

Project	IEEE 802.16 Broadband Wireless Access Working Group < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >
Title	IEEE 802.16 NetMan Task Group – Session #49 minutes
Date Submitted	2007-05-09
Source(s)	Phillip Barber <a href="mailto:pbarber@huawei.com">[mailto:pbarber@huawei.com]</a> Chair, NetMan TG Huawei
Re:	IEEE 802.16 NetMan Task Group Session #49 Minutes (Portland)
Abstract	
Purpose	To record meeting minutes
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## IEEE 802.16 NetMan Task Group Session #49 Minutes

Phillip Barber

**Tuesday, May 8, 2007**

1:30pm Session called to order and opened by Chair, Phillip Barber; Phillip Barber acting as Secretary

Motion to approve the agenda.

Moved by: Scott Henderson

Seconded by: Joey Chou

Passed by unanimous voice consent

Motion to approve minutes 802.16netman-07/007 for Session 48.

Moved by: Michael McVeigh

Seconded by: Scott Henderson

Passed by unanimous voice consent

The Chair presented the patent policy slide set <http://standards.ieee.org/board/pat/pat-slideset.ppt>

The Chair instructed the Secretary to record into the minutes the following patent policy information:

That the foregoing information was provided and the five slides were shown;

That the chair or designee provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) that the participant believes may be essential for the use of that standard;

Any responses that were given, specifically the patent claim(s)/patent application claim(s) and/or the holder of the patent claim(s)/patent application claim(s) that were identified (if any) and by whom.

It is recommended that the WG chair review the guidance in the Standards Companion on inclusion of potential Essential Patent Claims by normative reference

The Chair noted that there were no responses for the call for participants to identify patent claim(s)/patent application claim(s).

IETF Review Ad-Hoc Report:

The Chair brought to the attention of the group the email dated March 21 announcing the Teleconference of the Ad-Hoc group:

**From:** Phillip Barber [pbarber@broadbandmobiletech.com]

**Sent:** Wednesday, March 21, 2007 12:00 AM

**To:** 'STDS-802-16@listserv.ieee.org'

**Subject:** IETF Draft Ad-hoc meeting

All,

Prior to the recent Session 48 in Orlando, 802.16 received a request from the authors of the IETF Draft <[draft-ietf-16ng-ipv6-overipv6cs-09.txt](#)> to review their work and provide comments on the draft. This draft was developed as

part of the IETF's '16ng' group <<http://tools.ietf.org/wg/16ng>>

At Session 48, the Netman TG established an Ad-Hoc group to review and provide comments to the author's of the IETF Draft <[draft-ietf-16ng-ipv6-over-ipv6cs-09.txt](#)>. As Chair of the Netman TG, I assigned myself to Chair the Ad-Hoc group.

In order to conduct the Ad-Hoc review, I intend to schedule a teleconference. Unfortunately, the final date for comments on this draft is Monday, March 26. So we have to find a time to do a conference call very soon to discuss comments on the draft. Also, because of the near due date for comments, we are likely only going to get a single teleconference to discuss the Draft.

I propose a conference call for 6am PST, Thursday, March 22. I will schedule the conference bridge for two hours. Because of limitations in number of supported callers on the bridge, I will make the bridge information available to only those members that email me offlist and request to participate. Deadline for notifying me is 12pm PST Wednesday, March 21.

Thanks,  
Phillip Barber  
Chief Scientist  
Broadband Wireless Solutions  
Huawei Technologies Co., LTD.  
Chair, IEEE 802.16 Netman TG  
Chair, IEEE 802.16 *IETF Draft Review Ad-Hoc*

The Chair provided the following report to the group on the Ad-Hoc:

## IEEE 802.16 IETF Draft Review Ad-Hoc Teleconference Minutes 6am PST, Thursday, March 22, 2007

**6:00am Teleconference Session called to order and opened by Chair, Phillip Barber; Phillip Barber acting as Secretary**

Participants:

<p>Ranga Reddy Scott Henderson Paolo Narvaez Gabriel Montenegro Basavaraj (Raj) Patil</p>	<p>Phillip Barber Rex Buddenberg</p>
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The Chair informed the group that the group will be reviewing the latest version of the IETF Draft requested for review, [draft-ietf-16ng-ipv6-over-ipv6cs-09](#)

The Chair informed the group that, due to time constraints in accomplishing a formal liaison through the IEEE process in response to the IETF request for comment—the IETF due date for comments on the draft is March 26 and four days is inadequate to process the necessary email ballots for such liaison—and per the authors' request, the Ad-Hoc would not be generating formal output from the meeting. However, based on the discussion in the ad-hoc, individual members were encouraged to make appropriate comment submittals, independently, to the authors of the draft.

