a meeting of the 802 Executive Committee Study Group on Coexistence on Tuesday (5/15) afternoon and evening.

Approval of Session #12 minutes.

Motion#2: Motion: To Approve Minutes of Session #12 (IEEE 802.16-01/14r1): Anadar Benyamin-Seeyar , Nico Van Waes  $2^{nd}$ .

Vote: all for, none opposed.

Motion#2 carries.

Marks reported on Jose Costa's ITU-R liaison letter (IEEE 802.16l-01/12) and information about work with ETSI BRAN.

Marks discussed the schedule of the week and will update the file with information from TG3 and TG4 when it is available.

#### **Future sessions:**

#14 July 9-13, 2001: Portland, OR, USA: information is available on the web site. The 802.16 Closing Plenary will take place on Friday!

#15 September 10-14 2001 – Dean Chang has made a proposal in San Jose and Roger Marks made a proposal for Denver. A comparison is posted on the web.

### Motion#3: That Session #15 will be held in Denver.

# Moved by Carl Eklund, Gene Robinson 2nd

Discussion: Comparison from the web <a href="http://ieee802.org/16/meetings/mtg15/site\_selection\_data.html">http://ieee802.org/16/meetings/mtg15/site\_selection\_data.html</a> was reviewed by Marks, with comments from Chang.

Vote: 31 for; 14 opposed.

#### Motion#3 carries.

Marks expressed his appreciation to Dean Chang for his work in preparing a proposal and hopes that the group can take advantage of the hospitality in the Bay Area at some point in the future.

Charge to TGs - Think, during the week, about what can go into the meeting report as accomplishments. Marks posted specific tasks for the groups that he hoped could be completed. He proposed that the Task Group Chairs bring modified text to the closing plenary for this report. The Chair will not entertain surprise liaison proposals at the closing plenary. It was proposed that the liaison process work after the meetings. Marks expressed concern that a large amount of work goes into liaison letters and that they should not be used lightly.

The Chair appoints Carl Bushue as Working Group Secretary.

Motion#4: To affirm the Chair's appointment of Carl Bushue as Working Group Secretary

Moved by David Trinkwon, Rémi Chayer 2<sup>nd</sup>

Voice vote: All for, none opposed.

Motion#4 carries

Marks expressed a need for volunteers for various tasks in the group. If anyone is willing to accept the responsibility, he will discuss an appropriate position and title. Anyone interested should contact Roger Marks.

David Trinkwon discussed a problem with Task Group Chairs not providing a draft agenda for the week in advance of the Opening Plenary. The Working Group Chair agreed that the Task Group Chairs should provide this information.

New business: None

Closing:

Motion#5 to adjourn:

Moved by Walt Roehr, Nico Van Waes 2<sup>nd</sup>

Voice vote at 10:35P.M.: all for, none opposed.

Motion#5 carries.

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## 2) Closing Plenary

Friday 05/18/2001

Called to order by Chair, Roger Marks at 10:08A.M.

Agenda: was displayed and discussed <a href="http://ieee802.org/16/meetings/mtg13/closing.html">http://ieee802.org/16/meetings/mtg13/closing.html</a>

Motion#1 to approve agenda So moved by Brian Kiernan, Rémi Chayer 2nd Motion#1 approved without objection

Marks passed along the IEEE announcement of Tuesday, May 15, that IEEE 802 standards will be distributed via the Internet without charge, six months after being published. \$75 from each IEEE Plenary meeting registration fee goes to support this process.

## **Task Group Reports:**

Marks announced that Tuesday night at midnight, the final confirmation Sponsor Ballot for the TG2 draft closed. There were no "Disapprove" votes, there were no new comments, and that ballot is complete and final. The approval of the document is tentatively on the RevCom agenda for June 13<sup>th</sup> and the following day it should be approved by the IEEE Standards Board. The IEEE 802 SEC must approve the document being included on the RevCom agenda.

TG2: TG2 Chair Phil Whitehead reiterated the status of the Sponsor Ballot of P802.16.2/D3-2001.

Motion#2: To submit P802.16.2/D3-2001 to the 802 SEC for approval of submission to RevCom Moved by TG2 - Since this motion comes from a standing group, it does not need a second. Vote: 19 for, none opposed, 1 abstain.

Motion#2 carries.

802.16's Coexistence Study Group is proposing an Amendment to 802.16.2. A PAR Scope statement, Purpose Statement, and Timeline were discussed.

## Proposed PAR

"This project will develop extensions and modifications to 802.16.2-2001. These extensions and modifications will address two distinct topics. The first is the co-existence between multipoint (MP) systems and point to point systems, operating in the frequency range 10-66 GHz but with a focus on the range 23.5 to 43.5 GHz. Two types of point to point systems will be considered - those used by fixed BWA operators, and those used as individually assigned links, commonly licensed on a "first-come, first-served" basis. The second topic is the coexistence of fixed BWA systems operating in licensed bands within the frequency range 2-11 GHz. Consequential clarifications to the existing document will be carried out, if necessary."

