

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	Minutes of 802.16 Session #9
Date Submitted	2000-10-02
Source(s)	Scott Marin Voice: 972-424-2386 Fax: 972-516-2202 802.16 Secretary E-mail: smarin@ix.netcom.com
Re:	802.16 Session #9 (Denver, Colorado, USA, 11-15 September, 2000)
Abstract	This document records the minutes of 802.16 meetings held at 802.16 Session #9
Purpose	To record progress and decisions of the Working Group.
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate text contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.
Patent Policy and Procedures	<p>The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version 1.0) <http://ieee802.org/16/ipr/patents/policy.html>, including 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."</p> <p>Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <mailto:r.b.marks@ieee.org> as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site <http://ieee802.org/16/ipr/patents/notices>.</p>

Minutes of 802.16 Session #9
A Interim Session of the IEEE 802.16
Working Group on Broadband Wireless Access
Denver Marriott Southeast, Denver, Colorado, USA
11 to 15 September, 2000

1. Monday, Sept 11, 2000, Opening Plenary

At 14:00, Roger Marks, 802.16 Chairman, called Session # 9 to order. (See Appendix A for Opening Plenary presentation slides.)

Marks presented the Opening Plenary agenda. The Opening Plenary agenda was approved without objection.

Marks presented the schedule for the week and noted the times in which 802.16 attendees are invited to events of the co-located 2000 IEEE Radio and Wireless Conference (RAWCON2000). Marks noted several parallel 802.16 sessions and asked for comments on the agenda. The schedule for the week was approved without objection.

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

Marks commented on the IEEE SA sponsor ballot pool and noted that the web site contains a form that must be submitted to register for the pool. Participants need to join IEEE-SA or pay a balloting fee to join the balloting group. You must take action to register because registration is not automatic.

Marks continued with additional details on the rights of members and observers.

Scott Marin, 802.16 Secretary, noted that the session is being taped for accuracy, that Session #9 will use four attendance books (one for each task and study group), and that badges with voting tokens have been preprinted.

Marks explained that 802.16 registration of \$140 is to be paid at the front desk of the hotel.

Marks explained that document distribution would be from a DHCP server via 10BaseT, 100BaseT or 802.11b connections. Marks asked if document distribution by server was acceptable. Two people objected and asked for distribution by the flash card. Marks said we would work out a method of updating and distributing documents via his flash card.

Marks summarized the RAWCON meeting schedule.

Marks read the IEEE 802.16 Patent Policy.

Marks introduced the minutes from Session #8. Scott Marin reminded Marks of his request to include the revised 802.16 membership list that resulted from attendance at Session #8. Marks asked for approval of the Session #8 minutes amended to include the 802.16 membership list that resulted from Session #8. The minutes, as amended, were approved without objection.

Marks, as chair of TG1, reported that the plan is to resolve all comments and, by the end of the week, to approve a motion to send a draft to working group letter ballot. Jim Mollenauer, co-

editor, explained the editing process as an outgrowth of the prior process used on the functional requirements document.

Marks was asked if a document with the incorporated comments would be available for review. Marks noted that a new document was posted last night with the consolidated MAC comments.

As chair of the TG1 MAC, Carl Eklund explained that a two-pass process is planned to resolve comments, the first pass for editorial and the second pass for technical. Brian Petry asked that the group consider accepting editorial comments as a group.

Jeff Foerster agreed to put a document containing consolidated PHY comments on the server for Jim Mollenauer to consolidate with the MAC.

As chairman of TG1 PHY, Jay Klein reported that 58 comments and several contributions had been received and would be dealt with during the week.

As co-chair of TG2, Andy McGregor summarized the TG2 plans. (See Appendix A).

In a slight deviation from the approved agenda, Marks introduced Jim Carlo, Chairman of 802 and Vice-chair of the IEEE-SA Standards Board. Carlo commented that he came to Session #9 to observe and help the process. He would attend until Wednesday and encouraged people to ask questions of him.

As Chairman of TG3, Brian Kiernan reported that 13 contributions and 130 comments regarding the functional requirements had been received. About half of the comments were editorial. Kiernan commented that the objectives for the week are to 1) finish the requirements document, 2) establish an evaluation criteria, and 3) deal with the issue of having a TG3 MAC common or different from the TG1 MAC.

Marks reminded attendees that all voting members can vote in TG1, TG2, and TG3.

As chairman of the WirelessHUMAN™ Study Group, Durga Satapathy reported that the primary task for the week was to complete a draft PAR. A key issue is to define the scope. Six contributions have been received and several issues require resolution. Drayt Avera will be acting secretary for WirelessHUMAN™ at Session #9.

Marks, as 802.16 Chairman, charged task groups to, among other things, stick to the schedules and to turn on all documents before leaving Denver.

Marks asked for new business and none was offered.

Without objection, the Opening Plenary was adjourned.

2. Wednesday, 13 September 2000, Midweek Plenary

At 17:02, Roger Marks, Chairman of 802.16, called the Midweek Plenary to order.

Marks presented the agenda. Marks accepted additions from Jay Klein to report on ETSI BRAN HIPERACCESS and from Scott Marin to make a motion on the editorial process. The modified agenda (Appendix B) was adopted without objection.

Marks reviewed the agenda for –the week and changes to the associated meeting rooms. Using the 802.16 server connection, Marks updated the agenda file on the server. (Appendix B).

Concerning conference fees, Marks asked that everyone pay the \$140 by close of business today so that he can check registration status tomorrow.

Marks presented an update on the 802.16 server and explained the process to upload files.

Scott Marin, as 802.16 secretary, commended Task Group chairs and attendance book people for the good job of keeping the attendance books up to date. In an informal pole, attendees showed strong support for the new multiple book approach.

Regarding the TG1 MAC group, Carl Eklund reported good progress in resolving comments. A Wednesday evening session is planned to continue comment resolution. Eklund reported that the TG1 MAC group has decided to use a 48-bit MAC address instead of a 64-bit address. Eklund expressed some concern with the completeness of the document, citing that no comments had been received on the last 100 pages. Eklund stated that the document is in much better shape than on Monday and expected to have an even better document by Friday. Marks asked if changes of interest to TG3 had been made. Eklund responded that TG3 requirements had been considered and cited, as examples, the additions of options for ARQ and shorter frames.

Regarding the TG1 PHY, Jay Klein stated that the 58 comments had been resolved and that the group was now resolving TBDs. Klein stated that the plan is to continue with TBDs after a joint meeting with the TG1 MAC group. Klein was hopeful that a new version would be ready by Friday for release as a letter ballot.

