DRAFT

Minutes of IEEE 802.16 Session #12
A Plenary Session of IEEE 802.16 Working Group on Broadband Wireless Access
Hilton Head, SC, USA
March 12-16, 2001

1. Opening Plenary, Monday 03/12/2001

At 13:40, Roger Marks, 802.16 Chair, called Session #12 to order.

Discussed culture, process, logistics, server, membership, attendance and the agenda as posted on the server.

Marks presented the Opening Plenary agenda
Marks presented the schedule for the week

**Motion#1, Carl Eklund, 2nd Michael Stewart: To approve the agenda as presented by Roger Marks.
By voice vote, all for, Motion#1 passes.**

Marks presented information about the group's file server. Plenary room has a wireless hub as well as two tables with wired (Ethernet) cable connections. 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. Using SMB (Windows file share) anyone can log in as the user "attendee" with the password "attendee". The FTP interface is not working.

Marks reviewed the 802.16 process including the rights of all attendees and rights of members (See presentation in Appendix B).
Carl Bushue, acting 802.16 Secretary, introduced the attendance and membership-token books. Four attendance books (one for each task and study group) will be used.
Marks announced that that the 75% attendance requirement for Session #12 is 5 of 7 intervals.

Membership and voting was discussed.
There are 76 potential members at this meeting - 200 total voting tokens
Marks announced that potential members indicate acceptance of membership by removing their
token from the membership token sheets. Voting tokens for members and new members are in a membership token book that is circulating among the meeting rooms, and members should place the tokens on their name badge.
Rights of all, rights of observers, rights of members presented.
Participation is by individuals, not companies
Group process steps, rules, legal/antitrust and patent policy (in detail) were covered.

Projects
TG1 – 10 to 66 GHz draft in revision with letter ballot to close 03/13/2001,
TG3 – 2 to 11 GHz is in the proposals process,
TG4 – license-exempt has just completed an interim (session #11.5) meeting,
TG2 – coexistence has completed a letter ballot and should begin a sponsor ballot this week.

Approvals:

Approval of Session #11 minutes is deferred until Closing Plenary due to the lateness of availability of the text.

Proposed revision to PAR (document IEEE 802.16-01/10) is an implementation of the changes that were approved at Session #11.
Motion#2: to forward IEEE 802.16-01/10 to the 802 SEC.
Motion#2, by Carl Eklund, 2nd by Brian Kiernan. 43 for, none opposed, one abstention

Marks registered a thank you to Carl Bushue for rebuilding the operating system of the server after it failed completely during the last meeting.

Task Group reports:

Marks, as chair of TG1, reported that the draft standard will complete its initial Working Group Letter Ballot on 03/13/2001. As of now, the approval rating is 86% and, as this is higher that the 75% required, it will pass if the ratio does not change before the close. A question was raised about the voting pool and whether new members at this meeting could vote. The answer is no; the voting pool is permanent once the ballot begins. Marks is using FileMaker Pro to track comment resolution and recommends it to the other groups since it is can create a standalone application for MacOS, Windows, and Unix. The goal this week is to resolve as many of the comments received as is possible.

TG1-PHY status - Jay Klein: We received 150 editorial comments, 80 technical non-binding comments and 36 binding technical comments; beginning resolution this week. The binding comments are divided into three groups - easy (editorial), technical such as spectrum or masks, and channel plan comments.

TG1-MAC status - Carl Eklund: There is only 1 binding technical comment and a large number of non-binding comments.

Brian Kiernan, TG3 Chair, gave the TG3 report. 18 contributions. 3 significant PHY proposals. 7 documents containing improvements, mergers, suggestions, and recommendations regarding those 3 proposals. The agenda for the week was displayed. Tuesday: begin presentations (1.5 hours for each major proposal) and running all day. There will be a joint TG 3/4 MAC session Tuesday in the TG2 room. Voting on PHY proposals will be moved from Thursday to noon Wednesday. Thursday will continue PHY discussions. We expect a document coming out of this meeting, not just proposals. We expect to issue a call for comments and improvements at this meeting.

Durga Satapathy, TG4 Chair: report on Session #11.5–. Objective straw-man document from both a MAC and PHY team sent out in a call for comments. Received 10 comments (4 PHY and 6 MAC) that will be resolved at this meeting. Preparing to discuss co-existence issues with Julius Knapp of the FCC. Brief agenda shown listed detail on comments.

Marks set up a meeting (7:30 to 8:30 Monday evening) to plan what will be said by the group at the meeting with Julius Knapp of the FCC.