Begin document review of [draft-ietf-16ng-ipv6-over-ipv6cs-09](#)

Completed document review.

**7:30am The Chair adjourned the Session without opposition**

Reviewed new 802.11 SG on multimedia content distribution, and its interaction with 802.1, to determine if 802.16 may benefit from similar interaction on this matter. Discussion focused on two issues: (i) should 802.16 review 802.1AVB to determine if 802.16 should make similar project as 802.11 to accommodate the 802.1AVB features, and (ii) should 802.16 review 802.11 activity to consider the need to harmonize a common solution methodology.

The Chair brought to the attention of the group the announcement email dated April 18, 2007:

**From:** Roger B. Marks [r.b.marks@ieee.org]  
**Sent:** Wednesday, April 18, 2007 1:38 PM  
**To:** STDS-802-16@listserv.ieee.org  
**Subject:** SPAM-LOW: [STDS-802-16] Fwd: 802 EC Motion on 802.11 Video Transport Stream (VTS) Study Group

FYI regarding an 802 EC ballot.

Roger

Begin forwarded message:

**From:** "Stuart J. Kerry" <stuart@OK-BRIT.COM>  
**Date:** April 18, 2007 12:10:15 PM MDT  
**To:** STDS-802-SEC@listserv.ieee.org  
**Subject:** [802SEC] +++10 Day EC Email Ballot (Closes no later than 29 April 2007)+++ Motion to approve the formation of the 802.11 Video Transport Stream (VTS) Study Group  
**Reply-To:** stuart@OK-BRIT.COM

Dear EC Members,

The 802 EC Chair has delegated me to conduct this EC ballot on his behalf.

This is a 10 day email ballot to make a determination on the withdrawn motion which was deferred to an 802 EC email ballot, that was submitted to the Closing Orlando March 2007 802 EC meeting:

Motion: "To approve formation of an IEEE 802.11 Study Group to examine issues related to delivery of Video Transport Streams (VTS) over IEEE P802.11, with the intent to create a PAR and Five criteria to form a new Task Group. The proposed PAR and 5C would be reviewed by the 802.1 Audio Video Bridging Task Group (802.1AVB TG), and in addition both the 802.1AVB TG and 802.11 VTS SG (and eventually the 802.11 TG, if formed) will meet jointly at IEEE 802 plenary meetings, unless mutually agreed not to".

Moved: Stuart J. Kerry

Seconded: Tony Jeffree

This ballot opens 11:59 PM ET Wednesday 18th, 2007 and closes when all voting EC members have cast a ballot but no later than 11:59 PM ET Sunday April 29th, 2007 if enough ballots have been cast for a decision to be made (more than 9 approves or disapproves).

Executive Summary:

The proposed 802.11 Video Transport Stream (VTS) Study Group will focus on enhancements within the 802.11 MAC/PHY layers to improve video streaming performance over 802.11 links. The problem space is constrained to be limited to issues unique to 802.11 and nothing more.

The 802.11 VTS SG will collaborate with 802.1AVB TG to ascertain that 802.11 specifications include support for all mechanisms specified in 802.1AVB. If there are no mechanisms within 802.11 to support 802.1AVB, the 802.11

VTS SG will work jointly with 802.1AVB TG to specify the required mechanisms. This strategy is decided based on discussions with Michael Johas Teener (802.1AVB TG Chair) and Ganesh Venkatesan (Proposed Chair of the 802.11 VTS SG, if approved), as well as the two WG Chairs.

If the 802.11 VTS SG formation is approved by the EC, the tentative schedule for 802.11 VTS SG in May interim meeting in Montreal includes a presentation on 802.1AVB and 802.1AVB Transport Protocol followed by a discussion how 802.11 fits into this specification. These meetings are open to all 802 members.