Regarding TG2, Andy McGregor explained that a decision had been reached that coexistence analysis can be based on individual transmitter emissions and TG2 decided that it was unnecessary to aggregate emitters. Coordination triggers had been agreed. The group's goal is to handle all edits by Thursday. The TG2 task group has requested a joint meeting with TG1 PHY at 8:00am Thursday; this was agreed to an arranged. Andy McGregor reported that Marianna Goldhammer had presented an update from ETSI TM4 and noted that TG2 expected to prepare a liaison reply.

Regarding TG3, Brain Kiernan explained that TG3 had been working through comments received on the functional requirements and that work would continue at a Wednesday evening meeting from 19:30-22:00. Kiernan further noted that TG3 plans to complete the characteristics and evaluation criteria by the end of week. Kiernan also noted that TG3 plans to develop a call for contributions on models (channel and traffic) and a call for preliminary abstracts on PHY proposals. TG3 had received a liaison letter from ETSI BRAN, and Kiernan noted that TG3 needed to appoint a liaison person from TG3 to ETSI BRAN. Kiernan announced a joint TG1/TG3 meeting tomorrow night and a joint TG3/WirelessHUMAN™ meeting at 8:00-9:00 tomorrow.

Regarding WirelessHUMAN™, Durga Satapathy reported completing review of the seven contributions and that consensus had been reached to use 802.11a and ETSI HIPERLAN/2 as a basis for a PHY. Satapathy further explained that the draft PAR states that the MAC would draw from the 802.16 MAC. Satapathy noted that WirelessHUMAN™ is developing the Five Criteria document. Marks asked if the PAR required use of the stated standards. Satapathy said no.

In a charge to Task Groups, Marks asked groups to submit meeting minutes by the end of the week and to propose motions at future 802.16 plenary meetings using only documents from the server.

Regarding ITU-R Joint Rapporteurs Group (JRG) 8A-9B, José Costa reviewed document IEEE 802.161-00/16. Marks highlighted the importance of liaison with the ITU-R.

Jay Klein reported on ETSI BRAN HIPERACCESS Liaison.

Marks explained that ETSI BRAN, 802.11, and 802.15 now share password protected documents. Marks also stated that 802.16 must decide whether to share password protected documents with ETSI BRAN. By IEEE procedure, working group letter ballot documents are considered draft standards and must therefore be copyrighted and protected.

Marks reported that a letter (document IEEE 802.161-00/25) had been received from Andrew Kreig, president of the Wireless Communications Association. The letter announced the appointment of Demos Kostas as liaison from WCA to 802.16.

Under new business, Scott Marin expressed concern and the potential to abuse the editorial process to influence documents.

Motion#1, Scott Marin, 2 nd Brian Petry, That the 802.16 Chairman establishes written guidelines (boundaries) for editors that, among other things, explains what editors can and cannot do.,
--

Motion#1 passes without objection. Marks took an action to present draft editorial rules for approval at the closing plenary.

Marks adjourned the midweek plenary at 18:10.

3. Friday, 15 September 2000, Closing Plenary

At 10:05, Roger Marks called the meeting to order.

Marks presented a draft agenda. The agenda (See Appendix C) was approved without objection.

Marks reported a few bugs with the registration fees that may need to be fixed and asked people to check their hotel statements carefully.

Marks displayed the server page and explained the organization and ways to uses the server.

Marks announced that 802.16 Vice Chair Lou Olsen, had resigned and that a new vice chair would be elected at 802.16 Session #10. Marks appointed Brian Petry as Acting Vice Chair until the election. Brian Petry accepted the appointment (and said he'd continue to push for cookies at breaks).

Marks displayed logo_b.png, which had been introduced in a previous message to the 802.16 e-mail reflector:



The above logo was approved without objection.

Regarding WirelessHUMAN™, Durga Satapathy reported a decision to use the 802.16 MAC and a PHY based on ETSI BRAN HIPERLAN/2 and 802.11a (See presentation in Appendix C). Satapathy also reported completion of a draft project authorization request (PAR) and presented the draft.

Motion#2, Durga Satpathy, 2nd Drayt Avera, to accept the 9/15/00 version of the WirelessHUMAN™ PAR (\servers\public\WirelessHUMAN PAR 2000-09-15.doc) with some latitude to adjust text before submission to the 802 Executive Committee.

The proposed WirelessHUMAN™ PAR be forwarded to the IEEE 802 SEC at least 30 days prior to the start of the following IEEE 802 Plenary session, subject to a comments from IEEE 802.11 and 802.15 and a comment revision process on the 802.16 email reflector.

Marks asked that the PAR be changed from a “New Standard” to a “Supplement.” The change was accepted without objection.

Motion#2amended, Durga Satpathy, 2nd Drayt Avera, to accept the 9/15/00 version of the WirelessHUMAN™ PAR (\servers\public\WirelessHUMAN PAR 2000-09-15.doc) with some latitude to adjust text before submission to executive committee and that the type of document be a supplement rather than a new standard.

The proposed WirelessHUMAN™ PAR be forwarded to the IEEE 802 SEC at least 30 days prior to the start of the following IEEE 802 Plenary session, subject to a comments from IEEE 802.11 and 802.15 and a comment revision process on the 802.16 email reflector.

Motion#3 to amend Motion#2, Tom Kolze, 2nd Chet Sharali to amend Motion#2 by adding DOCSIS 1.1 to the PAR. Where it says “MAC 802.16” to add “DOCSIS 1.1”.

By token vote, 3 for, 15 against, Motion#3 fails

By token vote, 23 for, 1 against, 4 abstain, Motion#2, as amended, passes. The approved document is IEEE 802.16h-00/13r0.

Marks congratulated the WirelessHUMAN™ study group for reaching this stage in their work.

Regarding TG1 MAC, Carl Eklund reported that TG1 received several hundred comments on the draft specification and used most of the meeting time to resolve the comments. A major emphasis

was placed on removing the PHY dependencies from the MAC. Eklund noted that a joint meeting was held with TG3 in which many misunderstandings were discussed.

Regarding the TG1 PHY, John Liebetreu, presented a summary. (See Appendix C).

Motion#4, John Liebetreu, 2nd not needed, to initiate a Working Group Review of the IEEE 802.16.1 working document number 802.16.1-00/01r4 (to be constructed by incorporating the resolved comments listed in document number 802.16.1-00/09 into 802.16.1-00/01r3). The review is set to begin September 29 and to end October 30 2000. See call for comments 802.16.1-00/05.

By voice vote, all for, Motion#4 passes.

Marks reviewed the additional call for contributions on 802.16.1's open technical issues, noting a due date of 30 October 2000 and that convergence layer text for IP, Ethernet, and ATM will be submitted by Carl Eklund, Glen Sater, and Ken Stanwood, respectively.