Phil Whitehead, TG2 Chair, presented TG2 report. The Working Group Letter Ballot is complete. Sponsor Ballot begins Wednesday morning. Separately, there are three contributions to work on for this week. TG2 will expire when the current document is complete. 802.16 issued a Call for Contributions on amending 802.16.2 to include 2-11 GHz, to broaden the point-to-point coexistence, and possibly to add other enhancements. This will require a Study Group. TG3 will assist in preparing text for the additional spectrum. At Closing Plenary, may ask for approval of Study Group to write new PAR. If the PAR is eventually approved, a new Task Group will be formed to amend the 802.16.2 document.

Charge to TGs: Post agendas on the server. If there are motions for the Closing Plenary, the documents need to be posted on the server the night before, or at least 3 hours before the Closing Plenary.

Professional editing using IEEE staff editors is too expensive for what we would get. Marks decided that we would not spend surplus money for this editing at this time. There is a possibility of using a former 802 editor that might work out at some point. **Marks proposed purchasing a copy of FrameMaker for the group. In polling the group, there was no opposition.** The copy of FrameMaker will be used in TG 2 document editing for now.

There were 921 attendees at the November 802 meeting. About the same number are registered for this one.

Future sessions:
#13 May 14-18 at the Radisson Orlando, FL - joint with 802.11 and 802.15
#14 July Portland, OR
#15 September 10-14 Where? – Dave Williams found problems with Idaho for these dates. San Jose (Dean Chang) will have more details at Closing Plenary. Tel Aviv: Naftali Chayat thinks January is the best time for this location. There was no decision.
New business: None

Motion#3 to adjourn: Brian Kiernan, Michael Stewart 2nd. Motion passed unanimously by voice vote.
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Tuesday 03/13/01: Meeting with Julius Knapp (detailed agenda in 802.16-01/12)

Opened by Marks at 15:35
Started with description of 802.16
Discussed the history of the Working Group and current work in progress of the Task Groups.
We have:
124 members
76 potential
94 observers

There are a large number of documents on file from the group.

Marks introduced Julius Knapp.
Julius Knapp made and opening statement then answered questions from:

Roger Marks
Dave Trinkwon
Brian Kiernan

Roger Marks introduced Vic Hayes and David Chauncey. More questions followed from:

David Chauncy
David Trinkwon
Brian Kiernan
Durga Satapathy
Demos Costas
Vic Hayes

Session closed by Roger Marks
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Closing Plenary
Thursday 03/15/2001

Called to order by Chair, Roger Marks at 15:30

Agenda:
Motion#1 to approve agenda: Brian Kiernan, Carl Eklund 2nd
Approved without objection

Task Group Reports:

TG1 Working Group Letter Ballot closed: 69 approve, 17 disapprove - 80.2% approval with more than 50% return –
it passes.
747 comments.
PHY group resolved all technical comments
MAC group resolved all comments (all technical binding and non-binding)

TG1:
Motion: To forward IEEE 802.16/D2-2001 to Sponsor Ballot, subject to comment resolution and an
appropriate number of recirculation ballots.
Motion#2: Carl Eklund, Jay Klein 2nd
Discussion: Mr. Chayer raised a question about the low approval rating for forwarding to the Executive Committee.
Mr. Marks responded that a number of disapprove votes had already been changed to approve based on comment
resolution to date. When the group was asked if anyone at the meeting had changed from disapprove to approve, two
raised their hands. Mr. Marks stated that he knew of two more members who had changed their position which
would make a total of 4 of the 17 (increase to, at least, 85%) and that the motion is for forwarding after resolution of
issues.
32 for; 2 opposed. Motion #2 carries.

TG3:

Brian Kiernan presented report 802.16.3-01/11.

Traffic model was adopted.

Channel model is being updated, revision 2 is the current version.

Three PHY proposals, 2 were consolidated before presentation to the Task Group. This resulted in two proposals to the group. The group voted to have a single standard with one MAC and two PHYs. Two PHY document editors, Nico Van Waes and Anader Benyamin-Seeyar, will merge them into a draft standard for comments at the next meeting. A table of contents was approved by the Task Group. MAC progress was made in putting TG3 issues in the 802.16 MAC. Vladimir Yanover is the MAC document editor; a draft is to be released in about a month.

TG4:

Group presented 802.16.4-01/08

PHY (Chair: Sanjay Moghe) first draft is due April 16, with a conference call (April 18) to review it.

MAC group (Chair: Ken Peirce) reviewed the draft and is to complete it by April 16.