### Purpose Statement

"The purpose of this amendment to the Recommended Practice is to provide additional coexistence guidelines to license holders, service providers, deployment groups, and system integrators, covering coexistence with point to point systems operating in the 23.5 - 43.5 GHz frequency range and coexistence of fixed BWA systems operating in

the 2-11 GHz frequency range. The equipment parameter values contained within this amended practice will benefit license holders, equipment and component vendors and industry associations by minimizing the need for case by case coordination and facilitating the deployment and operation of fixed BWA systems. A further purpose is to encourage voluntary processes that facilitate a simpler licensing process for systems operating within the frequency range 2-11 GHz, and in particular in the 2.5 GHz MMDS/ ITFS bands in the USA."

Motion#3: Approve submission of the PAR (see IEEE 802.16.2-01/06 and IEEE 802.16.2-01/07) to amend 802.16.2-2001, to the IEEE 802 Executive Committee

Moved by Phil Whitehead, Wayne Hunter 2<sup>nd</sup>.

Vote: 20 for, none against, 1 abstains.

Motion#3 carries.

### Secretary report: by Carl Bushue

Attendance: a total of 151 people signed into sessions, 126 attended 6 or more sessions, 15 attended (or signed) for 3 or less sessions. {Note: the final count was 150, 127 of whom received participation credit; see Appendix A.} New documents are on the server in the new documents directory <a href="http://ieee802.org/16/meetings/mtg13/docs.html">http://ieee802.org/16/meetings/mtg13/docs.html</a>>.

## TG1: Report by TG1 Chair, Roger Marks.

The group has received many comments on the document and they are being edited into the draft as quickly as possible. A recirculation ballot may be started as early as May 25, 2001. Task Group 1 met to discuss the deletion of Mode A and conducted a straw poll on the issue. Sentiment was in strongly in favor of deleting Mode A. A detailed comment on the draft has been generated to implement the removal of Mode A; it will be subject to consideration during the recirculation ballot. A straw poll was conducted by Marks here in the Working Group Closing Plenary about the deletion of Mode A from the TG1 draft. No opposition was indicated.

### TG3: Report by TG3 Chair, Brian Kiernan (see IEEE 802.16.3-01/20)

The channel model baseline was revised. A new version will be issued during the week of May 21-25. The complete document was not available for approval yet, but there was an issue of the number of taps used in the model. The result of this week's work is that 3 taps will still be required but the spacing will be adjusted to remove singularities that are introduced with the current equidistant time spacing. In addition, 3 optional taps are to be defined

There was progress on the PHY documents. 802.16.3-01/58r2 (baseline single carrier document) and 802.16.3-01/59r2 (baseline OFDM document) have both been accepted by the Task Group. The MAC group agreed on an approach to be used for ARQ. Document 802.16.3-01/61 was agreed upon as a working document for the week. Document 802.16.3-01/61r1 includes the agreed on ARQ section but not all sections of the document have been approved by the Task Group.

A Table of Contents document (IEEE 802.16.3-01/20) has been updated to an addendum structure and approved by the Task Group. The new Table of Contents structure allows input by TG3 and TG4 as modifications to the 802.16 document. Both PHY documents and the MAC document are to be restructured into amendment format prior to Session #14. This restructuring is to be carried out at an interim-interim meeting on June 7<sup>th</sup> and 8<sup>th</sup> with the location to be announced. A call for comments and contributions will be issued against the reissued documents. Any inputs should include specific text to be changed or added in the document.

An understanding has been reached between TG3 and GT4 on a process to create a 802.16a and 802.16b PHY and MAC document. Details will be presented by Durga Satapathy in the TG4 report.

David Trinkwon will file a dispute (protest) against treating 802.16.3-01/29r1 as a baseline document approved by Task Group 3 and the motions (4 and 5) within the Task Group that followed from that.

There was discussion by Vladimir Yanover about the process and status of documents involving 50% vs. 75% voting for changes. He would like to have the formal procedures on document voting requirements clearly stated as well as the evolving status of Task Group documents.

Text for a call for comments was presented and discussed. Of particular interest is that any comments or contributions to the PHY documents must be accompanied by specific text in order to be added or changed in the two documents.

#### TG4: Report by Chair, Durga Satapathy:

The Task Group approved the PHY strawman (IEEE 802.16.4-01/12r1) and initiated a TG3/TG4 MAC document. The Task Group reviewed all comments on the TG4 PHY. Most were resolved with a few left. Satapathy reviewed the "Orlando Agreement" (IEEE 802.16.4-01/15) between TG3 and TG4 on processes to jointly work on documents.

#### **Future sessions:**

Interim/interim editorial meeting - June 7-8
Session #14 Plenary - Portland, OR, USA
Session #15 Interim - Denver, CO, USA
Session #16 Plenary - Austin, TX, USA
Session #17 Interim - Finland (?) January 2002

#### Liaisons:

The Working Group Chair, Roger Marks appoints Mika Kasslin (also Chair of 802.11 TGh) as 802.16 Liaison to 802.11. He notes that Mr. Kasslin has agreed in conversation to accept this appointment.

