

TGax July 2016 Meeting Agenda

Date: 2016-06-15

Authors:

Name	Company	Address	Phone	email
Osama Aboul-Magd	Huawei Technologies	303 Terry Fox Drive Kanata, ONT, Canada K2K-3J1	613-287-1405	Osama.aboulmagd@Huawei.com

IEEE 802.11 TGax: High Efficiency WLAN Task Group

**San Diego, USA
July 24-29, 2016**

Chair: Osama Aboul-Magd (Huawei Technologies)

Vice Chair: Simone Merlin (Qualcomm)

Vice Chair: Ron Porat (Broadcom)

Secretary: Yasuhiko Inoue (NTT)

Technical Editor: Robert Stacey (Intel)

Meeting Protocol

- **Please announce your affiliation when you first address the group during a meeting slot**

Attendance

- <http://newton.meeting.verilan.com>

1. Register
2. Indicate attendance

Attendance, Voting & Document Status

- Make sure your badges are correct
- If you plan to make a submission be sure it does not contain company logos or advertising
- Questions on Voting status, Ballot pool, Access to Reflector, Documentation, member' s area
 - see Jon Rosdahl – jrosdahl@ieee.org
- Cell Phones Silent or Off

Patent Policy

- **Following 5 slides**

Instructions for the WG Chair

The IEEE-SA strongly recommends that at each WG meeting the chair or a designee:

- Show slides #1 through #4 of this presentation
- Advise the WG attendees that:
 - The IEEE's patent policy is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*;
 - Early identification of patent claims which July be essential for the use of standards under development is strongly encouraged;
 - There July be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.
- **Instruct the WG Secretary to record in the minutes of the relevant WG meeting:**
 - That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) 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) of which the participant is personally aware and that July 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.
- The WG Chair shall ensure that a request is made to any identified holders of potential essential patent claim(s) to complete and submit a Letter of Assurance.
- It is recommended that the WG chair review the guidance in *IEEE-SA Standards Board Operations Manual* 6.3.5 and in FAQs 14 and 15 on inclusion of potential Essential Patent Claims by incorporation or by reference.

Note: **WG** includes Working Groups, Task Groups, and other standards-developing committees with a PAR approved by the IEEE-SA Standards Board.

Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:
 - “Shall inform the IEEE (or cause the IEEE to be informed)” of the identity of each “holder of any potential Essential Patent Claims of which they are personally aware” if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
 - “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group
- Early identification of holders of potential Essential Patent Claims is strongly encouraged
- No duty to perform a patent search

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

<http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6>

IEEE-SA Standards Board Operations Manual

<http://standards.ieee.org/develop/policies/opman/sect6.html#6.3>

Material about the patent policy is available at

<http://standards.ieee.org/about/sasb/patcom/materials.html>

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

This slide set is available at
<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt>

Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
 - Either speak up now or
 - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
 - Cause an LOA to be submitted

Other Guidelines for IEEE WG Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
 - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
 - **Don't discuss specific license rates, terms, or conditions.**
 - Relative costs, including licensing costs of essential patent claims, of different technical approaches July be discussed in standards development meetings.
 - Technical considerations remain primary focus
 - **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
 - **Don't discuss the status or substance of ongoing or threatened litigation.**
 - **Don't be silent if inappropriate topics are discussed ... do formally object.**

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association’s Antitrust and Competition Policy” for more details.

Agenda Items for the Week

- Approve TG and Telecons minutes since May meeting.
- Resolution of comments received on draft D0.1
- Ad Hoc group meetings
- Technical Presentations and related straw polls and/or motions
- Schedule Telecon times.

General Flow of the Meeting

- **Monday July 25, 08:00 – 10:00**
 - Call Ad Hoc Meeting to order
 - IEEE 802 and 802.11 IPR Policy and procedure.
 - AD hoc meeting Agenda setting
 - Approval of ad hoc meeting agenda
 - Call for submissions
 - Presentations
 - Adjourn
- **Monday July 25, 16:00 – 18:00**
 - Call Meeting to order
 - IEEE 802 and 802.11 IPR Policy and procedure.
 - Review from November 2014 meeting
 - Call for submissions
 - Agenda setting and approval
 - TG Motions
 - Presentations
 - Recess
- **Tuesday July 26, 10:30 – 12:30**
 - Ad Hoc Group Meetings
- **Tuesday July 26, 16:00 – 18:00**
 - Ad Hoc Group Meetings
- **Tuesday July 26, 19:30 – 21:30**
 - Ad Hoc Group Meetings
- **Wednesday July 27, 08:00 – 10:00**
 - Call Meeting to order
 - IEEE 802 and 802.11 IPR Policy and procedure.
 - Progress Review
 - Presentations
- **Wednesday July 27, 13:30 – 15:30**
 - Ad Hoc Group Meetings
- **Wednesday July 27, 16:00 – 18:00**
 - Call Meeting to order
 - IEEE 802 and 802.11 IPR Policy and procedure.
 - Presentations
 - TG Motions
 - Recess
- **Thursday July 28, 10:30 – 12:30**
 - Call Meeting to order
 - IEEE 802 and 802.11 IPR Policy and procedure.
 - Presentations
 - TG Motions
 - Recess
- **Thursday July 28, 13:30 – 15:30**
 - Call Meeting to order
 - IEEE 802 and 802.11 IPR Policy and procedure.
 - Presentations
 - TG Motions
 - Goals for March 2016
 - Telecon Schedule
 - Adjourn

TGax Schedule in a Glance

	Monday	Tuesday	Wednesday	Thursday
AM1	TGax		TGax	
AM2		PHY MAC		TGax
PM1			PHY MAC	TGax
PM2	TGax	SR MU	TGax	
EVE		PHY MAC		