Vic Hayes has proposed a Wireless Advisory Group with membership from Working Groups 802.11, 802.15, and 802.16 members. This proposal will be forwarded to the 802 Executive Committee.

A liaison letter on shared use of 5-6 GHz was discussed. (the final approved and edited version is 802.16l-01/10).

Motion to approve Liaison Letter to ITU- JTG 4,7,8,9, Working Party 7C, and JRG 8A-9B (as recorded on last page of 802.16.4-01/08) .

Motion#3 Walt Roehr, 2nd Demosthenes Kostas

Voice vote: passed unanimously

Proposed rules change from Working Groups 802.11 & 802.15 to support a 6th Criteria (coexistence) to add to the original 5 required for 802 PAR approval.

Straw poll to have Roger vote affirmative on this issue: For 4, Opposed 10.

The Working Group Chair appoints David Chauncey as regulatory liaison for the Working Group.

TG2:

Two areas are to be covered in the new Study Group:

-Coexistence between point to multi-point systems and point-to-point systems of various types

-Coexistence of FBWA systems operating below 11 GHz and specifically 2-11 GHz

MOTION#4 by Phil Whitehead, Rémi Chayer 2nd

That IEEE 802.16 gives approval for the formation of a new study group into coexistence of FBWA systems, in order that a formal request can then be made to IEEE 802.

Call the Question Carl Eklund, Juan Carlos Zuniga 2nd

Approved by voice vote – none opposed – the question is called

Vote: 31 For, 0 Opposed. Motion #4 carries

Future sessions:

Session #15 planning

Dean Chang: San Jose Hosting Proposal. He will continue to check into this. Roger Marks volunteered to investigate Denver an as alternative.

Session #12 report:

Draft presented by Roger Marks. Discussed and edited by the group.

http://ieee802.org/16/meetings/mtg12/report.html

There were no objections to the edited text becoming the Session #12 report, with editorial revisions by the Chair.

A document summarizing the status of the Working Group was discussed (802.16c-01/-04). It is a not an official document; it is a contribution of Roger Marks, Jay Klein, Brian Kiernan, Durga Satapathy, and Phil Whitehead.

Press release:

Motion to forward 802.16-01/13 to the 802 Executive Committee as a Press Release.

Approved without objection. (802 and IEEE-SA may edit this release.)

Liaison to ETSI BRAN: 802.16l-01/09

Roger Marks asked if there was any objection to adopting, editing and sending the liaison letter - There was no opposition.

New Business:
None

Closing:
Motion#5 to adjourn: Rémi Chayer, Dean Chang 2nd
Voice vote at 17:30: All For, None Against. Motion #5 Carries.

Attached: Appendix A: Attendance
**   Appendix B: Chair's Opening Plenary Report**

Submitted by Carl Bushue

Appendix A, Attendance at Session#12

Session #13 included 7 session intervals. The participation criteria was 5 or more intervals.
Please contact the 802.16 Session #12 Secretary (Carl.Bushue@mail.sprint.com) if you feel your
attendance has been recorded incorrectly.

The following 164 people registered attendance at 5 or more intervals and met the participation criterion:

Omer Acikel
Gordon Antonello
S. Lek Ariyavisitakul
Jori Arrakoski
Malik Audeh
Drayt Avera
C.R. (Rick) Baugh
Yvon Belec
Carlos Belfiore
Anader Benyamin-Seeyar
Burcak Beser
Dale Branland
James Brennan
Michael Buckley
Carl Bushue
Baruch Buskila
Lowell Campbell
Gregory Caso
Dean Chang
Kai Chang
David Chauncey
Naftali Chayat
Rémi Chayer
Ronald Coles
William Crilly, Jr.
Amos Dotan
Keith Doucet
Brian Edmonston
Brian Eidson
Carl Eklund
Hesham El-Damhougy
David Fisher
Robert Foster
Avraham Freedman
Andrew Garrett
G. Jack Garrison
Brian Gieschen
Marianna Goldhammer
Phil Guillemette
Zion Hadad
Joseph Hakim
Baruch Halachmi
Moritz Harteneck
Yoav Hebron
Bob Heise
Michael Hirano
Coleman Hum