Regarding TG2, Andy McGregor, presented the meeting minutes (IEEE 802.162c-00/22) and noted four recommendations from the meeting: 1) to use a more formal call for comments, 2) to invite comments from other organizations such as WCA, NSMA, RABC, and ARIB, 3) to formally ask for comments from the Broadband Wireless Association of the UK, and 4) to put the next draft of the coexistence practice on the public side of the IEEE 802.16 web site.

Marks asked TG2 to remove the copyright notice from their working document and not call the document a draft until a later stage in the process.

Regarding TG3, Brian Kiernan, reported (see Appendix C) adoption of the TG3 functional requirements document, development of evaluation criteria, and development of a call for contributions. In addition, TG3 adopted the TG1 MAC and formed the TG3 MAC Ad Hoc committee to review the TG1 MAC.

Motion#5, Brian Kiernan, 2nd not needed, Moved that the 802.16 Working Group

- Establish a common 802.16 MAC based on 802.16.1-00/01r4,
- Require each 802.16 task group to define its mandatory and optional sub-sets of the common MAC,
- Shall ensure backward compatibility and maintenance of the common MAC, and
- Shall strive to ensure forward compatibility of the common MAC.

By token vote: 24 for, 0 against, 1 abstain, Motion#5 passes. {See Appendix E}

Marks acknowledged several organizational issues that must be worked. Marks will try to resolve as many issues as possible by the November meeting.

Regarding upcoming meetings, Marks noted that the next meeting (Session #10) will be in Tampa, Florida and that the opportunity exists to extend the Task Group meetings to Friday morning or Monday morning. Marks also noted the possibility of joint meetings with other 802 working groups.

Marks noted that Session #11 is scheduled for 22 to 26 January 2001 in Tel Aviv, Israel hosted by BreezeCOM.

Marks noted that Session #13 (May 7-11 2000) will be a joint meeting with 802.11 and 802.15 and possibly ETSI BRAN. Marks noted his desire to hold interim meetings together with other 802 groups.

Marks asked for a straw pole as to those in favor of meeting Sundays, none for and about 20 against.

Regarding Liaison, Marks noted that ETSI BRAN recommended that Demos Kostas act as contact in both directions. Marks plans to reply using Demos Kostas in both directions.

Marks noted that, as of this week, 802.16 members and observers now have access to a mirror of all ETSI BRAN documents. Marks will send out information to members and observers on how to access the documents.

Regarding liaison with ETSI BRAN, Marks showed a draft liaison letter (80216l-00_28.doc).

Motion#6. Marks, 2nd Brian Petry, to approve draft letter presented by Marks (document IEEE 80216l-00/28).

Motion#7, Brian Petry, Brian Kiernan, to amend motion#6 by replacing "we appoint Dr. Kostas as our informal contact person, for the information exchange" with "for a contact person, we", thereby appointing no contact person

Motion#7, by voice vote, all for. Motion#7 passes.

Motion#6, by voice vote, several for, one opposed. Motion#6 passes.

Scott Marin, 802.16 secretary, had to leave the meeting and George Fishel took over as secretary.

Andy McGregor presented a draft liaison letter by TG2. David Trinkwon proposed an amendment to letter. The letter, as amended, was approved by voice vote.

Gene Robinson, from the regulatory affairs committee, presented three draft letters to regulatory bodies of the U.S, Canada, and the U.K. The letters were edited by Marks. The letters were approved by unanimous voice vote.

Brian Petry indicated that a document containing a draft editorial policy and procedures is on the server. Brian Petry said that anyone wishing to be an editor should read the document. The chairman requested that members give information to Brian on the editorial process.

At 12:28, Marks adjourned Session#9.

4. Acknowledgements

The 802.16 secretary would like to thank the sub-group chairs (Carl Eklund, Jay Klein, Andy McGregor, Brian Kiernan, and Durga Satapathy) and the people who took care of the attendance books for each group (Juan Zuniga, Carl Bushue, and Drayt Avera). The multiple attendance book approach seemed to work well due mainly to the help of the above people.

2000-10-02

IEEE 802.16-00/20

Respectfully,
Scott Marin
802.16 Secretary

Appendix A, Opening Plenary Presentations

Opening Plenary Agenda

802.16 Session #9: Opening Plenary Meeting Agenda

Monday, 11 September 2000, 14:00-15:15

See Opening Plenary presentation slides

Opening of Session #9 and of Opening Plenary Meeting		14:00
Call to Order	Marks	I
Presentation and Approval of 802.16 Opening Plenary Agenda	Marks	V
Schedule of meetings for the week	Marks	V
Membership and Voting		14:10
Rights of members, observers, and others	Marks	I
Attendance list procedure	Marin	I
Voting token procedure	Marin	I
Announcements		14:15
Registration	Marks	I
Document distribution	Marks	I
Logistics: rooms, breaks, etc.	Marks	I
Individual and Anti-Trust	Marks	I
IEEE 802.16 Patent Policies and Procedures	Marks	I
Approvals		14:25
Minutes of Session #8 (IEEE 802.16-00/17)	Marks	V
802.16.1		14:30
Report	Marks	I
Editing	Mollenauer, Petry	
802.16.1 MAC	Eklund	
802.16.1 PHY	Klein	
802.16.2		14:40
Report	McGregor	I
802.16.3		14:50
Report	Kiernan	I
WirelessHUMAN		15:00
Report	Satapathy	I
Charge to Task Groups	Marks	15:10
Voting in Task Groups and Study Groups	Marks	I
New Business		15:13
Closing		15:15
Adjournment of Opening Plenary	Marks	V