* Ad Hoc group is tbd

Submissions (PHY)

DCN	Title	Author	ad hoc
11-16/0816	Comment Resolution for CID 2183	Daewon Lee	PHY
11-16/0872	CR HE-SIG-A Part II	Ross Jian Yu	PHY
11-16/0873	CR HE-SIG-B Part I	Ross Jian Yu	PHY
11-16/0891	LDPC for 1024QAM	Hongyuan Zhang	PHY
11-16/0892	Spec Text on LDPC for 1024QAM	Hongyuan Zhang	PHY
11-16/0893	11ax Extended Range PPDU	Bin Tian	PHY
11-16/0894	HE-LTF Capabilities	Hongyuan Zhang	PHY
11-16/0895	Spec Text for HE-LTF Capabilities	Hongyuan Zhang	PHY
11-16/0896	11ax Beamformee Capabilities	Hongyuan Zhang	PHY
11-16/0897	Spec Text for Beamformee Capabilities	Hongyuan Zhang	PHY
11-16/0898	BW Field in HE-MU Format	Hongyuan Zhang	PHY
11-16/0899	Spec Text for BW Field in HE-MU Format	Hongyuan Zhang	PHY
11-16/0900	PHY Comment Resolution for CID 1052 and 2519	Hongyuan Zhang	PHY
11-16/0903	Gamma phase rotation for HE PPDU	Bin Tian	PHY
11-16/0904	proposed text for gamma phase rotation for HE PPDU	Yujin Noh	PHY
11-16/0906	RU restriction on 20MHz operating STAs	Yujin Noh	PHY
11-16/0908	CR - proposed text on RU restriction of 20MHz STAs	Joonsuk Kim	PHY
11-16/0910	Minimum Occupied Bandwidth	Joonsuk Kim	PHY
11-16/0914	Bit field finalization of HE-SIG-A	Ron Porat	PHY
11-16/0915	Text for bit field finalization of HE-SIG-A	Lochan Verma	PHY
11-16/0920	PHY comment resolution for CID 1659,493,494	Lochan Verma	PHY
11-16/0922	PHY CR 1024 QAM	Xiaogang Chen	PHY
11-16/0923	PHY CR DCM Constellation Mapping	Sriram Venkateswaran	PHY
11-16/0928	CR on Section 26.3.9.8 - HE-SIG-B	Sriram Venkateswaran	PHY
11-16/0937	11ax Comment Resolutions for Clauses 26.3.2-26.3.9.3-26.3.9.4-26.3.9.5-26.3.10.2-26.3.10.13	Kaushik Josiam	PHY
11-16/0964	Considerations on MAC-PHY interactions during SR operations	Rui Cao	PHY
		Jing Ma	PHY

Submissions (MAC)

34 submissions

DCN	Title	Author	ad hoc
11-16/0828	HE Fragmentation - part 1	Alfred Asterjadhi	MAC
11-16/0829	Comment Resolution for Section 10.24.10 Block Ack/GCR block ack	Reza Hedayat	MAC
11-16/0844	CCO-Intra_PPDU_PS	Alfred Asterjadhi	MAC
11-16/0856	Issue of Buffer Status reporting	Stephane Baron	MAC
11-16/0860	comment resolution on A-MPDU format	Yongho Seok	MAC
11-16/0861	comment resolution on mu acknowledgment procedure	Yongho Seok	MAC
11-16/0862	comment resolution on subclause 25.11	Yongho Seok	MAC
11-16/0864	40.1 comment resolution on clause 6	Yasuhiko Inoue	MAC
11-16/0867	CIDs for CIDs: Section 9.3.1.9.3 Compressed BA format	George Chierian	MAC
11-16/0868	CIDs for Section 9.3.1.9.7 Multi STA BAs	George Chierian	MAC
11-16/0869	Comment resolution section 9.3 TWT	Zhou Lan	MAC
11-16/0871	Trigger Frame Per User Info Order	Zhou Lan	MAC
11-16/0877	Comment resolution on CID 783 (TXOP Duration field format)	Jeongki Kim	MAC
11-16/0878	Comment resolution on CID 782 (Intra-PPDU PS)	Jeongki Kim	MAC
11-16/0881	Comment resolution on ROMI	Jayh Park	MAC
11-16/0882	Comment resolution on TOMI	Jayh Park	MAC
11-16/0883	Comment resolution for CID152	Jayh Park	MAC
11-16/0884	Spec. Text for HE Operation element and AID Assign Rule	Jianhan Liu	MAC
11-16/0890	Comment Resolution on NAV Setting of Single and Multiple Protection and Control Response	Po-Kai Huang	MAC
11-16/0913	SU Multi-TID Rules	Jarkko Knecht	MAC
11-16/0916	TID value of ALL ACK signaling	Woojin Ahn	MAC
11-16/0917	Text for TID value of ALL ACK signaling	Woojin Ahn	MAC
11-16/0918	Discussions on Partial BSS Color	Geonjung Ko	MAC
11-16/0924	NAV resetting with RTS/MU-RTS	Weimin Xing	MAC
11-16/0925	Spec text on NAV resetting with RTS/MU-RTS	Weimin Xing	MAC
11-16/0941	CR HE Fragmentation - part 2	Ming Gan	MAC
11-16/0942	CR Service Field	Ming Gan	MAC
11-16/0951	Setting for TXOP Duration Field	Po-Kai Huang	MAC
11-16/0952	Spec text trigger frame per user info order	Zhou Lan	MAC
11-16/0953	Comment Resolution and Spec Text for Setting for TXOP Duration field	Po-Kai Huang	MAC
11-16/0960	AP access procedure for UL MU operation	Jinsoo Ahn	MAC
11-16/0961	Consideration on Multi-STA BlockAck Optimization	Hanseul Hong	MAC
11-16/0962	EDCA rules-follow up 1	Jing Ma	MAC
11-16/0963	EDCA rules-follow up 2	Jing Ma	MAC
11-16/0966	CID71 and CID190 Resolutions	Jarkko Knecht	MAC

