IEEE P802.11  
Wireless LANs

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| [March 2011 MAC ad hoc meeting minutes] | | | | |
| Date: 2011-03-18 | | | | |
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Abstract

[This document is the meeting minute of TGac MAC ad hoc group. Four MAC ad hoc sessions were held between March 14 and March 17, 2011]

PM2, Mon, 3/14/2011

5:15PM, Jason Lee (ETRI) called the MAC ad hoc meeting to start, after the TGac meeting.

Jason went though the meeting agenda. 4 MAC sessions scheduled.

Jan 2011, LA, meeting minutes was approved unanimously.

Additional submissions were solicited but no requests.

Osama commented that Brian’s presentation Doc# 11-372 needs to be added.

**Daewon Lee (LG) presented 11-0302r0, “Comment Resolution Neighbor Report”**

* Daewon wanted to run the straw poll.
* Robert suggested delay the straw poll for people to have enough time to think about the resolution.
* The straw poll was delayed.

**Daewon Lee (LG) presented 11-0303r0, “Comment Resolution-VHT BSS load element”**

* Daewon encouraged people to read the text and discuss with them on the topic.

**Daewon Lee (LG) presented 11-0305r0, “Comment Resolution-Channel Switch Announcement”**

* Kyungchul Kwak (LG) suggested using the CPM element proposed by 11af.
* Daewon argued that this would require 11ac implementer to implement 11af, which is more complicated.
* Kyungchul argued CPM element is more globally acceptable.
* Brian mentioned that regulations could change in the future.
* Yongho mentioned that CPM does not support 80MHz and 160MHz, so solution in this proposal is better.
* Peter asked what about an 80MHz STA received a request to switch to the 160MHz operation?
* Youhan saw no problem of this.

AM1, Tue, 3/15/2011

8:15AM: Jason called the meeting to start.

Jason went through the agenda.

Jason called for additional presentations. Robert has additional contributions but not having the document numbers yet.

**8:20AM: Daewon Lee presented 11-0306, “Comment Resolution-TPC“**

* Menzo (Qualcomm) asked a clarification question on how the duplicate channel-power identifier works.
* Mark (CSR) clarified the meaning of Coverage Class and Operating Class.
* Menzo commented that it could work this way as proposed. But he thought maybe it is better to define a new information element because you don’t need to consider legacy device.
* Daewon encouraged discussion.
* Mark asked two clarification questions.

**8:50AM: Simone Merline presented 11-0347r0, “Comment Resolution Partial AID field”**

* Jarkko asked question on the use of the partial AID.

**9:05AM: Jarkko Kneckt presented 11-313r2, “SU-MIMO-type-for-Group\_addressed-frames-ppt``**

* Robert pointed out the proposed solution is more complicated.
* Simone didn’t see the point of changing the GID field.
* Jarkko ran a straw poll, 110315\_a
  + *Are you in favor of detecting the TA and RA of the group addressed frame from PLCP header in order to be able to filter group addressed frames and save power?*
  + Result: Y/N/A= 1/9/16

**9:33AM: Yong Liu presented 11/374, “resolutions for CIDs 43, 44, 45, 712, 773, 1815”**

* The promotion, 110315\_a**,** was run,
  + *Do you agree to the resolutions for CIDs 43, 44, 45, 712, 773, 1815 as in doc 11/11-0374r0 and to be forwarded to the 11ac task group for motion?*
  + Results: Y/N/A=17/0/6, pre-motion passed.

The meeting ended at 9:54AM and the MAC ad hoc will recess until PM2, Wed.

AM1, Wed, 3/16/2011

4:05PM: Jason called the meeting to start.

Jason went through the agenda. Some discussions on adding, changing order, and removing presentations (see 371r5).

**Simone Merlin (Qualcomm) presented 11/345, “Comments Resolution-HT-Control-field”**

* Sudieer asked questions on his own comment CID=233.
* Simone planned to run a pre-motion on Thu, AM2

**Brian Hart (Cisco) presented 11/372r2, “D0.1 Comment Resolution”**

* Brian ran the pro-motion, 110316\_a
  + *Do you agree with the resolutions for CIDs 153, 479 as in doc 11/11-0372r2 and to be forwarded to the 11ac task group for motion?*
  + Result: Pre-motion passed unanimously

**Daewon Lee (LG Electronics) presented 11/0304, “Comment Resolution-Link Adaptation”**

* Xun Yang from Huawei asked questions.
* Peter asked why one SNR for even 80+80 transmission?

**Robert Stacey presented 11-396, “Resolution for CIDs 1118, 1119, 1122 on Frame Body Size”**

* Mark mentioned there is some ambiguity about the uses of VHT STA and HT STA in the proposed text. He suggested adding “non-VHT” in front of “HT STA”
* Mark also pointed out some errors on the proposed changed. They were corrected on-the-fly and a new revision will be updated.
* Yong did not like the term of “non-VHT HT STA”. He suggested removing the “non-VHT”.
* Mark did not agree fully.
* The newly added “non-VHT” was removed.
* Pre-motion 110316\_b was run
  + *Do you agree with the resolutions for CIDs 1118, 1119, 1122 as in doc 11/11-0396r2 and to be forwarded to the 11ac task group for motion?*
  + Result: pre-motion passed unanimously

**Jarkko (Nokia) presented 11-384r1, Resolutions-to-static-RTS-CTS-comments**

* Robert asked how the times were calculated.
* Grisha Lerner (TI) asked whether the presenter want this feature mandatory or optional.
* Robert indicated this is quite a big change to the standard. He hoped to see the proof of performance improvement before making the decision.
* Jarkko ran the straw poll 110316\_a
  + *Do you accept to include the normative text as described in 11-11-0384-02-00ac-resolutions-to-static-RTS-CTS-comments.doc to the latest 802.11ac specification and to solve CIDs 683 and 698?*
  + Result: Y/N/A=1/7/40

AM1, Thu, 3/17/2011

10:30AM: Jason called the meeting to start.