Agenda for the Week

802.16 Session #9: Agenda
Schedule (tentative)

	Morning	Afternoon		Evening
Mon		<p>RAWCON Keynote Address Ballroom A-D 1:20-1:50 pm (802.16 Registrants Invited)</p>	<p>802.16 Opening Plenary 2-3:15 pm Salon E</p>	<p>TG1 3:30-5 pm Salon E</p> <p>TG2 3:30-5 pm Colorado Room</p> <p>TG3 3:30-5 pm Nebraska Room</p> <p>RAWCON Exhibition/Reception/Poster Session 5:30-7:00 pm (802.16 Registrants Invited)</p> <p>RAWCON Banquet 7:00-10:00 pm with RAWCON Panel Session 8:30-10:00 pm (buy ticket from RAWCON)</p>
Tue	<p>TG1 MAC Salon E 8 am-12:30 pm</p> <p>TG1 PHY Salon G 8 am-12:30 pm</p> <p>TG2 Nebraska Room 8 am-12:30 pm</p> <p>TG3 The View 8 am-12:30 pm</p> <p>WirelessHUMAN Salon F 8 am-12:30 pm</p>	<p>RAWCON Lunch 12:30-1:30 pm (802.16 Registrants Invited)</p>	<p>TG1 MAC Salon E 1:30 pm-4 pm</p> <p>TG1 PHY Salon G 1:30 pm-4 pm</p> <p>TG2 Nebraska Room 1:30 pm-5:30 pm</p> <p>TG3 The View 1:30 pm-5:30 pm</p> <p>WirelessHUMAN Salon F 1:30 pm-4 pm</p>	<p>RAWCON Exhibition/Reception/Poster Session 5:30-7:00 pm (802.16 Registrants Invited)</p> <p>RAWCON Panel Session 7:00-9:00 pm (802.16 Registrants Invited)</p>
Wed	<p>TG1 MAC Salon E 8 am-5 pm</p> <p>TG1 PHY Salon 5 8 am-5 pm</p> <p>TG2 Salon 4 8 am-5 pm</p> <p>TG3 Salon GH 8 am-5 pm</p> <p>WirelessHUMAN Salon F 8 am-5 pm</p>	<p>802.16 Midweek Plenary 5-6 pm</p>		

Chairman's Opening Plenary Presentation

IEEE 802.16 Session #9: Opening Plenary Meeting
 IEEE 802.16 Presentation Submission Template (Rev. 0)
 Document Number:
 Name:
 Date Submitted:
 2000-09-11
 Author:
 Roger Marks
 NIST
 373 Broadway, MC 813.100
 Boulder, CO 80503
 Voice: +1-303-497-8077
 Fax: +1-303-497-7628
 E-mail: marks@nist.gov
 Name:
 Session #9: Opening Plenary
 Base Document:
 None
 Purpose:
 None
 This presentation is to be inserted in the Session #9 minutes.
 Status:
 This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw content contained herein.
 Release:
 The contributor grants a non-exclusive license to the IEEE to incorporate (and any modifications thereto) in the creation of an IEEE Standards publication, to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution, and to use IEEE's name and the IEEE logo in connection with any IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.
 IEEE 802.16 Patent Policy:
 The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version 1.0) and understands the requirements thereon, including the requirement that IEEE members may receive the benefits of patents, including patent protection, appropriate to the development of the standard-developing committee and provided the IEEE receives assistance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard.
 Early disclosure in the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publications will be approved for publication. Please notify the Chair.
 Confidentiality/Ownership: In order to be eligible to receive a document, item, or draft patent (patent or patent application) that may cover technology that is under consideration by IEEE 802.16, the Chair will disclose this notification via the IEEE 802.16 web site.
<http://www.stds-802-16.org>

IEEE 802.16
 Working Group on
 Broadband Wireless Access
 (BWA)
 Session #9
 Opening Plenary
 11 September 2000
 2:00-3:15 pm

Session Opening

- Call to Order
- Welcome

802.16 Officers

- Chair: Roger Marks
- Vice Chair: Lou Olsen
- Secretary: Scott Marin

Agenda

- Presentation of 802.16 Opening Plenary Agenda
 - Chair asks for unanimous consent to approve
- Schedule of meetings for the week
 - Chair asks for unanimous consent to approve

Rights of All

- To subscribe to the 802.16 Email Reflector (stds-802-16) and thereby be notified of document publication, meetings, minutes, ...
- To post to stds-802-16 in accordance with the reflector 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.

IEEE and IEEE SA Membership

- Members are encouraged to join IEEE, IEEE Standards Association, and IEEE Computer Society
- Such membership is not required for Working Group Membership, Observer Status, or Sponsor Ballot Pool/Group

Sponsor Ballot Pool/Group

- Balloting **Pool** is being constructed
- Future 802.16 draft standards will be balloted by a Balloting **Group** drawn from members of the 802.16 Balloting **Pool**.
- To join the 802.16 Balloting **Pool**, use the form on the web.
- Members of IEEE Standards Association [IEEE or CS + \$10] can participate in Ballot **Group** without paying special fee

Rights of Members & Observers

- To examine draft standards.
- To participate in Working Group Letter Ballots.
- To examine the votes of Working Group members.
- 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 involving 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.

Attendance List

- Recorded at each "meeting interval"
 - Afternoon: Mon/Tue/Wed/Thu
 - Morning: Tue/Wed/Thu/Fri
 - Evening: Thu
 - Self-declared; "substantially all" of meeting
 - Session "Participation": 75% of meeting intervals
 - =will round down to 6
- Attendance recorded in parallel meetings
 - voting credit for presence at either
- Attendance is public record
 - attendance will be reported on web
 - contact info will not be posted (just company)

Secretary's Announcements

- Scott Marin
 - Attendance books (four of them)
 - Write your name
 - If new and unregistered, insert business card in pocket
 - Initial and keep the book moving
 - Remember your book and page number
 - Voting tokens
 - Printed on badge for Members
 - Raise to vote

Registration

- \$140
- Registration fee form at front desk
 - Hotel guest: charge to room
 - Others: credit card
- Receive copy of form as receipt

Document Distribution

- Server: <http://10.0.0.1>
- Run DHCP
- Use 10BaseT or 100BaseTX
- Use 802.11b or 802.11 DSSS Wireless
- Upload files using anonymous ftp
- Flash Card may be available

Logistics

- Meeting Rooms:
 - Vary throughout the week
- Breaks
 - Always in large room (E or D)
- RAWCON events

Individuality

- In IEEE standards meetings, participation is by individual
 - you do not represent a company or organization
- Membership belongs to the individual, not an organization, and may not be transferred.

Legal and Anti-Trust

- 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.

IEEE 802.16 Patent Policy

- 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."

IEEE 802.16 Patent Policy (cont.)

- IEEE 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. The only role a patent claim plays in Working Group discussions concerns ensuring compliance to the IEEE 802.16 Patent Policy and Procedures.
- Justification for the inclusion of technology is limited to the technical merits of the technology.

IEEE 802.16 Patent Procedures

Anyone, 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 Patent Procedures

Written contributions to IEEE 802.16 standards development will not be accepted without an acknowledgement of familiarity with the IEEE 802.16 Patent Policy and Procedures. This acknowledgement will be part of the mandatory contribution cover sheet and will read:

"The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version #) ..."

Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site."

IEEE 802.16 Patent Procedures

The Chair, once formally notified and once a potentially relevant draft standard exists, shall write to the identified party and request that a Letter of Assurance be filed with the Chair for forwarding to the IEEE-SA Patent Committee, in accordance with the instructions in the IEEE-SA Standards Board Operations Manual. A sample request letter and response letter are available. When the Patent Committee has accepted the letter as a Letter of Assurance, information regarding the letter will be indexed in the Records of IEEE Standards-Related Patents.