Submissions (MU)

DCN	Title	Author	ad hoc
11-16/0866	Comment Resolution of Section 26.3.13 MU-MIMO	Kome Oteri	MU
11-16/0875	CR for the section 10.3.2.8a CS Condition to Respond CTS	Kiseon Ryu	MU
11-16/0876	CR for the section 25.5.2.4 UL MU CS CCA and CS Required Bit	Kiseon Ryu	MU
11-16/0880	UL MU Transmission Rules - EDCA backoff	Jayh Park	MU
11-16/0885	Comment Resolution on UL MU CS NAV Considerstion	Po-Kai Huang	MU
11-16/0886	Comment Resolution for some UL MU CS TBD	Po-Kai Huang	MU
11-16/0887	Spec Text for MU-RTS restriction on HE MU PPDU	Po-Kai Huang	MU
11-16/0926	Soliciting UL_MU_ACK	Raja Banerjee	MU
11-16/0929	CR - UL MU Operation	Simone Merlin	MU
11-16/0930	CD - DL MU Operation	Simone Merlin	MU
11-16/0938	Comment Resolution for Sub-clause 25.10.4	Chittabrata Ghosh	MU
11-16/0958	UL OFDMA for Unassociated STAs	Leonardo Lanante	MU

12 submissions

Submissions (SR)

DCN	Title	Author	ad hoc
11-16/0879	Comment resolution on SR for VHT PPDU's	Jeongki Kim	SR
11-16/0889	comment-resolution-SR-Intra-BSS-detection	Young Hpoon Kown	SR
11-16/0901	Clarification of SR Fields in HE Trigger Based PPDU	Daewon Lee	SR
11-16/0902	Proposed Text Changes for SR Fields in HE Trigger-Based PPDU	Daewon Lee	SR
11-16/0905	SR Fields Clarification	Ron Porat	SR
11-16/0919	Discussions on SR Fields in HE Trigger-based PPDU	Geonjung Ko	SR
11-16/0310	DSC Proposal Text	Graham Smith	SR
11-16/0945	Clarifications for OBSS_PD-based SR parameters	Laurent Cariou	SR
11-16/0946	Proposed text changes for OBSS_PD-based SR parameters	Laurent Cariou	SR
11-16/0957	Comment Resolutions on OBSS_PD Conditions in 25.9.3	James Wang	SR

10 submissions

Submissions (TG)

DCN	Title	Author	ad hoc
11-16/0835	EIFS	Alfred Asterjadhi	TG
11-15/1095	OFDMA Performance in 11ax	Suhwook Kim	TG
11-16/0870	Concluding MAC Trigger Padding	Zhou Lan	T G
11-16/0907	20MHz HE devices	Joonsuk Kim	TG
11-16/0909	CR - proposed text on 20MHz devices	Joonsuk Kim	TG
11-16/0949	MAC trigger frame padding follow up	Zhou Lan	TG
11-16/0965	On High Efficiency WLAN (HEW) TG PAR Scope	Osama Aboul-Magd	TG

9 submissions adding Ke Yao comment resolution

Agenda for Monday July 25, 08:00 – 10:00

- **Call meeting to order**
- **Patent policy, etc.**
- **Ad Hoc meeting (No motions)**
- **Call for submissions.**
- **Set up agenda for the ad hoc meeting.**
- **Presentations**
- **Adjourn**

Agenda for Monday July 25, 16:00 – 18:00

- Call meeting to order
- Patent policy, etc.
- Call for submissions
- Set Ad Hoc Groups schedule and approve agenda
- Comment Resolution Tutorial – Adrian Stephens
- Summary from May 2016 meeting
- TG motions
 - Approve TG meeting and Telecon minutes since May meeting.
 - Approve resolutions of comments, if needed.
- **Comment Resolution Status – Robert Stacey**
- **Timeline**
- **Presentations and Comment Resolution**
 - TXOP Duration Issues (Jeongki Kim and Bo Sun)
 - 11-16/0965; On HEW TG PAR Scope
 - 11-15/1095; OFDMA Performance in 11ax
 -

- **Recess**

Submission

Slide 21

Osama Aboul-Magd (Huawei Technologies)

Summary from May 2016 Meeting

- Received about 70 submissions. Majority of the submission were requesting changes to the TG Specification Framework document. Few submissions were addressing comment resolution mainly for the PHY clause.
- Agreed to terminate the Specification Framework process. The frame of reference is Draft D0.1.
 - Future submissions shall bring text to continue developing the TG draft
- Approved the resolutions of about 200 comments, most of them addressing the PHY clause
- Revisited the timeline and accepted a new modified timeline – next slide.
- The TG had a series of telecons where resolutions of about 227 comments were discussed.

