Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	Minutes of 802.16.1 for Thursday, May 4, 2000 at 802.16 Session #7
Date Submitted	**2000-05-13**
Source(s)	Scott Marin 802.16 Secretary Voice: 972-852-7109 Fax: 972-852-6760 E-mail:smarin@spectrapoint.com
Re:	**802.16 Session #7 (Gaithersburg, Maryland, U.S.A., 1-5 May 2000)**
Abstract	This document records the minutes of 802.16.1 meetings held Thursday, May 4, 2000 at 802.16 Session #7
Purpose	To record decisions of the task group.
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Selection of PHY Draft

Call to order

1300, Roger Marks called the session to order and announced that the objective for the afternoon is to adopt a PHY draft.

Development of Agenda: Call for PHY Motions to be Presented

1) Call to order
2) Development of an agenda: Call for PHY motions to be presented
- Jay Klein indicates intent to make a motion on a PHY proposal
- No other indications of intent
3) Other business
4) Adjourn

Without objection, the agenda is approved.

PHY Motion

Motion#1, Jay Klein, 2nd Ray Sanders, to drop PHY proposals 802.16.1pc/20r1 and 802-16.1pc/19 and adopt 802.16.1pc-00/29 as the IEEE 802.16.1 PHY draft.

Motion#2, Brian Petry, 2nd Rémi Chayer, to amend Motion#1 to change the contributor list to alphabetical order by last name without reference to modes.

25 for, 1 against, Motion#2 passes.

Amended Motion#1, Jay Klein, 2nd Ray Sanders, to drop PHY proposals 802.16.1pc/20r1 and 802.16.1pc/19 and adopt 802.16.1pc-00/29 as the IEEE 802.16.1 PHY draft as amended to change the contributor list to alphabetical order by last name without reference to modes.

28 for, 9 against, Motion #1 passes.

Roger Marks asked for further discussion.
Brian Petry encouraged people who voted against Motion#1 to submit objections in writing.

Other Business

Ad Hoc FEC committee

Eric Jacobsen and John Liebetreu discussed plans for the FEC committee (Appendix A) and announced plans for a call for contributions.

Tom Kolze presented some concerns that there should be a call for volunteers instead of the chair appointing two chairs for the FEC ad hoc committee. The secretary was asked to note the issue in the minutes.

Adjourn

14:30 adjourned until 19:00, without objection.

Selection of a MAC Draft

Call to Order

1900, Roger Marks called the meeting to order.

Development of Agenda: Call for MAC Motions to be Presented

Draft Agenda:

1) Call to order
2) Development of an agenda
   - Carl Eklund indicated intent to present motion on a MAC proposal
   - No other indications of intent
3) Other business
4) Adjourn

The agenda was approved without objection.

Motions

Carl Eklund presented an on overview of plans to merge the two invited MAC proposals and showed the following information:

Interim Meeting

- Intentions:
  Work out technical issues of D+ and E+ proposals that address, for example:
  Agnostic MAC (upper service protocol independent, e.g. ATM TDM IP etc.)
  Fully support PHY (current draft 00/29)
  Etc.
- The D+ and E+ contributors agree that this plan is tractable and best meets the needs of the 802.16 MAC community.

Motion#3, Carl Eklund, 2nd Karl Stambaugh, to: -- Delay until the July plenary the WG decision to choose a MAC. -- Invite a single proposal from the combined D+ and E+ contributors that represents a merger of MAC documents 00/14 and 00/15, due in July for potential adoption by the WG.

Motion#4, Brian Petry , 2nd Ray Sanders, to change to word "single" to "joint."

Without objection, Motion#4 passes

Amended Motion#3, Carl Eklund, 2nd Karl Stambaugh, to: -- Delay until the July plenary the WG decision to choose a MAC. -- Invite a joint proposal from the combined D+ and E+ contributors that represents a merger of MAC documents 00/14 and 00/15, due in July for potential adoption by the WG.