Approval of Minutes

- **Chair asks unanimous consent to:**
 - approve Document IEEE 802.16-00/17 (Minutes of Session #8)

TG1 (802.16.1)

- **Air Interface for Fixed Broadband Wireless Access Systems**
- **10-66 GHz**

- **Chair: Roger Marks**
- **Editor: Jim Mollenauer/Brian Petry**
- **MAC Chair: Carl Eklund**
- **PHY Chair: Jay Klein**

TG1 Goals for Week

- Stay on Development Plan
 - Initiative Working Group Letter Ballot
 - Seek approval at Closing Plenary
- MAC
 - Comment resolution
 - Meet with TG3
- PHY
 - Comment resolution
 - Other contributions
 - Meet with TG2

TG2 (802.16.2)

- **Coexistence of Broadband Wireless Access Systems**

- **Co-Chair: Andy McGregor**
- **Co-Chair: Leland Langston**
- **Vice Chair: Rémi Chayer**
- **Editor: Vito Scaringi**
- **Secretary: Reza Arefi**

TG3 (802.16.3)

- **Broadband Wireless Access Systems in Licensed Bands from 2 to 11 GHz**
- **Chair: Brian Kiernan**
- **Vice Chair: Carl Bushue**
- **Secretary: Dean Chang**
- **Functional Requirements**
 - **Brian Petry**
 - **George Fishel**

WirelessHUMAN™ Study Group

- **Wireless High-Speed Unlicensed Metropolitan Area Networks**
- **Chair: Durga Satapathy**
- **Secretary: Sanjay Moghe**
- Chartered at Session #6
- Renewed at Session #8
- Writing a PAR
- To coordinate with 802.11 and 802.15

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
 - provide document index on bulletin board
- Presentations to server 2 hours in advance

Voting in Task Groups

- Only 802.16 Voting Members may vote in task Group meetings
 - Show Voting Token
- All present are eligible to vote at Study Group meetings

New Business

- Request for New Business items

Adjournment

- Chair asks unanimous consent to adjourn this meeting of Working Group 802.16 until the Midweek Plenary
 - (5-6 pm on Wednesday, 13 September)

TG2 Status Report

IEEE 802.16.2 Activities

Recommended Practice for Coexistence of Broadband Wireless Access Systems

Co-chairs: Leland Langston, Andy McGregor

Vice Chair: Remi Chayer
Editor: Vito Scaringi

11 September 2000
IEEE 802.16.2
1

Activities since San Diego Meeting

- R7 of draft Practice issued late July
- Several input docs and comments received
- Teleconference held Sept 7th – 8 participants
 - Significant discussion on content
- R8 of draft Practice available Sept 11th

11 September 2000
IEEE 802.16.2
2

Plans for Denver

- Close issue of single vs multiple interferers
- Review doc for consistency & completeness
- Present summary to joint TG1/TG2
- Post R9 in week of Sept 18th
- Seeking comments from any 802.16 participant
- **TARGET:** TG ballot following Tampa meeting

11 September 2000
IEEE 802.16.2
3

Appendix B, Midweek Plenary Presentations

Midweek Plenary Agenda

802.16 Session #9: Midweek Plenary Meeting Agenda

Wednesday, 13 September 2000, 17:00-18:00

<i>Opening of Midweek Plenary Meeting</i>		17:00
Call to Order	Marks	I
Presentation and Approval of 802.16 Midweek Plenary Agenda	Marks	V
Schedule Update	Marks	V
<i>Announcements</i>		17:05
Registration	Marks	I
Document distribution	Marks	I
Attendance books, badges, etc.	Marin	I
<i>802.16.1</i>		17:10
Report	Marks	I
802.16.1 MAC	Eklund	
802.16.1 PHY	Klein	
<i>802.16.2</i>		17:20
Report	McGregor	I
<i>802.16.3</i>		17:30
Report	Kiernan	I
<i>WirelessHUMAN</i>		17:40
Report	Satapathy	I
<i>Charge to Task Groups</i>	Marks	17:45
<i>Liaison</i>		17:50
ITU	Costa	
ETSI BRAN	Klein	
<i>Closing</i>		17:55
New Business (Marin: Editorial Process)	Marks	V
Adjournment of Opening Plenary	Marks	V

I=Information D=Discussion V=Vote

Agenda for the Week as revised at the Midweek Plenary

802.16 Session #9: Agenda

	Morning	Afternoon	Evening	
Mon		<p>RAWCON Keynote Address Ballroom A-D 1:20-1:50 pm (802.16 Registrants Invited)</p>	<p>802.16 Opening Plenary 2-3:15 pm Salon E</p>	<p>TG1 3:30-5 pm Salon E</p> <p>TG2 3:30-5 pm Colorado Room</p> <p>TG3 3:30-5 pm Nebraska Room</p> <p>RAWCON Exhibition/Reception/Poster Session 5:30-7:00 pm (802.16 Registrants Invited)</p> <p>RAWCON Banquet 7:00-10:00 pm with RAWCON Panel Session 8:30-10:00 pm (buy ticket from RAWCON)</p>
Tue	<p>TG1 MAC Salon E 8 am-12:30 pm</p> <p>TG1 PHY Salon G 8 am-12:30 pm</p> <p>TG2 Nebraska Room 8 am-12:30 pm</p> <p>TG3 The View 8 am-12:30 pm</p> <p>WirelessHUMAN Salon F 8 am-12:30 pm</p>	<p>RAWCON Lunch 12:30-1:30 pm (802.16 Registrants Invited)</p>	<p>TG1 MAC Salon E 1:30 pm-4 pm</p> <p>TG1 PHY Salon G 1:30 pm-4 pm</p> <p>TG2 Nebraska Room 1:30 pm-5:30 pm</p> <p>TG3 The View 1:30 pm-5:30 pm</p> <p>WirelessHUMAN Salon F 1:30 pm-4 pm</p>	<p>RAWCON Exhibition/Reception/Poster Session 5:30-7:00 pm (802.16 Registrants Invited)</p> <p>RAWCON Panel Session 7:00-9:00 pm (802.16 Registrants Invited)</p>
Wed	<p>TG1 MAC Salon G 8 am-5 pm</p> <p>TG1 PHY Salon H 8 am-5 pm</p> <p>TG2 Salon 4 8 am-5 pm</p> <p>TG3 Salon E 8 am-5 pm</p> <p>WirelessHUMAN Salon F 8 am-5 pm</p>	<p>802.16 Midweek Plenary 5-6 pm</p>	<p>TG1 6-7:30 pm Salon E</p> <p>TG3 7:30-10 pm Salon E</p>	