Submissions Covered During Telecons

- <https://mentor.ieee.org/802.11/dcn/16/11-16-0725-03-00ax-comment-resolution-on-9-3-1-23.docx> (6 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0773-02-00ax-comment-resolution-section-25-6-he-sounding.docx> (15 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0774-01-00ax-comment-resolution-on-9-3-1-23-ruallocation.docx> (14 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0780-01-00ax-comment-resolution-on-9-3-1-23-phy-tbd.docx> (31 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0775-01-00ax-comment-resolution-on-section-26-3-12-4-phy-mu-mimo-power-pre-correction.docx> (7 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0766-00-00ax-he-variant-ht-control-ul-mu-response.docx> (28 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0798-00-00ax-he-variant-ht-control-general.docx> (33 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0815-02-00ax-comment-resolution-mu-rts-scrambler-seed.docx> (5 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0819-01-00ax-cids-for-section-9-3-1-9-blockack-frame-format.docx> (9 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0806-00-00ax-he-variant-ht-control-buffer-status-report.docx> (24 CIDs)
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0807-00-00ax-comment-resolution-on-mu-rts-cts-procedure.docx> (27 CIDs)
- **Note:** A new revision is expected to accommodate Mark's comments
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0808-00-00ax-comment-resolution-on-trigger-frame-format-mu-rts-variant.docx> (14 CIDs)
- **Note:** A new revision is expected to accommodate Mark's comments
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0813-00-00ax-cr-on-section-26-2-2-txrvector-parameters.doc> (4 CIDs)
- **Note:** We need to revisit this document again to try to cose a couple of TBDs
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0836-00-00ax-comment-resolution-on-section-9-4-1-phy-mu-mimo-compressed-beamforming-report.docx> (10 CIDs)
- **Note:** Adds significant amount of text and introduces new frame.

Approval of TG Minutes (March 2016 Meeting and Telecon Minutes)

- Approve TGax minutes of meetings and teleconferences from May 2016 interim meeting to today:

- <https://mentor.ieee.org/802.11/dcn/16/11-16-0686-00-00ax-tgax-may-2016-waikoloa-meeting-minutes.docx>
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0768-05-00ax-tgax-teleconference-minutes-from-june-to-july-2016.docx>
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0755-00-00ax-tgax-may-2016-waikoloa-phy-ad-hoc-meeting-minutes.docx>
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0716-00-00ax-mu-ad-hoc-meeting-minutes-may-2016.docx>
- <https://mentor.ieee.org/802.11/dcn/16/11-16-0701-00-00ax-combined-spatial-reuse-mac-ad-hoc-group-meeting-minutes.docx>

- Move: Bo Sun

Second: Robert Stacey

- ~~Approved with no objection~~

Submission

Slide 24

Osama Aboul-Magd (Huawei Technologies)

Comment Resolution Status (Editor Report)

- **Robert Stacey (Technical Editor)**

From IEEE 802.11 Operation Manual

- <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-14-0000-802-11-operations-manual.docx>

Motions modifying drafts may be made at appropriate times during meetings. Complex technical changes to a draft shall be in a submission that has been accepted by document control according to document formats specified in section 3.7 of this document and has been made available electronically for a **period of not less than four active 802.11 WG session hours**. The TG chair determines if a technical change is sufficiently complex to require a submission.

When a CRC is following the “Accelerated process” for completion of a WG letter ballot, and is not meeting during an 802.11 WG session, any submission containing changes to the draft shall be on the server and announced to the appropriate TG reflector no less than 72 hours before any motion is made related to that submission.

NOTE – when a CRC is meeting coincident with an 802.11 session, it is subject to the four hour rule described in the previous paragraph.

Timeline

- **May 2014:** start of the TG
- **Nov. 2014:** First draft of the TG SFD was approved
- **Jan. 2016:** proposed TG draft
- **March 2016:** Draft D0.1 was approved and CC started
- **September 2016: Draft 1.0 and WG letter ballot**
- **March 2017:** Draft 2.0 and recirculation
- **July 2017:** MDR (Mandatory Document Review)
- **November 2017:** Formation of SB pool
- **March 2018:** Sponsor Ballot
- **December 2018:** RevCom

Agenda for Tuesday July 26, 10:30 – 12:30

- **Ad Hoc Group Meetings**
 - PHY: Seaport DE
 - MAC: Seaport G

Agenda for Tuesday July 17, 16:00 – 18:00

- **Ad Hoc Group Meetings**
 - MU : Seaport DE
 - SR: Seaport G

Agenda for Tuesday July 17, 19:30 – 21:30

- **Ad Hoc Group Meetings**
 - PHY: Seaport DE
 - MAC: Harbor EF

Agenda for Wednesday July 27, 08:00 – 10:00

- **TG Meeting**
- **Call Meeting to order**
- **IEEE 802 and 802.11 IPR Policy and procedure.**
- **Progress from Ad Hoc**
- **Presentations**
 - 11-16/0907: 20 MHz HE Devices – Joonsuk kim
 - 11-16/0909: Text for 20 MHz - Joonsuk Kim
 - 11-16/0870 and 11-16/0949 – Zhou Lan
 - 11-16/0971 – Graham Smith
 - 11-16/0957 – James Wang
 - 11-16/0947 – Laurent Cariou
- **Recess**

Agenda for Wednesday July 27, 13:30 – 15:30

- Ad Hoc Group Meetings
 - PHY: Seaport DE
 - MAC: Seaport G

Agenda for Wednesday July 27, 16:00 – 18:00

- **TG Meeting**
- **Call Meeting to order**
- **IEEE 802 and 802.11 IPR Policy and procedure.**
- **Presentations**
 - 11-16/0947 – Laurent Cariou
 - 11-16/0957 – James Wang (??)
- **TG Motions**
- **Recess**

SR Motion #9

- **Move to include the text in doc 11-16/0971r2 related to DSC in the next revision of the TG draft**
- **Move: Graham Smith**
- **Second: Sean Coffey**
- **Motion withdrawn**

SR Motion #10

- **Move to accept the proposed text changes in document “11-16/0947r4, for OBSS_PD-based SR parameters” and include the changes in the next revision of the TG draft**
- **Move: Laurent Cariou**
- **Second: Ron Porat**
- **Y: 59, N:20, A: 29**
- **Motion fails**