Approved in 802.11 WG:

. 802.11 WNG SC - Results: 59-3-11

. WG - Results: 76-1-25

Details:

802.11 VTS SG is focused on enhancements within the 802.11 MAC/PHY layers to improve the performance of video streams sent over 802.11 links. This is the main focus of the 802.11 VTS SG and is expected that the SG will spend 80% of its time in this activity. Some of the areas for study are (not in any specific order, not a complete list). Some of these topics are not fully explored yet:

1. Enhancements to 802.11e mechanisms to render them effective for transport streams (not all bits are equal)
2. QoS Management mechanisms (permits QoS control from higher layers)
3. Optimizations to make medium access more deterministic
4. Forward Error Correction techniques that are effective for 802.11 (specifically low reliability of the medium)
5. Resiliency mechanisms to mitigate interference
6. Heuristics for retransmission, packet drop, etc
7. Channel dynamics estimation and adaptation techniques

In addition (if there are currently no known mechanisms in 802.11) the VTS SG, in order to guarantee that the wired and wireless sub-systems can co-exist, will also work on the following items listed below. It is anticipated that the items in this list will involve some level of joint activity between 802.1AVB TG and 802.11 VTS SG. About 20% of the 802.11 VTS SG activity is expected here. Please note that the items listed below will be in 802.11 (if needed) but will be performed jointly with the experts from 802.1AVB TG.

. Mechanisms to support those specified by 802.1 Qat (stream reservation protocol - bandwidth, latency, Admission Control and Time Synchronization) and 802.1Qav (forwarding and queuing of time-sensitive streams). Note that support for 802.1AS is already included in 802.11v.

. Mechanisms to support 802.1Qas (time synchronization).

. Any additional mechanisms that are specified in 802.1AVB requiring additional support in 802.11.

A liaison will be established between 802.1AVB TG and 802.11 VTS SG. The liaison will ascertain 802.1 AVB mechanisms and optimizations in 802.11 for video streaming are compatible and they work together to improve streaming performance. This will be a 2-way communication - advancements in 802.1AVB will be made known to the 802.11 VTS SG members and advancements made in the SG made known to 802.1AVB TG members.

. The documents generated by the two groups may be reviewed by each other (on a case by case basis),

. There may be presentations from one group to the other to provide rationale/motivation for an approach/solution

and

. Members from each group will attend meetings of the other when possible.

Regards,

/ Stuart

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Stuart J. Kerry  
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The Chair identified that in 802.1, the [Audio/Video Bridging \(AVB\)](#) is divided into three topical areas:

[802.1AS](#) - Timing and Synchronization

[802.1Qat](#) - Stream Reservation Protocol

[802.1Qav](#) - Forwarding and Queuing Enhancements for Time-Sensitive Streams (Traffic Shaping)

The Chair deferred discussion on this topic until Wednesday, May 9, in the afternoon, to give Members an opportunity to review the relevant documents and become informed on the topic.

Liaison Reports:

The Chair noted that 802.21 was meeting next week in Montreal to resolve comments received on their latest Working Group recirculation on the D5 Draft of their document.

The Chair noted no additional IETF matters to discuss.

This concluded the Liaison Reports:

Began work on review and preparation of Draft of 802.16 liaison letter to 3GPP in response to the liaison letter L802.16-07/022.

Completed a revision of the Draft liaison letter to 3GPP as C802.16-07/011r1.

3:20pm The Chair recessed the Session

**Wednesday, May 9, 2007**

8:30am Session called to order and opened by Chair, Phillip Barber; Phillip Barber acting as Secretary

Begin WG Comment Resolution of Comments Received on Working Group Letter Ballot #25a on P802.16i/D2. 43 comments are in 802.16-07/030. 6 Contributions in Netman Upload Directory.

Reviewed comment 1001 with associated contribution C802.16i-07/006r1. Comment and associated contribution Withdrawn at commenter's request.

Reviewed comment 1011 with associated contribution C802.16i-07/011r1. Comment and associated contribution Accept-Modified with the modification being that the group accepted the entire remedy presented in the revised contribution C802.16i-07/011r1.