Wayne Hunter
David Husson
Du Wayne Jackson
Eric Jacobsen
Hamadi Jamali
Jacob Jorgensen
Tal Kaitz
Phil Kelly
Brian Kiernan
John Kim
George Kipens
Itzik Kitroser
Jay Klein
Thomas Kolze
Demosthenes Kostas
Jason Krasnow
Jerry Krinock
Rajeev Krishnamoorthy
Jonathan Labs
John Langley
Ludovic Lauer
Chin-Chen Lee
Minfei Leng
Moshe Levinson
Xiaodong Li
Zhi-Jian Li
Sergio Licardie
John Liebetreu
Lars Lindh
Huz Liu
Hui-Ling Lou
Willie Lu
Heinz Lycklama
Osamu Maeshima
Robert Malkemes
Roger Marks
Ronald McCallister
Russell McKown
Sushil Mehta
Ronald Meyer
Andrew Middleton
Vlad Mitlin
Apurva Mody
Sanjay Moghe
Ronald Murias
Jim Nadeau
Robert Nelson
Kim Olszewski
Uzi Padan
Panos Panagiotopoulos
Kenneth Peirce
Subbu Ponnuswamy
Pierre Poulin
Vicente Quilez

Manouchehr Rafie
William Ralston
Moshe Ran
Dave Reed
Einan Regev
Stanley Reible
Mark Reudink
Valentine Rhodes
Fred Ricci
Walt Roehr
Erez Ruder
Amir Sarajedini
Octavian Sarca
Hikmet Sari
Durga Satapathy
Carl Scarpa
Andy Schiltz
Randall Schwartz
Dan Schwob
Baker Scott
Yossi Segal
Radu Selea
Olivier Seller
Menashe Shahar
Tie-Jun Shan
David Shani
Chaim Shenhav
Jon Shields
Chet Shirali
James Simkins
Manoneet Singh
Ken Singleton
Gary Smith
Steven Smith
Sean Sonander
Ken Stanwood
Michael Stewart
Paul Struhsaker
John Sydor
Joseph Tavormina
Shawn Taylor
Jonathan Thompson
Anish Tolia
David Trinkwon
Nico Van Waes
Subir Varma
Arthur Wang
Chao-Chun Wang
Lei Wang
Stanley Wang
Robert Ward
Larry Watkins
Mati Wax
Philip Whitehead

Robert Whiting
David Williams
Vladimir Yanover
Huanchun Ye
Charles You
Yoram Zarai
Wenhan Zhang
Juan Carlos Zuniga
Paul Zyskowski

The following 14 people registered attendance at 4 or fewer intervals and did not meet the participation criterion:

Yehude Azenkot
Michael Donahue
Jeff Dunnihou
Anthony Klinkert
Titus Lo
Steve Morhus
Roger Pandanda
Manish Patel
David Ribner
Hal Roberts
Jun Shen
Stuart Thomson
Katsumi Tokuyama
Rajiv Vijayan

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Session #12

Opening Plenary

12 March 2001

1:30-3:30 pm

Welcome

- **802.16 Culture (ala IEEE 802 culture)**
    - **Engineering Membership**
    - **Seeking Technical Consensus**
    - **Open (even by 802 standards)**
    - **Procedural**
    - **Contribution-Driven**
- **802 is extremely successful**
    - **802 is following the model**
    - **excellent record of progress**

802.16 Officers

- **Chair: Roger Marks**

- **Vice Chair: Brian Kiernan**

- **Secretary: Carl Bushue (Acting)**

Logistics

- **Hotel Info**
- **Projectors**

Resources

- **THIS WEEK:**
  - **802.11b Wireless LAN**
  - **http://10.0.0.1**
  - **also Window File Sharing**
- **http://ieee802.org/16**
  - **http://WirelessMAN.org is equivalent**
- **Reflector**
  - **Sign up on web**
  - **Read archives on web**

Rights of All

To subscribe to the 802.16 Email Reflector (and Focused Reflectors) and thereby be notified of document publication, meetings, minutes, ...

To post to reflectors in accordance w/rules

To examine documents, unless copyright concerns prohibit it.

To contribute documents in response to a Call for Contributions.

To attend and participate in 802.16 meetings, if registered.

To join the Sponsor Balloting Pool.

Rights of Members & Observers

To examine draft standards.

To participate in Working Group Letter Ballots.

To examine the Member and Observer contact databases.

Exclusive Rights of Membership

To make or second a motion at any meeting of 802.16 or its subsidiaries.

To vote, if and only if present, at any meeting of 802.16 or its subsidiaries.

To vote in 802.16 Working Group Letter Ballots.

To vote by email on any issue involvin 802.16 or its subsidiaries.

To lodge complaints about Working Group operation with the 802 Executive Committee.

To petition the 802 Executive Committee in writing.

802.16 Membership

- **124 Members**
- **76 Potential Members**
- **10 individuals lost membership by virtue of rule:** Membership shall be lost if two consecutive, or two of any three consecutive, Working Group letter ballots are not returned or are returned with an abstention other than for "lack of technical expertise."

