

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Session #11, 802.16 TG4 Minutes, January 22 – 26, 2001, Crowne Plaza, Ottawa, CA	
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Re:	IEEE 802.16 Session #11, 802.16 TG4 Minutes	
Abstract		
Purpose	Provide written record of meeting events	
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Minutes of 802.16 TG4 Session #11
A Task Group of IEEE 802.16
Ottawa, Ontario, CA
22-26 January 2001

Call to Order

Chairman Durga Satapathy called the meeting to order at 9 AM, Jan 22, 2001.

Meeting Agenda

Durga noted that there were seventeen contributions for this session. Eleven were primarily MAC related and 6 focused on the PHY.

Motion 1 by Durga Satapathy to approve the proposed agenda, 2nd by Mika Kasslin

Motion 1 passed unanimously. 7 voting members present. 23 members total present.

Agenda

MONDAY

- ¥ 9:00 - 10:00 Review agenda; Update on Session 11.5 Plans
- ¥ 1-3: Plenary Session
- ¥ 3:30 - 5:00 Open Discussion; Coexistence Strategies;

TUESDAY

- ¥ 9:00 - Mika Kasslin, Nokia, 802164c_01-04

Joint TG3 and TG4 meeting

- ¥ 10:00 (TG3) Ken Peirce, Malibu Networks 802164c-01_10
- ¥ 10:30 (TG3) Ken Peirce, Malibu Networks 802164c-01_11
- ¥ 11:00 (TG3) Ken Peirce, Malibu Networks 802164c-01_12
- ¥ 1:00 (TG3) Vladimir Yanover, Breezecom, 80216c-01_05
- ¥ 2:00 - 4:00 Proposal Merging Activity
- ¥ 7:30 p.m. - 9:30 p.m. : Joint TG3 MAC Session

WEDNESDAY

- ¥ 9:00 - Inchul Kang, Malibu Networks 802164c-01_14
- ¥ 10:00 - John Sydor, CRC 802164c-01_15
- ¥ 11:00 - Octavian Sarca, Redline Communications 802164c-01_16
- ¥ 11:30 - Proposal Merging Activity
- ¥ 1:00 - Zion Hadad, Runcom 802164c-01_01
- ¥ 2:00 - Mika Kasslin, Nokia 802164c-01_03
- ¥ 2:45 - Tom Williams, Holtzman Inc. 802164c-01_09
- ¥ 3:30- Marianna Goldhammer, Breezecom 802164c-01_17
- ¥ 4:30 - Proposal Merging Activity
- ¥ 5:00 - Adjourn

THURSDAY

- ¥ 9:00 - Subir Varma, Aperto Networks, 802164c-01_02
- ¥ 10:00 - Vladimir Yanover, Breezecom, 80216c-01_06
 - Vladimir Yanover, Breezecom, 80216c-01_07
 - Vladimir Yanover, Breezecom, 80216c-01_08
- ¥ 1:00 - Demos Kostas, Adaptive Broadband, 80216c-01_13
- ¥ 2:00 - 4:00 Proposal Merging Activity
- ¥ 7:30 p.m. - 9:30 p.m. - Joint TG3 MAC Session

FRIDAY

¥ 10:00 - Closing Plenary

Durga explained that all proposals will be presented, but that later we would try to combine relevant proposals into unified proposals. These unified proposals will be sorted out at the February interim meeting. Our task at the March meeting will consist of fine tuning.

Meeting adjourned until after the plenary

Call to Order

The meeting was called to order at 3:35 PM Monday, Jan 22, 2001.

The topic of this meeting was the strategy for dealing with coexistence issues.

Discussion

Durga noted that TG3 does not face the same coexistence issues that are faced by TG4 and therefore TG4 should begin development of a coexistence strategy.

Durga then went over the events leading to the creation of the 802.16.2 TG.

Durga suggested the appointment of a coexistence liaison in the future.

The meeting was adjourned at 5PM.

Call to Order

The meeting was called to order at 9:00 AM Tuesday, Jan 23, 2001.

The meeting began with a presentation by Mika Kasslin of Nokia. This presentation and its corresponding contribution were intended for TG4 only and thus discussed at the TG4 meeting from 9-10AM.

802.16.4c-01/04 A WirelessHUMAN™ System (Mika Kasslin, Nico van Waes , Nokia, 1/13/2001)

A lot of discussion occurred concerning this proposal and it had to be postponed to a later time to accommodate the joint meeting at 10.

Break – Moved TG4 to Collocate with TG3

The following contributions were presented:

802.16.4c-01/10 A Proposal for the Enhancement of the 802.16.1 MAC to Provide a per-Service Flow Reliable Connection Service (Jacob Jorgensen, Ken Peirce, Subbu Ponnuswamy, 01/01/13)

802.16.4c-01/11 A Proposal for the Enhancement of the 802.16.1 MAC: Multiple Higher Layer PDUs per MAC Encapsulation (Jacob Jorgensen, Ken Peirce, Subbu Ponnuswamy, 01/01/13)

802.16.4c-01/12 [also TG4] A Proposal for the Enhancement of the 802.16.1 MAC::Multiple Higher Layer PDUs per MAC Encapsulation (Jacob Jorgensen, Ken Peirce, Subbu Ponnuswamy, 01/01/13)

802.16.4c-01/05 MAC Headers Structure for 802.16.4 (Vladimir Yanover,01/01/13)

802.16.4c-01/06 Data Integrity in 802.16.4 MAC (Naftali Chayat,Vladimir Yanover,Inbar Anson, 01/01/13)

802.16.4c-01/07 Reservation Tools for the 802.16.4 MAC (Naftali Chayat,Vladimir Yanover, 01/01/13)

802.16.4c-01/02 Modifications to the TG1 MAC for use in TG4 Systems (Subir Varma,01/01/12)

802.16.3c-01/20 Increasing Link Robustness in TG3 Systems (Subir Varma,01/01/17)

802.16.3c-01/21 A MAC Transport Layer Structure for TG3 Systems (Subir Varma,01/01/17)

802.16.3c-01/22 Comments on the Time Base Structure of TG3 (Subir Varma,01/01/17)

802.16.3c-01/25 Proposed Enhancements to 802.16.1 MAC to Accommodate OFDMA PHY (Itzik Kitroser,Zion Hadad,Yossi Segal,01/01/17)

A list of issues was assembled to discuss jointly with the TG1 MAC group at the evening session. These issues included ARQ, Packet Headers, Concatenation and Parallel Polling.

