IEEE P802.11  
Wireless LANs

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| IEEE 802.11 TGax, MU Ad hoc  January 2016 Atlanta TGax MU Ad hoc Meeting Minutes | | | | |
| Date: 2016-01-19 | | | | |
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Abstract

The meeting minutes from the MU Ad Hoc group meeting of TGax in the IEEE 802.11 Atlanta session January 18th – 22nd, 2016.

**IEEE 802.11 Task Group ax, MU Ad hoc**

**January 2016 Atlanta Meeting**

**January 18th – 22nd, 2016**

**MU Adhoc Session #1**

**Tuesday, January 19th, 2016, PM3 TGax Session (7:30 – 9:30PM)**

1. **The meeting called to order by Sigurd Schelstraete (Quantenna), the co-chair of the TGax MU Ad hoc**
   1. At 8:30 pm, 157 people are present.
2. **Announcement**
   1. Agenda Doc.11-15/0147 on the server. Rev. 0 is the working document.
   2. Meeting Protocol: The Chair asked to state name and affiliation when speaking for the first time.
   3. Attendance reminder.
      1. The attendance server: https://imat.ieee.org/
3. **The chair reviewed the mandatory 5 slides of P&P.**
   1. Instructions from the WG Chair. [reviewed~~, did not review~~]
   2. Participants, Patents, and Duty to Inform. [reviewed~~, did not review~~]
   3. Patent Related Links. [reviewed, ~~did not review~~]
   4. Call for potentially essential patents.
      1. Chair asked if anyone is aware of potentially essential patents

[Asked. ~~Did not ask~~]

* + 1. Potentially essential patents

[None reported. ~~Reported as follows~~]

* 1. Other Guidelines for IEEE WG Meetings.

1. **The Chair identified 9 presentations assigned by the TGax chair to be treated in MU Ad hoc**
   1. No new presentations, other than those listed in the agenda, were requested.
   2. 16/0065r0 was withdrawn by the author Tomoko Adachi (Toshiba)

1. **The Chair asked for approval of the agenda**
   1. No objection raised
2. **Presentation of contributions**
   1. 0048 Protection using MU RTS/CTS
      1. Strawpoll #1 (pre-motion): ***Do you agree to add to the TG Specification Framework:***

*4.y.z After MU-RTS/CTS frame exchange, an AP may trigger short frame exchange to check which STA has responded to the MU-RTS frame.*

* *Examples of such frames are Buffer Status Request, PS-Poll, etc.*
* *Details on definition for short frame are TBD.*

*Y/N/A: 24/10/Many*

*SP fails*

* 1. 0031 UL MU Carrier Sensing (CS) Rules
     1. Strawpoll #1 (pre-motion):  
        *Do you support adding the following text into Section 4.3 of the SFD:*

*When a STA is required to sense the medium before its UL MU transmission in response to a trigger frame, it senses the medium using ED after receiving the PPDU that contains the trigger frame (i.e. during the TBD IFS time)?*

Y/N/A: 68/3/Some

SP passes

* + 1. Strawpoll #2 (pre-motion):

*Do you support adding the following text into Section 4.3 of the SFD:*

*When a STA needs to perform the energy detect (ED) before its UL MU transmission in response to a trigger frame, it shall perform the energy detect (ED) at least in the subchannel that contains the STA’s UL allocation, where the sensed subchannel consists of either a single 20MHz channel or multiple of  20MHz channels?*

Y/N/A: 79/12/Some

SP Passes

* 1. 0054/r1 UL MU CCA Response
     1. Strawpoll #1 (pre-motion):

Do you support to add the following text into Section 4.3 of the SFD:

*When required to sense the medium before its UL MU transmission in response to a trigger frame, if a STA detects the 20MHz channels containing the allocated UL RU are not all idle, then the STA shall not transmit anything in the allocated UL RU.*

Y/N/A: 85/0/Some

SP passes

* 1. 0057r0 Indication for UL MU Carrier Sensing

Do you agree to change the SFD text in the clause 4.3 as below?

~~A STA shall consider CCA status to respond to a Trigger frame under a non-null TBD set of conditions~~.

*Trigger frame carries an indication of whether or not the carrier sensing is required for the STA to transmit a UL MU PPDU in response to a Trigger frame. If a Trigger frame indicates that the carrier sensing is required, the STA shall consider the channel status of the physical carrier sensing meaning ED and virtual carrier sense (NAV) before UL MU transmission in response to the Trigger Frame. Otherwise, the STA may transmit a UL MU PPDU without the carrier sensing. The AP shall require the carrier sensing except under TBD conditions*.

Y/N/A: 59/0/Some

SP Passes

* 1. 0067r1 MAC Padding in Trigger Frame

Do you agree to add the following text in Section 4.3 of the SFD:

*The inter frame space between a PPDU that contains a trigger frame and its triggered UL MU PPDU is SIFS*

Y/N/A: 79/0/Some

SP Passes

Do you agree to add the following text to the SFD?

*The spec shall define a MAC padding scheme (TBD) for trigger frame sent in Non-HT PPDUs*

Y/N/A: 68/0/Some

SP Passes

1. The Chair announced the end of the MU ad hoc session at 9:32 pm.