Agenda for Thursday July 28, AM2 and PM1

- **TG Meeting**
- **Call Meeting to order**
- **IEEE 802 and 802.11 IPR Policy and procedure.**
- **TG Motions**
- **Presentations (if time allows)**
 - George
 - Wojin
 - Chitto
 - Jerrko
 - Kaushik
- **Telecon**
- **adjourn**

SR Motion #11

- **Move to accept the proposed text changes in document 11-16/0902r3 and include the changes in the next revision of the TG draft**
- **Move: Daewon Lee**
- **Second: Ron Porat**
- **Accepted with no objection**

PHY Motion #158

- **Move to include the spec text change as shown in doc 11/16-0892r0 to the next revision of the TG draft**
- **Move: Hongyuan Zhang**
- **Second: Bo Sun**
- **Y/N/A**
- **Accepted with no objection**

PHY Motion #159

- **Move to include the spec text changes as shown in doc 11/16-0895r0 in the next revision of the TG draft, which reflects Straw Polls 1~3 in doc 11-16/0894r0**
- **Move: Hongyuan Zhang**
- **Second: Bo Sun**
- **Accepted with no objection**

PHY Motion #160

- Move to include the spec text changes as shown in doc 11/16-0897r1 in the next revision of the TG draft.
- Move: Hongyuan Zhang
- Second: Bo Sun
- Accepted with no objection
- Y/N/A

PHY Motion #161

- **Move to include the spec text changes as shown in doc 11/16-0899r0 (reflects the content of SP1 in doc 11-16/0898r0) to the next revision of the TG draft**
- **Move: Hongyuan Zhang**
- **Second: Bo Sun**
- **Y/N/A**
- **Accepted with no objection**

PHY Motion #162

- Move to add the spec text changes to D0.2 on Table 26-20
 - Fields in the HE-SIG-A for an HE SU PPDU and HE Extended Range SU PPDU as shown in doc 11/16-0915r0
- Move: Bin Tian
- Second:
- Y/N/A

PHY Motion #163

- **Move to include the spec text change as shown in doc 11/16-0909r2 in the next revision of the TG draft.**
- **Move: Joonsuk Kim**
- **Second: Bo Sun**
- **Y/N/A**
- **Approved with no objection**

PHY Motion #164

- **Move to include the spec text changes in doc 11-16/0915r2 in the next revision of the TG draft.**
- **Move: Brian Hart**
- **Second: Bo Sun**
- **Accepted with no objection**

PHY Motion #165

- **Move to add to the next revision of the TG draft:**
 - Add at the end of section 26.3.7.1 the following sentence:
 - In a HE MU PPDU transmission, at least $N \times 4 \times 26$ tones (contiguous or non-contiguous), where N is the number of 20MHz channels' legacy preambles present, shall be occupied throughout the signaled BW
- **Move: Ron Porat**
- **Second: Bo Sun**
- **Y/N/A**
- **Accepted with no objection**

MU Motion #57

- **Move to add the following to the next revision of the**

TG draft:

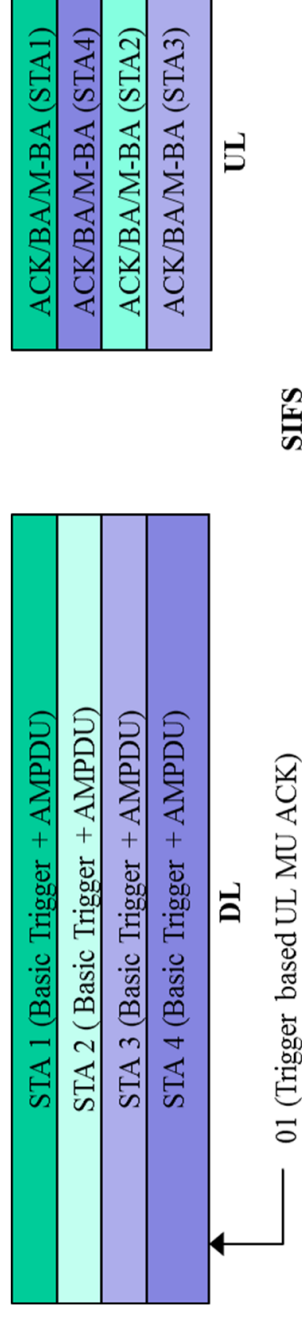
- *Insert the following at the end of 10.22.2.2:*
- When an HE STA successfully receives the corresponding acknowledgement frame in response to the MPDU sent in HE trigger based PPDU, the backoff for the associated EDCAF resumes the backoff counter countdown
- *Insert the following at the end of 10.22.2.2:*
- When an HE STA does not receive the corresponding acknowledgement frame in response to the MPDU sent in HE trigger based PPDU, the backoff for the associated EDCAF resumes the backoff counter countdown

- *Insert the following at the end of 10.22.2.2:*
- If an HE STA does not successfully receive the corresponding acknowledgement frame in response to the MPDU sent in an HE trigger based PPDU, the short retry counters and long retry counters for the associated EDCAF are not changed

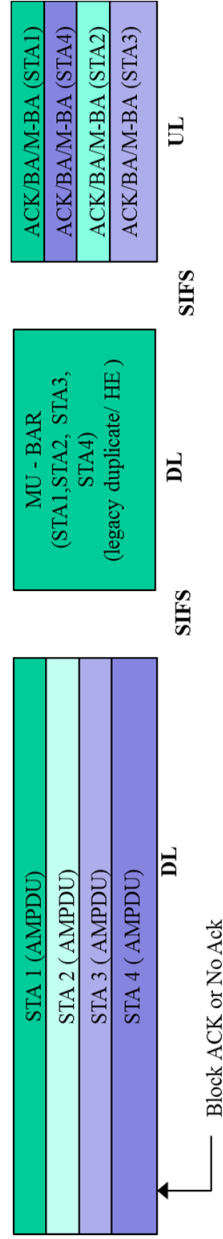
- **Move: Kiseon Ryu**
- **Second: Simone Merlin**
- **Accepted with no objection**

MU Motion

- **Move to add the following text to the next revision of the TG draft**
- **Section 25.5.1**
 - It is mandatory at the non AP HE STA to support reception of Trigger in the DL MU PPDU aggregated with Data and respond with an ACK/BA/M-BA if the QoS ACK Policy in the DL AMPDU is set to 01 (Trigger based UL MU ACK) and the STA has not set the UL MU Disable to 1.