The meeting was adjourned at 5:40pm.

Call to Order

The meeting was called to order at 9:00 AM Wednesday, Jan 24, 2001.

The focus on this day received presentations on all PHY proposals.

802164c-01_14 - Inchul Kang, Malibu Networks

802164c-01_15 - John Sydor, CRC

802164c-01_16 - Octavian Sarca, Redline Communications

802164c-01_01 - Zion Hadad, Runcom

802164c-01-13 —Demos Kostas, Adaptive Broadband

Meeting adjourned at 12:00 for lunch

Call to Order

The meeting was called to order at 1:00 PM Wednesday, Jan 24, 2001.

802164c-01_03 - Mika Kasslin, Nokia

802164c-01_09 - Tom Williams, Holtzman Inc.

802164c-01_17 —Naftali Chayat (for Marianne Goldhammer), Breezecom

Extra time allowed Anader Benyamin-Seeyar to present an ad hoc PHY proposal that utilized a single carrier.

Meeting adjourned at 5PM

Call to Order

The meeting was called to order at 9:00 AM Thursday, Jan 25, 2001.

Durga requested nominations for the position of TG4 Vice Chair.

Durga announced that Burcak Besser had two late MAC contributions and that it was in the interest of the TG to hear them.

802.16.4c-01/24 - Burcak Besser, Pacific Broadband

802.16.3c-01/23 - Burcak Besser, Pacific Broadband

At 10:15 Durga gave the TG a 15 minute break

10:30 MAC Discussion - Mika Kasslin was given a chance to continue discussion of his MESH contribution..

Roger Marks came by and the TG discussed procedures for future work, including February Interim meeting in San Jose.

Durga announced that there were two nominations for Vice Chair, Ken Peirce and Sanjay Moghe. As a replacement for TG secretary could not be found, Ken Peirce withdrew.

Motion #4 Durga Satapathy requested that the TG accept Sanjay Moghe as Vice Chair. Motion passed. 7 voting members present. 23 members present. Approval was unanimous.

Durga then presented a high level overview of MAC synergies with TG3 etc.

Motion #5 Durga Satapathy requested that the TG accept David Chauncey as Coexistence Liaison. Motion passed. 7 voting members present. 23 members present. Approval was unanimous.

Durga asked the TG to split up into 2 groups – PHY and MAC.

Demos Kostas requested time to present a liaison report. Durga Satapathy apologized and denied the request noting that it was out of place in the context of MAC discussion per agenda.

Meeting adjourned at 12:00 for lunch

Call to Order

The meeting was called to order at 1:00 PM Thursday, Jan 25, 2001.

Ken Peirce was directed to be the focal point of MAC effort. Sanjay Moghe was directed to be the PHY focal point. Both teams were charged with going through the contributions and ranking them. Following this both teams would convene at 2:30 PM and show the results.

The MAC team came up with the following prioritized list of issues to be addressed by the TG:

1. Type field modification to 802.16.1 Generic Header
2. Concatenation
3. ARQ
4. MAP Flexibility
5. DFS
6. Transmission Power Control
7. Adaptive Modulation
8. Ranging, Frame Synchronization
9. Optional support of mesh topology

Motion #2 Durga Satapathy requested that the TG accept this list of MAC issues as those that needed to be focused on. Motion passed. 7 voting members present. 23 total attendees present. Approval was unanimous.

The PHY team came up with the following prioritized list of issues to be addressed by the TG:

1. TDD Operation
2. OFDM Modulation
3. Interference Mitigation Techniques

Motion #3 Durga Satapathy requested that the TG accept this list of PHY issues as those that needed to be focused on. Motion passed unanimously by the 5 voting members present. Of the 22 total attendees present, only one non-member was dissenting.

Durga left the session at 3:15 after clarifying the PHY group issue that the WirelessHUMAN group will address and OFDM based PHY only as per PAR.

The meeting was adjourned for dinner at 5:30.

Call to Order

The meeting was called to order at 7:30 PM Thursday, Jan 25, 2001.

This was an adhoc meeting between those interested in MAC commonality. Members of TG1, TG3 and TG4 were present.

The following topics were discussed:

ARQ — the result was that the TG1 MAC document would have the ARQ operational description paragraph removed to permit TG3 and TG4 latitude for design.

New Generic Header format — modified versions of the header were not immediately accepted by TG1, but TG1 agreed to look into the feasibility of a Type field that would use some of the presently reserved bits in the Generic Header.

Concatenation —the need for concatenation was agreed to by members of all three TGs. The exact formatting would be discussed later.

Roger Marks gave a recap of the meeting and noted the willingness of all parties to negotiate an effective result.

Meeting was adjourned at 9:30

No TG4 Meeting was held on Friday morning as the Plenary was moved up to 9:30.

A closing plenary presentation was made for TG4 on behalf of Durga Satapathy by Ken Peirce.