David Chauncey is not here but Marks reported that Chauncey met with the 802 Coexistencee Study Group. The Study Group does not seem interested in playing an aggressive role. They may recommend becoming a standing technical advisory group to provide future input on coexistence issues that arise from interactions between devices that adhere to standards that come out of different Working Groups.

#### Letter from ETSI BRAN

During the week, the Working Group received a letter from ETSI BRAN (IEEE 802.16l-01/13) asking about the meaning of "interoperability". Marks' proposed response would be to point to the interoperability definition in the IEEE Standard Dictionary of Electrical and Electronics Terms (IEEE Standards 100-1996). The appropriate definition is "The capability promoted, but not guaranteed, by being in conformance with a given set of standards that enable heterogeneous equipment generally built by various vendors to work together in a network environment." will be included in the letter. **There was no objection to the revised text of the letter** (IEEE 802.16l-01/14) **being sent to ETSI BRAN.** 

Session #13 report:

Draft presented by Roger Marks.

Discussed and edited by the group.

http://ieee802.org/16/meetings/mtg13/report.html

There were no objections to the edited text becoming the Session #13 Report, with editorial revisions by the Chair.

New Business: None

Closing:

Motion#4 to adjourn:

So moved by Carl Eklund, Kenneth Peirce  $2^{nd}$  Voice vote at 11:50A.M.: all for, none against. Motion#4 Carries.

Attached: Appendix A: Attendance

Appendix B: Chair's Opening Plenary Report

Submitted by Carl Bushue, IEEE 802.16 Secretary

### Appendix A, Attendance at Session #13

Session #13 included 9 session intervals. The participation criteria was 6 or more intervals. Please contact the 802.16 Secretary (Carl.Bushue@mail.sprint.com) if you feel your attendance has been recorded incorrectly.

## The following 127 people registered attendance at 6 or more intervals and met the participation criterion:

Aditya Agrawal Inchul Kang Walt Roehr Erez Ruder Song An Philip Kelly Ofer Kelman Octavian Sarca Gordon Antonello Jori Arrakoski Brian Kiernan Hikmet Sari Malik Audeh Itzik Kitroser **Durga Satapathy** C.R. (Rick) Baugh Jay Klein Carl Scarpa Yvon Belec Rajeev Krishnamoorthy Randall Schwartz Yossi Segal Anader Benyamin-Seeyar Joseph Kwak James Brennan Jonathan Labs Radu Selea Michael Buckley John Langley Olivier Seller Mohammad Shakouri

Carl Bushue Chin-Chen Lee Chaim Shenhay Baruch Buskila Yigal Leiba Dean Chang Minfei Leng Shusaku Shimada Yuankai Chang Moshe Levinson Chet Shirali **David Chauncey** Barry Lewis Marcus da Silva Remi Chayer Xiaodong Li Manoneet Singh William Crilly John Liebetreu Jung Je Son Dennis Davis Lars Lindh Sean Sonander Brian Edmonston Hui Liu Ken Stanwood Brian Eidson

Fernando Lopez de Victoria Michael Stewart Paul Struhsaker Henry Eilts Heinz Lycklama Carl Eklund Robert Malkemes Shawn Taylor Vinko Erceg Garik Markarian **Todd Taylor** Robert Foster Roger Marks William Taylor Andrew Garrett Ian Martin Ayelet Tiram-Regev G. Jack Garrison Ronald McCallister David Trinkwon Brian Gieschen Russell McKown Linh Truong Marianna Goldhammer Sushil Mehta Nico Van Waes

Michael Hamilton Andrew Middleton Lei Wang Moritz Harteneck Sanjay Moghe Robert Ward Yoav Hebron Ronald Murias Larry Watkins **Brandon Hinton** Robert Nelson Mati Wax Wavne Hunter Kim Olszewski Philip Whitehead David Husson Mike Paff **David Williams** 

Ronald Meyer

Subir Varma

Manish Patel Curt Wise DuWayne Jackson Kenneth Peirce Vladimir Yanover Eric Jacobsen Huanchun Ye Musa Jahanghir Vicente Quilez Yoram Zarai Hamadi Jamali Einan Regev Stanley Reible Wenhan Zhang Kyunghun Jong Pan Joo Mark Reudink Paul Zyskowski

Jacob Jorgensen Valentine Rhodes
Tal Kaitz Gene Robinson

Zion Hadad

The following 23 people registered attendance at 5 or fewer intervals and did not meet the participation criterion:

Drayt Avera

Po-Lin Chiu

Mark Foley

Victor Hou

Chang-Lung Hsiao

Thomas Hudson

Do Kim

Young Kim

Valentino Liva

Lamberto Raffaelli

Guy Resheff

David Ribner

Amir Sarajedini

Dan Schwob

Mike Scullin

Helge Shaon

Donald Shaver

Kevin Suitor

John Sydor

Jose Tellado

Stuart Thomson

Mike Thursby

Albert Young