- It is mandatory at the non AP HE STA to support reception of DL MU PPDU with QoS ACK Policy set to Block Ack or No ACK followed by a MU-BAR within SIFS followed by transmission of the ACK/BA/M-BA appropriately if the STA has not set the UL MU Disable to 1.



- **Move: Simone Merlin**
- **Second: Alfred**

~~Table till PM1~~
Submission

MAC Motion #85

- **Move to add the following text to the TG draft:**
 - The Queue Size subfield is an 8-bit field that indicates the amount of buffered traffic, for a given TC or TS at the STA sending this frame.
 - An HE non-AP STA uses the Queue Size subfield to indicate the amount of buffered traffic intended for the STA identified by the receiver address of the frame containing the QoS Control field.
- **Move: Pascal Viger Second:**
- **Y/N/A: Stephane Baron**
- **Accepted with no objection**

MAC Motion #86

- **Move to add the following text to the TG draft:**
 - Add to clause #9.3.1.23
 - “Per User Info fields with AID = 0 shall be allocated only after Per User Info fields with AID not equals to 0, if any, and before the MAC padding field, if present.”
- Move: Zhou Lan
- Second: Reza Hedayat
- Accepted with no objection

MAC Motion #87

- **Move to include the spec text change as shown in doc 11/16-0917r1 in the TG draft**
- **Move: Woojin Ahn**
- **Second: John Son**
- **Accepted with no objection**

CR Motion #15

- **Move to approve resolutions of CIDs, 9, 228**
- **2219, 2422, 2691, 2900 in doc 11-16/0725r3.**
- **Move: Raja Banerjee**
- **Second: Simone Merlin**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #16

- **Move to approve resolutions to CIDs, 55, 1000, 1221, 1915, 2234, 802,1695, 1222, 182, 971,2713, 702, 1916, 2233, 223 in doc 11-16/0773r2.**
- **Move: Raja Banerjee**
- **Second: Robert Stacey**
- **Accepted with no objection**

CR Motion #17

- **Move to accept resolutions to CIDs, 262,1083, 102, 612, 660, 830, 864, 1716, 2215, 2301, 2376, 372, 719, 864 in doc 11-16/0774r1**
- **Move: Raja Banerjee**
- **Second: Simone Merlin**
- **Y/N/A**
- **Accepted with no objection**

CR Motion # 18

- **Move to approve resolutions to CIDs, 101,103, 104,374,375, 377, 558, 561, 661, 662, 664, 688, 1296, 1299, 1301, 1717, 1718, 1882, 2113, 2114, 2174, 2217, 2302, 2421, 227, 720, 663,1303,1305,1306 in doc 11-16/0780r1**
- **Move: Raja Banerjee**
- **Second: Simone Merlin**
- **Accepted with no objection**
-

CR Motion #19

- **Move to approve resolutions to CIDs, 340, 341, 342, 343, 1023, 2734, and 2889 in doc 11-16/0775r2**
- **Move: Lochan Verma**
- **Second: Sameer Vermani**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #20

- **Move to approve resolutions of CIDs, 855, 1064, 1, 784, 90, 94, 654, 453, 1181, 2249, 2297, 2208, 2406, 2576, 2901, 2902, 2903, 2405, 2904, 1254, 1255, 1256, 1202, 1714, 1761, 1762, 1881, 1418 in doc 11-16/766r1**
- **Move: Alfred Asterjadhi**
- **Second: Young Hoon kwon**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #21

- **Move to approve resolutions of CIDs, 1126, 1127, 1179, 58, 89, 361, 2248, 1877, 1878, 792, 686, 687, 793, 1133, 91, 92, 362, 363, 2296, 1712, 1713, 1250, 1253, 1711, 2204, 2205, 2206, 211, 364, 1231, 134, 1750, 1244 in doc 11-16/0798r0**
- **Move: Alfred Asterjadhi**
- **Second: Simone Merlin**
- **Y/N/A**
- **No objection**

CR Motion #22

- **Move to approve resolutions to CIDs, 14, 127, 370, 371, 2602 in doc 11-16/0815r2**
- **Move: Young Hoon Kwon**
- **Second: Yongho Seok**
- **Accepted with no objection**

CR Motion #23

- **Move to approve resolutions to CIDs, 961, 1137, 804, 212, 2212, 2412, 2413, 1136, 1493 in doc 11-16/0819r1**
- **Move: Alfred**
- **Second: Yasu**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #24

- **Move to approve resolutions to CIDs, 824, 93, 1067, 2388, 45, 178, 254, 438, 680, 769, 770, 771, 817, 818, 1062, 1065, 1066, 1550, 2189, 2190, 2191, 2272, 2711, 147 in doc 11-16/0806r0**
- **Move: Alfred Asterjadhi**
- **Second: Matt Fischer**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #25