Motion#5, Jay Klein, 2nd Chet Shirali, to amend Motion#3 to read: -- Delay until the July plenary the WG decision to choose a MAC. -- Invite a joint proposal from the contributors of MAC documents 802.16.1mc-00/14 and 802.16.1mc-00/15 and representing a merger of these documents, due in July for potential adoption by 802.16.1.

Without objection, Motion#5 passes

Amended Motion#3,
-- delay until the July plenary the WG decision to choose a MAC
-- Invite a joint proposal from the contributors of MAC documents 802.16.1mc-00/14 and 802.16.1mc-00/15 and representing a merger of these documents, due in July for potential adoption by 802.16.1.

Motion#6, Gene Robinson, 2nd Jung Yee, to amend motion#3 to include in the invite to the joint proposal from the contributors of the MAC documents that we insert "and to include a reference matrix showing compliance to the functional requirements documents."

Motion#7, Phil Guillemette to call Motion#6

Without objection, Motion#7 passes.

13 for, 16 against, Motion#6 fails.

Motion#8, Brian Petry, 2nd Jay Klein, to amend by adding another bullet that reads: invitation shall be based on the wording of the most recent MAC invitation to contribute.

Motion#9, Nico van Waes to call Motion#8

Without objection, Motion#9 passes.

22 for, 5 against, Motion#8 passes.

Amended Motion#3,
-- Delay until the July plenary the WG decision to choose a MAC.
-- Invite a joint proposal from the contributors of MAC documents 802.16.1mc-00/14 and 802.16.1mc-00/15 and representing a merger of these documents, due in July for potential adoption by 802.16.1.
-- Invitation shall be based on the wording of the most recent MAC invitation to contribute.

33 for, 0 against, 1 abstention, Motion#3 passes

Other Business

Roger Marks asked for a request for an interim meeting of 802.16.1. None requested.

Adjourn

20:10 Adjourned, without objection.

Regards,
Scott Marin
802.16.1 Acting Secretary

Appendix A, FEC Ad-Hoc Committee Presentation

FEC Ad-Hoc Committee

- Investigate Coding Schemes Relevant to 802.16.1 BWA Systems
  - Call for Contributions – submissions due June 5, 2000
  - Investigation
    - ETSI BRAN-HA
    - DVB-RCS
- Email forum for comments on contributions.
  - Egroups , mailing list, for comments, suggestions, evaluations.
  - eric.a.jacobsen@intel.com and john@ sicom .com for private comments.
- Committee will report with comments and recommendations at Session #8 in LaJolla .

Call for Contributions
Document Requirements

- QPSK is baseline modulation for evaluation.
- All data should be submitted per code rate.
- Indicate if code for Uplink, Downlink, or both.
- Complexity estimates – encoder/decoder.
  - QPSK and 64QAM at *TBD* Mbaud .
- Latency estimates – end to end.
- Block size for each configuration.
- BER vs Eb/No curves (at least one, and all relevant configurations if possible).
- Required Eb/No for Pe = 10E-6, *and 10E-9 if available*.

Tabular Format for Required Information
with example data.

Code	Code A	Code B
Aggregate Code Rate	?	9/10
Eb/No at $P_e = 10^{-6}$	4.2dB	4.6dB
Encoder Complexity	2k gates + 10kbit memory	1k gates + 8kbit memory.
Decoder Complexity	70k gates + 10kbit memory	250k gates + 16kbit memory
Block Size	9984 bits	8192 bits
Latency (Tx + Rx)	20kbits	22kbits

FEC Ad-Hoc Committee

- Call for contributions will contain details of data requirements.
  - Documents not meeting requirements will still be considered, but will not be able to be fairly compared to alternatives.
  - Data should be substantiated as fully as possible. Data source must be indicated as analysis, simulation or measurement.
- Email forum for interested discussion.
- Committee reports with comments and recommendations at Session #8 in LaJolla .