Agenda was discussed.

* Peter delayed his presentation (11/375)
* Jarkko added another presentation (11-11-445r1)

**Yongho Seok (LG Electronics) presented 11-0310r0, “Comment Resolution-TDLS”**

**Daewon (LG Electronics) ran the pre-motions, 110317\_a, on and Neighbor Report (11/302)**

* *Do you agree with the resolutions for Neighbor Report including CID 1049 as in doc 11/11-0302r0 and to be forwarded to the 11ac task group for motion?*
* Pre-motions passed unanimously.

**Daewon (LG Electronics) ran the pre-motions, 110317\_b, on Channel Switch Announcement (11/305r1).**

* *Do you accept to include the normative text as described in 11-11-0305-01-00ac-comment-resolution-channel-switch-announcement.doc to the latest 802.11ac specification and to solve CIDs 558, 1454, 1044, 1050, and 1524?*
* Pre-motions passed unanimously.

**Daewon (LG Electronics) ran the pre-motions, 110317\_c, VHT BSS Load element (11/303r2)**

* *Do you agree with the resolutions for VHT BSS Load element including CIDs 1260, 1443, 1444, 1529, 1530, 1259, 1042, 1458, 707, 1771, 771, and 1152 as in doc 11/11-0303r2 and to be forwarded to the 11ac task group for motion?*
* Pre-motions passed unanimously.

**Daewon (LG Electronics) ran the pre-motions, 110317\_d, on TPC (11/306r2).**

* *Do you agree with the resolutions for Transmit Power Limit for Wider BW including CIDs 559, 1030, 1031, 1032, 1453, 1454, 1455, and 1525 as in doc 11/11-0306r2 and to be forwarded to the 11ac task group for motion?*
* Pre-motions passed unanimously.

**Yongho Seok (LG Electronics) ran the pre-motion, 110317\_e, on “Comment Resolution-TDLS”** (11-0310r1, which he presented at the beginning of this session), after reflecting minor suggestions on text changes.

* *Do you agree with the resolutions for Wide Bandwidth TDLS including CIDs 1043 and 169 as in doc 11/11-0310r0 and to be forwarded to the 11ac task group for motion?*
* Pre-motions passed unanimously.

**Haiguang Wang (I2R) presented 11-410r2, Data Transmission Protection on the IEEE 802.11ac MU-MIMO Downlink**

* Robert mentioned the group ID we defined allows overloading but this proposal requires unique set of STAs. The problem is one Group ID cannot identify 4 exact STAs.
* Peter said we can set aside part of Group IDs to be used in this case.
* Yong mention we don’t have enough Group IDs
* Robert said it is difficult (by their simulation) to show the benefit with this spending. He wanted to see this scheme provides benefit.
* Daewon said it is important to build a robust system. He wanted to see the entire behavior of the scheme. For example, what if one of the CTS is lost?
* Daewon: on Slide 7, what if the uplink transmissions are not well synchronized.
* Haiguang: we are not going to propose this one. But it seems doable.
* Daewon: at this stage, we are very close to the letter ballot. We need to see the complete proposal to fully analyze it.
* Peter spoke to support this proposal.
* Straw Poll (110317\_a):
  + Are you in favor of allowing using group ID in RTS?
  + Result: Y/N/A=7/8/9

**Simone (Qualcomm) ran pre-motion, 110317\_f on comment resolutions of HT Control Field (11/345r0).** The presentation was given on Monday. No comments/discussions received after that.

* *Do you agree with the resolutions for 11ac HT Control field including CIDs 23, 906, 1344, 1473, 1120, 1472, 100, 908, 233, 907, 1234, 1345, 885, 24, 966, 1004, 1005, 1353, 1401, 1578 as in doc 11/11-0345r0 and to be forwarded to the 11ac task group for motion?*
* Pre-motions passed unanimously.

**Jarkko presented 11/445r1 on Partial AID**

* Menzo: it is hard to implement.
* Simone: it requires dynamic change/processing.
* Jarkko ran three straw polls
  + Straw Poll 110317\_b:
    - *Are you in favor of having a part of the transmitter address present in the Partial AID of the SU VHT PPDU that carries group addressed MPDUs?*
    - Result: Y/N/A=2/8/14
  + Straw Poll 110317\_c:
    - *Are you in favor of having a part of the receiver address (Group address) present in the Partial AID of the SU VHT PPDU that carries group addressed MPDUs?*
    - Result: Y/N/A=2/9/11
  + Straw Poll 110317\_d:
    - *Do you agree on Partial AID for the mesh STAs?*
    - Result: Y/N/A=1/5/11