- **Move to approve the resolutions to CIDs, 963, 128, 214, 2171, 2428, 692, 124, 2906, 2840, 2603, 2599, 1209, 2264, 15, 13, 126, 1071, 693, 1768, 401, 1727, 403, 1644, 2281, 2282, 2279, 160 in doc11-16/0807r2**
- **Move: Po-Kai Huang**
- **Second: Yongho Seok**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #26

- **Move to accept the resolutions of CIDs, 1311, 2223, 110, 2587, 8, 2222, 1068, 1310, 1312, 2588, 2601, 2894, 1204, 2907 in doc 11-16/0808r2**
- **Move: Po-Kai Huang**
- **Second: Kiseon Ryu**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #27

- **Move to approve resolutions to CIDs, 2517, 1780, 1923, and 1610 in doc 11-16/0813r5.**
- **Move: Bo Sun**
- **Second: Hongyuan Zhang**
- **Y/N/A**
- **Accepted with no objection**

CR motion #28

- **Move to approve resolutions to CIDs, 112, 380, 381, 456, 539, 689, 690, 1154, 1316, 1862 in doc 11-16/0836r1**
- **Move: Lochan Verma**
- **Second: Sriram**
- **Y/N/A**
- **No objection**

CR Motion #29

- **Move to approve resolution to CID 2183 in document 11-16/0816r1**
- **Move: Daewon Lee**
- **Second: Young Hoon Kwon**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #30

- **Move to approve the resolutions to CIDs, 2007, 2005, 2123, 2747, 2746, 2244, 842, 846, 526, 910 in doc 11-16/0872r2**
-
- **Move: Ross Jian Yu**
- **Second: Bo Sun**
- **Accepted with no objection**

CR Motion #31

- **Move to approve resolutions to CIDs, 302, 2040, 2132, 2680, 2039, 2038, 1001,479, 2150 in doc 11-16/0873r1**
- **Move: Ross Jian Yu**
- **Second: Bo Sun**
- **Accepted with no objection**

CR Motion #32

- **Move to approve resolutions to CIDs, 2032, 2549, 2133, 2548, and 1009 in doc 11-16/1021r2**
- **Move: Ross Jian Yu**
- **Second: Bo Sun**
- **Accepted with no objection**

CR Motion #33

- **Move to approve the resolutions to CIDs, 1052, 2519 in doc 11-16/0900r1**
- **Move: Robert Stacey**
- **Second: Sriram**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #34

- **Move to approve the resolution to CID 854 in doc 11-16/0908r1**
- **Move: Joonsuk Kim**
- **Second: Yongho Seok**
- **Accepted with no objection**

CR Motion #35

- **Move to approve the resolutions to CIDs, 1659, 493, 494 in doc 11-16/0920r3**
- **Move: Xiogang Chen**
- **Second: Bo Sun**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #36

- **Move to approve the resolutions to the CIDs, 1782, 2082, 2083 in doc 11-16/0922r2**
- **Move:** Sriram Venkaeswaran
- **Second:** Bo Sun
- **Accepted with no objection**

CR Motion #37

- Move to approve the resolutions to CIDs, 836 883 884 1930 2247 292 525 904 906 908 1984 1990 1995 1988 1994 1058 1992 1991 1985 1989 1684 523 1857 271 1412 1195 1996 2532 2120 2098 293 1987 1993 2748 2749 in doc 11-16/0937r7.
- **Move: Rui Cao**
- **Second: Bo Sun**
- **Accepted with no objection**

CR Motion #38

- Move to approve resolutions to CIDs, 482, 1867, 2084, 2085 in doc 11-16/0923r1
- Need presentation can skip
- Move: Sriram Venkateswaran
- Second:
- Y/N/A

CR Motion #39

- **Move to approve resolutions to CIDs, 22, 23, 24, 136, 414, 415, 587, 694, 21, 1213, 2615, 1442, 1443, 1756, 1769, 2231 in doc 11-16/0829r3**
- **Move: Reza Hedayat**
- **Second: Brian Hart**
- **Accepted with no objection**

CR Motion #40

- **Move to approve resolutions to CIDs, 1275, 1270, 1269, 1139, 97, 2213, 1809, 1808, 1807, 1806 in doc 11-16/0867r2**
- **Move: George Cherian**
- **Second: Brian Hart**
- **Accepted with no objection**

CR Motion #41

- **Move to approve resolutions to CIDs, 76, 194, 258, 259, 1598, 1773, 2849 in doc 11-16/0844r2**
- **Move: Alfred Asterjadhi**
- **Second: Brian Hart**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #42

- **Move to approve resolutions to CIDs, 1482, 1481, 1480, 1479, 1478, 1476, 1475, 1474, 1473, 30, 1225, 1486, 967, 750, 697, 696, 1793, 424, 167, 2629, 2628, 2627, 2626, 2269, 1484, 1485, 1794, 1662, 1487, 2197, 2464, 2465, 1470, 165, 1217 in doc 11-16/0828r0**
- **Move: Alfred Asterjadhri**
- **Second: Brian Hart**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #43

- **Move to approve resolutions to CIDs, 2484, 2483, 2482, 2481, 2430, 2429, 2489 in doc 11-16/0860r1**
- **Move: Yongho Seok**
- **Second: Brian Hart**
- **Accepted with no objection**

CR Motion #44

- **Move to approve the resolutions to CIDs, 73, 210, 192, 642, 1593, 1919, 643, 1595, 2259, 2260 in doc 11-16/0862r3**
- **Move: Yongho Seok**
- **Second: Young Hoon Kwon**
- **Accepted with no objection**

CR Motion #45

- **Move to approve resolutions to CIDs, 2608, 2607, 2606, 2488, 2487, 1399, 2841 in doc 11-16/0861r2**
- **Move: Yongho Seok**
- **Second: Brian Hart**
- **Accepted with no objection**