Reviewed comment 1012 with associated contribution C802.16i-07/012r1. Comment and associated contribution Accept-Modified with the modification being that the group accepted the entire remedy presented in the revised contribution C802.16i-07/012r1, and an instruction to the editor:

In the contribution, for the wmanIf2mBsOtaUsageDataRecordEntry OBJECT-TYPE, in the Description, change the language as:

This table provides one row for each [session-service-flow](#), and is indexed by ifIndex, wmanIf2mBsSsMacAddress, wmanIf2mBsCid, and wmanIf2mBsSessionId. Since MAC management CID (i.e. basic, primary, and 2nd management) share the same CID for both UL and DL, it should use the QoS parameter set to distinguish which entry is DL or UL."

Reviewed comment 1013 with associated contribution C802.16i-07/015r1. Comment and associated contribution Accept-Modified with the modification being that the group accepted the entire remedy presented in the revised contribution C802.16i-07/015r1.

Reviewed comment 1014 with associated contribution C802.16i-07/017. Comment Withdrawn by commenter; contribution not provided.

Reviewed comment 1016 with associated contribution C802.16i-07/016. Comment Withdrawn by commenter; contribution not provided.

Reviewed comment 1021 with associated contribution C802.16i-07/013r1. Comment and associated contribution Accept-Modified with the modification being that the group accepted the entire remedy presented in the revised contribution C802.16i-07/013r1.

11:40am The Chair recessed the Session

1:30pm Session called to order and opened by Chair, Phillip Barber; Phillip Barber acting as Secretary

Continued WG Comment Resolution of Comments Received on Working Group Letter Ballot #25a on P802.16i/D2. 43 comments are in 802.16-07/030. 6 Contributions in Netman Upload Directory.

Reviewed comment 1023 with associated contribution C802.16i-07/014. Comment and associated contribution Accepted.

The Chair loaded 18 late comments into the database and republished the database as 802.16-07/030r1.

Reviewed comment 1060L with associated contribution C802.16i-07/019r1. Comment and associated contribution Accepted.

Completed WG Comment Resolution of Comments Received on Working Group Letter Ballot #25a on

P802.16i/D2. 61 comments are in 802.16-07/030r1. 7 Contributions in Netman Upload Directory.

Continued Review of the new 802.11 SG on multimedia content distribution, and its interaction with 802.1, to determine if 802.16 may benefit from similar interaction on this matter.

The Chair presented the 802.11 contribution IEEE 802.11-06/1783r0 '11-06-1783-00-000v-timing-measurement-enhancement-synchronization-av-streams.pdf'

802.16 current support for timing alignment mechanism (through the U-TDOA feature) and reservation, admission control, and traffic shaping (QoS & Scheduler) seems to obviate any need to develop new features to meet 802.1AVB requirements. The group is not sure of the applicability of the proposed use case model. The group feels that on first review, it appears that a Recommended Practice document on how to map 802.1AVB standards onto 802.16 QoS/Scheduler would likely meet 802.1 needs. The finding is based on a purely cursory review of available material. Further investigation is warranted.

4:35pm Begin TG Closing Session

Motion:

To accept the resolution of commentary database 802.16-07/030r1 as the resolution of Working Group Ballot recirculation on P802.16i/D2.

Moved by: Scott Henderson

Seconded by: Richard van Leeuwen

For: 5 Against: 0 Abstain: 0

Motion passed

Motion:

To authorize the editor to revise P802.16i/D2, in accordance with the comment resolutions in 802.16-07/030r1, and reissue the document as P802.16i/D3.

Moved by: Joey Chou

Seconded by: Scott Henderson

For: 5 Against: 0 Abstain: 0

Motion passed

Motion:

To authorize the NetMan TG Chair to request the Working Group Chair to initiate a Working Group Ballot recirculation on P802.16i/D3, to close around July 9, 2007.

Moved by: Scott Henderson

Seconded by: Joey Chou

For: 5 Against: 0 Abstain: 0

Motion passed

New Business

5:05pm

Motion:

To adjourn

Moved by: Richard van Leeuwen

Seconded by: Eero Wallenius

Passed by unanimous voice consent