Appendix C, Closing Plenary Presentations

Closing Plenary Agenda

802.16 Session #9: Closing Plenary Meeting Agenda

Friday, 15 September 2000, 10 am -12:00 noon

<i>Opening</i>		10:00
Call to Order	Marks	I
Agenda	Marks	V
Announcements		
<i>Announcements</i>		10:03
Registration	Marks	I
Document distribution	Marks	I
Vice Chair	Marks	I
802.16 Logo	Marks	D
WirelessHUMAN		
<i>WirelessHUMAN</i>		10:10
Report	Satapathy	I
PAR Approval	Satapathy	V
802.16.1		
<i>802.16.1</i>		10:25
Report	Marks	I
802.16.1 Working Group Review	Marks	V
802.16.2		
<i>802.16.2</i>		10:50
Report	McGregor	I
Final Task Group Review	McGregor	I
Motions	McGregor	V
802.16.3		
<i>802.16.3</i>		11:10
Report	Kiernan	I
Motions	Kiernan	V
Future Meetings		
<i>Future Meetings</i>		11:30
Session #10: 6-10 November 2000: Hyatt Regency Tampa, Tampa, Florida, USA	Marks	I
Sunday, Monday, Friday at Session #10	Marks	D
Session #11: 22-26 January 2001: Tel Aviv, Israel	Marks	I
Session #12: 12-15 March 2001: Hyatt Regency, Hilton Head, South Carolina, USA	Marks	I
Session #13: 7-11 May 2001: Orlando, Florida, USA, along with IEEE 802.11 and 802.15	Marks	I
Liaison		
<i>Liaison</i>		11:35
ETSI BRAN: notification of 802.16.1 status and offer of password	Marks	V
Regulatory Agency notifications	Robinson	V
New Business		
<i>New Business</i>		11:40
802.16 Editorial Policy	Marin/Petry	V
Closing		
<i>Closing</i>		12:00
Adjournment of Opening Plenary	Marks	V

I=Information D=Discussion V=Vote

WirelessHUMAN™ Closing Presentation

[Insert Document Title Here]

IEEE 802.16 Presentation Submission Template (Rev. 8)

Document Number:
 [The appropriate coordinator, normally the Task Group Chair, will fill in this number after obtaining it from the 802.16 Chair. The document number will match that of the base contribution, with "p" replacing "c". For example: 802.16.1p-000a].

Date Submitted:
 [2000-07-13.]

Source:
 [Durga Satapathy] [Voice: (913) 534-6338]
 [Sprint] [Fax: (913) 534-6322] dsatapat@att.net
 [7101 College Blvd, Suite 1436 B] [Overland Park, KS 66210]

IEEE 802.16 Session #9:
 [Blank Document]

[If this presentation illustrates an 802.16 document, cite the document number and URL -><http://ieee802.org/16/-/...>]

Purpose:
 [WirelessHUMAN Study Group report at closing plenary]

This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserves the right to add, amend or withdraw material contained herein.

Reproduction:
 This contribution grants a non-exclusively license to the IEEE to incorporate text contained in this contribution and any modifications thereof, in the creation of an IEEE standard publication, to copyright in the IEEE, to name any IEEE standard publication even though it may include portions of this contribution, and to the IEEE, with discretion to permit others to reproduce in whole or in part the resulting IEEE standard publications. This contribution also acknowledges and accepts that this contribution may be made public by IEEE 802.16.

IEEE 802.16 Patent Policy:
 The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version 1.0) and agrees to the terms of the policy, including the statement "IEEE standard may include the names of inventors, including patent applications, of those technical participants in the opinion of the standard-developing committee and provided the IEEE receives assurance from the patent holder that it will license applications under reasonable terms and conditions for the purpose of implementing the standard."

Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and to ensure the disclosure that such publication will be approved by the contributor. Please notify the Chair as early as possible, in written or electronic form, of any patent (pending or under application) that may cover technology that is being considered for inclusion in a standard approved by IEEE 802.16. The Chair will disclose this contribution to the IEEE 802.16 web site.

Purpose of Proposed Project

To enable rapid worldwide deployment of innovative, cost-effective and interoperable multi-vendor broadband wireless metropolitan area network products operating in the unlicensed bands. To facilitate competition in broadband access by providing fixed wireless alternatives to wireline broadband access. Identify techniques to tolerate interference in the unlicensed bands, facilitate strategies for coexistence with other unlicensed band systems such as 802.11a, and maximize the carrying capacity of the unlicensed bands. Encourage consistent worldwide allocation, and accelerate the commercialization of unlicensed broadband wireless access spectrum. Utilization of unlicensed frequencies will address a market that includes residences, Small Office-Home Office (SOHO), telecommuters and Small and Medium Enterprises (SME).

IEEE 802.16 Plenary Report

Wireless High-Speed Unlicensed Metropolitan Area Network
 (WirelessHUMAN™) Study Group

Durga P. Satapathy

WirelessHUMAN Study Group Participants

Sprint	RF Solutions	Agilent Technologies
Intel	Breezecom	Adaptive Broadband
Nokia	Transcomm Inc.	Cabletron
Ericsson	BNA Systems	WirelessHome
Lucent	Escape	Carleton University
Intracom	Malibu Networks	Carnegie Mellon University
Proxim	UltraCom	Georgia Institute of Technology
WavelP	Harris Corporation	HRL Laboratories, LLC
N Band Com	Wireless Inc.	Western Multiplex
Coreon Inc	Cabletron systems	Communications Research Center
Runcom	Magnolia Broadband	Yokogawa Electric Co.
Innovave ECI		

WirelessHUMAN™ Update

- Reviewed 8 contributions
- Achieved consensus on selecting standards to utilize/modify:
 - MAC: 802.16
 - PHY: 802.11a / HIPERLAN/2
- Drafted PAR and 5 criteria

Motion:

The proposed WirelessHUMAN™ PAR
 be accepted

WirelessHUMAN™ PAR Scope

This standard specifies the physical layer and media access control layer of the air interface of interoperable fixed broadband wireless metropolitan area network systems including point-to-multipoint. The standard enables access to data, video, and voice services with quality of service in unlicensed bands designated for public network access. It will focus on the 5-6 GHz range and may be applied to unlicensed bands between 2 and 11 GHz. The WirelessHUMAN standard will utilize or modify applicable elements from the following:

MAC: 802.16
 PHY: 802.11a ; HIPERLAN/2

The development of the WirelessHUMAN standard will follow the timeline as shown in Appendix A.