CR Motion #46

- **Move to approve the resolution to CID 2596 in doc 11-16/0953r2 and includes the text changes in the TG draft**
- **Move: Po-Kai Huang**
- **Second: Young Hoon Kwon**
- **Accepted with no objection**

CR Motion # 47

- **Move to approve resolutions to CIDs, 705, 2437, 2436, 2439, 2440 in doc 11-16/0879r2**
- **Move: Jeongki Kim**
- **Second: Young Hoon Kwon**
- **Accepted with no objection**

CR Motion #48

- **Move to approve resolutions to CIDs, 62, 640, 2434, 2438, 703, 2435, 66, 257, 447, 186, 2661, 2662, 776, 2660, 1577, 2332, 2718 in doc 11-16/0889r1**
- **Move: Young Hoon Kwon**
- **Second: Yongho Seok**
- **Accepted with no objection**

CR Motion #49

- **Move to approve resolutions of CIDs, 1070, 2226, 693, 125, 2650, 2651 in doc 11-16/0875r2**
- **Move: Kiseon Ryu**
- **Second: Po-Kai Huang**
- **Y/N/A**
- **accepted with no objection**

CR Motion #50

- **Move to approve the resolutions of CIDs, 768, 829, 978, 1546, 1295, 2710, 2709, 2187, 2647, 2266 in doc 11-16/0876r2**
- **Move: Kiseon Ryu**
- **Second: Po-Kai Huang**
- **Accepted with no objection**

CR Motion #51

- **Move to approve the resolutions of CIDs, 2890, 2896, 1634 in doc 11-16/0870r0**
- **Move: Zhou Lan**
- **Second: Young Hoon Kwon**
- **Accepted with no objection**

CR Motion #52

- Move to approve resolution to CID 783 in doc 11-16/0877 r5
-
- Move: Jeongki Kim
- Second: Kiseon Ryu
- Accepted with no objection

CR Motion #53

- **Move to approve resolutions of CIDs, 162, 2444, 2443, 2623 in doc 11-16/0835r1**
- **Move: Alfred**
- **Second: Po-Kai Huang**
- **Accepted with no objection**

CR Motion #54

- **Move to approve resolutions to CIDs 507, 949, 1005, 1785, 1862 in doc 11-16/0866r4**
- **Move: Kome Oteri**
- **Second: Xiaofei**
- **Accepted with no objection**

CR Motion #55

- **Move to approve resolutions to CIDs, 482, 1867, 2084, 2085 in doc 11-16/0923r1**
-
- **Move:** Sriram Venkateswaran
- **Second:** Ron Porat
- Accepted with no objection

CR Motion #56

- **Move to approve resolutions of CIDs, 9, 228**
- **2219, 2422, 2691, 2900 in doc 11-16/0725r3.**
- **Move: Alfred**
- **Second: Simone Merlin**
- **Second: Y/N/A**
- **Accepted with no objection**

CR Motion #57

- **Move to approve resolutions to CIDs, 55, 1000, 1221, 1915, 2234, 802,1695, 1222, 182, 971,2713, 702, 1916, 2233, 223 in doc 11-16/0773r2.**
- **Move: Alfred**
- **Second: Simone**
- **No objection**

CR Motion #58

- **Move to accept resolutions to CIDs, 262,1083, 102, 612, 660, 830, 864, 1716, 2215, 2301, 2376, 372, 719, 864 in doc 11-16/0774r1**

- **Move: Alfred**
- **Second: Simone Merlin**
- **Y/N/A**

Accepted with no objection

CR Motion #59

- **Move to approve resolutions to CIDs, 101,103, 104,374,375, 377, 558, 561, 661, 662, 664, 688, 1296, 1299, 1301, 1717, 1718, 1882, 2113, 2114, 2174, 2217, 2302, 2421, 227, 720, 663,1303,1305,1306 in doc 11-16/0780r1**

- **Move: Alfred**
 - **Second: Simone Merlin**
- Accepted with no objection**

CR Motion #60

- **Move to accept resolutions to CIDs, 80, 1284, 1182, 1143, 1286, 962, 1287, **831**, 508, 367, 100, 99, 98, 999, 1812, 2580, 2458, 2414, 2232, 2185, 2170, 1285, 1813, 2582, 1811, 1810, 1715, 1291, 1288, 1814 in doc 11-16/0868r1**
- **Move: George Cherian**
- **Second: Simone Merlin**
- **Y/N/A**
- **Accepted with no objection**

CR Motion #61

- **Move to approve resolutions to CIDs, 306, 310, 311, 477, 1002, 1003, 1010, 1692, 2020, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2036, 2037, 2130, 2151, 2245, 2246, 2543, 2544, 2545, 2546, 2547, 2679, 2681 in doc 11-16/0928r2**
- **Move: Kaushik Josiam**
- **Second: Bo Sun**
- **Accepted with no objection**

CR Motion #62

- **Move to approve resolutions to CIDs, 1589, 1590, 2668, and 2669 in doc 11-16/0938r0**
- **Move: Chitto Ghosh**
- **Second: Yasu**
- **Accepted with no objection**

CR Motion #63

- **Move to approve resolutions to CIDs, 71 and 190 in doc 11-16/966r0**
- **Move: Jarkko Knecht**
- **Second: Alfred**
- **Accepted with no objection**

CR Motion #64

- **Move to approve resolution to CID 782 in doc 11-16/0878r1**
- **Move: Jeongki Kim**
- **Second: Kiseon Ryu**
- **Approved with no objection**

Conference call times

- **August 4 20:00 – 22:00 ET is already approved**
- **August 11, 25, Sept 8 10:00 – 12:00 ET**
- **August 18, Sept 1 20:00 – 22:00 ET**