Individuality

Participation is by individual

- **Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives**
- **Membership belongs to the individual, not an organization, and may not be transferred.**

Voting in Task Groups

Only 802.16 Voting Members may vote in task Group meetings
  – Show Voting Token (badge with logo)

Basic Process Steps

Study Group

   Develops plan to standardize

   Creates PAR for 802 & IEEE approval

Task Group

   a) Find Consensus on initial draft

        Call for proposals

        Merge and consolidate

   b) refine draft

Working Group Letter Ballot (802.16)

Sponsor Ballot (IEEE and 802)

IEEE 802 Rules

.1.4 Operation of the Working Group

The operation of the Working Group has to be balanced between democratic procedures that reflect the desires of the Working Group members and the Working Group Chair's responsibility to produce a standard, recommended practice, or guideline, in a reasonable amount of time.

Robert' s Rules of Order shall be used in combination with these operating rules to achieve this balance.

Robert's Rules

In the debate each member has the right to speak twice on the same question on the same day (except on an appeal), but cannot make a second speech on the same question as long as any member who has not spoken on that question desires the floor.

IEEE 802 Rules

.1.4.1 Chair's Function

The Chair of the Working Group decides procedural issues. The Working Group members and the Chair decide technical issues by vote. The Working Group Chair decides what is procedural and what is technical.

Note: 802.16 Chair delegates the power to make procedural decisions to the presiding Task Group Chair

Legal and Antitrust

Any discussions that relate to the validity or cost of patent use shall be avoided.

Any discussions or any material relating to an ongoing litigation shall be avoided.

Any discussions of pricing or issues that would violate US antitrust laws shall be avoided.

Patent Policy

See full details at 802.16 Web Site

IEEE 802.16 operates under the Patent Policy of the
IEEE Standards Association, as set forth in Clause 6 of
the IEEE-SA Standards Board Bylaws. This policy
includes the statement:

– "IEEE standards may include the known use of patent(s),
  including patent applications, if there is technical
  justification in the opinion of the standards-developing
  committee and provided the IEEE receives assurance
  from the patent holder that it will license applicants under
  reasonable terms and conditions for the purpose of
  implementing the standard."

Patent Policy (continued)

EEE 802.16 interprets "in the opinion of the standards-developing committee" as "in the opinion of the members of the Working Group." Early disclosure to the Working Group participants of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and to increase the likelihood that the draft publication will be approved for publication. IEEE 802.16 strives to make such information available as soon as possible for consideration by individual members in their voting decisions. However, in its meetings and electronic forums, IEEE 802.16 does not permit discussions concerning the validity or applicability of intellectual property claims.

Patent Procedures

nyone, whether participating in IEEE 802.16 or not, should notify the Chair of any patents (granted or under application, and regardless of the assignee or the patent nationality) that may cover technology that is under consideration by or has been approved by IEEE 802.16. Such notification should be in written or electronic form (email is preferred) and need not make any statement concerning enforcement or licensing. The Chair will presume that such notification is intended for public release and will, as soon as practical, post it to the web along with other Patent Notices On File with IEEE 802.16. The Chair and the Working Group will take no position regarding the validity or applicability of any patents.

IEEE 802.16 Projects

Task Group 1: 10-66 GHz

– Draft in revision

Task Group 3: 2-11 GHz, licensed

– Proposal process

Task Group 4: license-exempt, 5-6 GHz

– First meeting at Session #11

Task Group 2: Coexistence (10-66 GHz)

– Passed Working Group Letter Ballot

– Finalizing Draft

Professional Editorial Help

- **Proposal from IEEE:**
  - **Editorial assistance from staff project editors**
  - **802.16 funds through its reserves**
  - **IEEE-SA has proposed a contract**
  - **Refuses**

- **Purchase a copy of FrameMaker for 802.16 use**

802 Issues

SEC Meeting 7-12 pm Thursday
- Moving to Friday am in July

921 people in November
- About the same here

New Recording Secretary
- Bob O'Hara

Discussion of coordinated wireless program

Task Group 1

Air Interface for Fixed Broadband Wireless Access Systems

– 10-66 GHz

Working Group Letter Ballot

– Closes Tomorrow

  • Tuesday 13 March 2001

Charge to Task Groups

Complete the task on your agenda

 – Update agenda on bulletin board

Prepare for next meeting

 – Call for Contributions, etc.

Prepare for Closing Plenary

 – All motions to be in writing

Document everything

 – submit documents before you leave

Presentations to server 2 hours in advance