TG1 MAC Closing Presentation

(TG1 MAC report.ppt)

WirelessHUMAN™ Timeline

- Call For Proposals for WirelessHUMAN PHY/MAC: Nov 2000
 - PHY: Modifications of 802.11a / HIPERLAN/2
 - MAC: Modifications of 802.16
- Review proposals : Jan 2001
- Select candidate proposals at Interim meeting: Feb 2001
- Decision on specific modifications: March 2001
- First Draft Standard: May 2001
- Comment Resolutions: July 2001
- Second Draft Standard: Sep 2001
- Finalize WirelessHUMAN Standard: Nov 2001

TG1 MAC group

- Resolved comments received during Final Task Group review
- Major effort to remove any particular PHY dependence from the MAC
- Process of adding features useful for TG3 requirements started
- Meeting with TG3

Important MAC decisions

- Adoption of EUI-48 addresses (previously EUI-64)
- Addition of error control to MAC layer (previously defined in TC layer of PHY B)
- Combining Burst FDD and FSDD modes into a single mode
- Redesigned DL MAP message for higher spectral efficiency

NOKIA

Work done

- All editorial comments resolved
- All technical comments reviewed and resolved to level required to support Working Group Review
- TBDs resolved to level required to support Working Group Review
- Met with MAC group for “synchronizing”

TG1 PHY Closing Presentation

Document Number:
802.16p-77

Title:
PHY TG1 Report at Session 9

Date Submitted:
9/15/00

Source:
Jay Klein

Version:
Denver, September 2000

Base Document:
None

Purpose:
Report

Notice:
This document has been prepared to assist the IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserves(s) the right to add, amend or withdraw material contained herein.

Release:
The contributor acknowledges and accepts that this contribution may be made public by IEEE 802.16.

IEEE Patent Policy:
The contributor is familiar with the IEEE Patent Policy, which is set forth in the IEEE-SA Standards Board Bylaws <http://standards.ieee.org/about/initiatives/standards.html> and 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.”

PHY TG1 Report Session #9

Jay Klein
Ensemble Communications

Documents Submitted

- 802.16.1pc-00/44 (2000-09-07) Recommendation on LMDS Radio Propagation Channel Models
- 802.16.1c-00/07 (2000-09-10) FEC Parameterization for Data Transport (Alok Gupta)
- 802.16.1c-00/06 (2000-09-08) FEC Parameterization for Control Channel Information (Alok Gupta)
- 802.16.1c-00/04 (2000-09-01) Frequency Synthesizer Model Parameters (Lars Lindh and Hans Sommera)

Documents Submitted – cont.

- 802.16.1c-00/03 (2000-09-01) Combining Burst FDD and FSDD modes in 802.16.1 (Ken Stanwood)
- 802.16.1c-00/01 (2000-08-08) Summary of Open PHY Issues in IEEE 802.16.1-00/01 (Jeff Foerster)

TG3 Closing Presentation

802.16.3 Task Group Report

- Finished and Adopted Functional Requirements Document except for editorials
 - Output Comment database on server
- Developed an initial List of Evaluation Criteria for PHY proposal evaluations, Full Criteria to be developed at next meeting
- Issuing two calls for contributions
 - Preliminary PHY proposals
 - Deployment, Traffic and Propagation

- 802.16.3 Task Group
- CALL FOR CONTRIBUTIONS
- Session #10
- Deadline: 30 October, 2000

• Session #10 of the IEEE 802.16 Working Group on Broadband Wireless Access is preparing to define the PHY protocols for a broadband wireless access air interface specification for frequencies from 2 through 11 GHz. The specification will be based on substantial contributions, with necessary final input at the process workshop. Major and important contributions will be requested, with final selection scheduled for June 2001.

• The PHY Task Group invites the submission of initial contribution proposals prepared PHY solutions. Contributors will be invited to attend the IEEE 802.16 Working Group Session #10 (30 November 2000) in Tampa, Florida, USA to present and discuss the merits of their proposals. Only submissions to session #10 will be eligible for inclusion in subsequent work items. Submissions must be received by 15 minutes of presentation followed by 15 minutes of discussion. Submissions must be received by the deadline date.

• Include a descriptive title. Include an overview and a reference model that describes functions, including interfaces to other layers. Describe the benefits of the proposed PHY, including any unique features. Describe any drawbacks of the proposed PHY.

• Explain how the submitted PHY relates to existing standards, such as ITU-R IMT-SS, IEEE 802.11, DOCSIS 1.1, ETSI HiperLAN or others. If it is based on an existing standard, what differences occur to the standard? Emphasize the scalability of the proposed PHY to deal efficiently with various data types as described in the 802.16.3 Functional Requirements Document. Include a statement on intellectual property rights and how 802.16 may utilize the proposed PHY as a standard.

• The proposals will be evaluated based on criteria in the Evaluation Table below. However, at this initial stage, contributions are not expected to address in detail the discussion items that will be raised during the next general discussion or technical forum. Each of the Working Group members will be able to provide public and/or internal comments on a contribution to a contribution #11 (January 22-24, 2001) in Ft. Lauderdale, Florida. The contributions and responses to the contribution #11 will be used to select the PHY to use for the next phase of work.

• Contributions will be considered only if submitted using Revision 8 or higher of the 802.16 Discussion Submission Template <http://www802.org/16/docs/802_16_templates.doc>. The template requires a cover page and a narrative.

• Submissions will be considered non-confidential and will be posted, as soon as possible following receipt, for public access on the 802.16 Web Site <http://www802.org/16/>.

• Final call contributions to the 802.16.3 Task Group Chair, Brian Kiernan <brian.kiernan@interdigital.com>, with a copy to 802.16 Chair, Roger Marks <marks@nist.gov>, for receipt by the deadline of 30 October 2000.

- 802.16.3 Task Group
- CALL FOR CONTRIBUTIONS – Session #10
- Deadline: 30 October, 2000

• The Task Group 3 of the IEEE 802.16 Working Group on Broadband Wireless Access is preparing to define the PHY protocols for a broadband wireless access air interface specification for frequencies from 2 through 11 GHz. The specification will be based on substantial contributions, with necessary final input at the process workshop. Major and important contributions will be requested, with final selection scheduled for June 2001.

• The PHY Task Group invites the submission of initial contribution proposals prepared PHY solutions. Contributors will be invited to attend the IEEE 802.16 Working Group Session #10 (30 November 2000) in Tampa, Florida, USA to present and discuss the merits of their proposals. Only submissions to session #10 will be eligible for inclusion in subsequent work items. Submissions must be received by 15 minutes of presentation followed by 15 minutes of discussion. Submissions must be received by the deadline date.

• Include a descriptive title. Include an overview and a reference model that describes functions, including interfaces to other layers. Describe the benefits of the proposed PHY, including any unique features. Describe any drawbacks of the proposed PHY.

• Explain how the submitted PHY relates to existing standards, such as ITU-R IMT-SS, IEEE 802.11, DOCSIS 1.1, ETSI HiperLAN or others. If it is based on an existing standard, what differences occur to the standard? Emphasize the scalability of the proposed PHY to deal efficiently with various data types as described in the 802.16.3 Functional Requirements Document. Include a statement on intellectual property rights and how 802.16 may utilize the proposed PHY as a standard.

• The proposals will be evaluated based on criteria in the Evaluation Table below. However, at this initial stage, contributions are not expected to address in detail the discussion items that will be raised during the next general discussion or technical forum. Each of the Working Group members will be able to provide public and/or internal comments on a contribution to a contribution #11 (January 22-24, 2001) in Ft. Lauderdale, Florida. The contributions and responses to the contribution #11 will be used to select the PHY to use for the next phase of work.

• Contributions will be considered only if submitted using Revision 8 or higher of the 802.16 Discussion Submission Template <http://www802.org/16/docs/802_16_templates.doc>. The template requires a cover page and a narrative.

• Submissions will be considered non-confidential and will be posted, as soon as possible following receipt, for public access on the 802.16 Web Site <http://www802.org/16/>.

• Final call contributions to the 802.16.3 Task Group Chair, Brian Kiernan <brian.kiernan@interdigital.com>, with a copy to 802.16 Chair, Roger Marks <marks@nist.gov>, for receipt by the deadline of 30 October 2000.

802.16.3 Task Group Report

- Officially Adopted TG1 MAC as TG3 Draft MAC
- Create TG3 MAC Ad Hoc to review TG1 MAC and provide TG3 Comments
- Two Motions for the Working Group:
 - Liaison to ETSI BRAN sub11 GHz WG
 - Establishment of 802.16 Common MAC

Motion #1:

That the 802.16 Working Group appoint Chet Shirali as a liaison to the ETSI BRAN sub11 GHz Working Group.

Motion #2

Moved that the 802.16 Working Group:

- Establish a common 802.16 MAC
- Require each 802.16 Task Group to define its mandatory and optional sub-sets of the common MAC
- Shall ensure backward compatibility and maintenance of the common MAC
- Shall strive to ensure forward compatibility of the common MAC

Appendix D, Attendance at Session#9

Session#9 was an interim session. The 75% interval attendance criteria for Session #9 was 6 or more intervals. Please contact the 802.16 Secretary (smarin@ix.netcom.com) if you feel your attendance has been recorded incorrectly.

The following 126 people registered attendance at 6 or more intervals and met the attendance criteria.

Aboukarr, Bakri
 An, Song
 Arefi, Reza
 Arunachalam, Arun
 Avera, Drayt
 Avivi, Eli
 Ayyagari, Deepak
 Baragar, Ian
 Baseghi, Behshad
 Baugh, C.R. (Rick)
 Belfiore, Carlos
 Benyamin-Seeyar, Anader
 Bushue, Carl
 Buskila, Baruch
 Chan, Rebecca
 Chang, Dean
 Chayer, Rémi
 Condie, Mary
 Cornelius, James
 Costa, José
 Crilly, Jr., William J.
 Doherty, Edward
 Edmonston, Brain
 Eidson, Brian
 Eklund, Carl
 El-Damhougy, Hesham
 Fishel, George
 Foerster, Jeffrey
 Garrison, G. Jack
 Gesbert, David
 Goldhammer, Marianna
 Guillemette, Phil
 Gupta, Rakesh
 Hadad, Zion
 Hall, Eric
 Hamilton, Michael
 Hammons, Roger
 Hatim, Baya
 Hebron, Yoan
 Hilberman, Dan
 Hosur, Srinath
 Hsuan, Yi
 Hudson, Thomas
 Hum, Coleman
 Hunter, Wayne
 Jacobsen, Eric
 Jamali, Hamadi

Jorgensen, Jacob
 Kang, Inchul
 Kasslin, Mika
 Kiernan, Brian
 Kim, John
 Kitroser, Itzik
 Klein, Jay
 Kolze, Thomas
 Kostas, Demos
 Kwak, Byung-Jae
 Kwak, Joe
 Langley, John B.
 Langston, J. Leland
 Leiba, Yigal
 Lewis, Barry
 Licardie, Sergio
 Liebetreu, John
 Lindh, Lars
 Lo, Titus
 Marin, Scott
 Marks, Roger
 McCallister, Ron
 McGregor, Andy
 McMullin, Roderick
 Meyer, Ronald
 Middleton, Andrew
 Mizoguchi, Masato
 Mody, Apurva
 Mollenauer, James
 Padan, Uzi
 Petry, Brian
 Pleasant, Wayne
 Ralston, William
 Ran, Moshe
 Resheff, Guy
 Rhodes, Valentine
 Robinson, Gene
 Roehr, Walt
 Rzeszewski, Ted
 Santacesaria, Claudio
 Satapathy, Durga
 Sater, Glen
 Scaringi, Vito
 Scarpa, Carl
 Schwartz, Randall
 Segal, Yossi
 Sellars, Malcolm
 Shan, Tie-Jun
 Shimada, Shusaku
 Shirali, Chet
 Skaar, Helge
 Smith, Steve
 Stamatelos, George

Stambaugh, Karl
 Stanwood, Ken
 Stewart, Michael
 Struhsaker, Paul
 Sydor, John
 Tappenden, Chris
 Tateishi, Kimiya
 Tavormina, Joe
 Thomas, Raymond
 Thompson, Paul
 Trinkwon, David
 Van Waes, Nico
 Varma, Subir
 Wachira, Muya
 Wang, Arthur
 Wang, Chao-Chun
 Wang, Lei
 Wang, Xiaofeng
 Ward, Bob
 Whitehead, Philip
 Whiting, Robert
 Williams, David G.
 Wise, Curt
 Wiss, John
 Yanover, Vladimir
 Zuniga, Juan Carlos

The following 18 people registered attendance at less than 6 intervals and did not meet the attendance criteria.

Alspaugh, Matthew
 Carlo, Jim
 Falconer, David
 Foley, Mark
 Foster, Robert
 Gupta, Alok
 Hancock, Dale
 Harel, Haim
 Khanna, Amarपाल
 Kreig, Andrew
 Monk, Anton
 Nadeau, James
 Ong, Ling Chuen
 Rafie, Manouchehr
 Ribner, David B.
 Wheatley, Chuck F.
 Yang, S. Michael
 Yurtkuran, Erol

Motion #5

Moved that the 802.16 Working Group:

- Establish a common 802.16 MAC based on 802.16.1-00/01r4
- Require each 802.16 Task Group to define its mandatory and optional sub-sets of the common MAC
- Shall ensure backward compatibility and maintenance of the common MAC
- Shall strive to ensure forward compatibility of the common MAC