TGax November 2016 Meeting Agenda

Date: 2016-09-30

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

1

SAMSUNG 1116
Samsung v. Wilus
IPR2025-01044

IEEE 802.11 TGax: High Efficiency WLAN Task Group

San Antonio, TX

November 06-11, 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 November be essential for the use of standards under development is strongly encouraged;
  - There November 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 November 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.

7

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**

Slide #1

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 November 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 September meeting.
- Complete the resolution of comments received on draft D0.1
- Approve a motion to prepare draft D1.0 and start WG LB
- Ad Hoc group meetings
- Technical Presentations and related straw polls and/or motions
- Schedule Telecon times.

General Flow of the Meeting

- **Monday November 07, 08:00 – 10:00**
  - Call Ad Hoc Meeting to order
  - IEEE 802 and 802.11 IPR Policy and procedure.
  - AD hoc meeting Agenda setting
  - Call for submissions
  - Presentations
  - adjourn
- **Monday November 07, 13:30 – 15:30**
  - Meeting to order
  - IEEE 802 and 802.11 IPR Policy and procedure.
  - Approve of Ad Hoc meetings schedule
  - TG Motions
  - Presentations
  - Recess
- **Monday November 07, 16:00 – 18:00**
  - Ad Hoc Group Meetings
- **Monday November 07, 19:30 – 21:30**
  - Ad Hoc Group Meetings
- **Tuesday November 08, 10:30 – 12:30**
  - Ad Hoc Group Meetings
- **Tuesday November 08, 16:00 – 18:00**
  - Ad Hoc Group Meetings
  - Recess
- **Wednesday November 09, 08:00 – 10:00**
  - Call Meeting to order
  - IEEE 802 and 802.11 IPR Policy and procedure.
  - Progress Review
  - Presentations
- **Wednesday November 09, 13:30 – 15:30**
  - Ad Hoc Group Meetings
- **Wednesday November 09, 16:00 – 18:00**
  - Ad Hoc Group Meetings
- **Thursday November 10, 08:00 – 10:00**
  - Ad Hoc Group Meetings
- **Thursday November 10, 13:30 – 15:30**
  - Call Meeting to order
  - IEEE 802 and 802.11 IPR Policy and procedure.
  - Presentations
  - TG Motions
  - Recess
- **Thursday November 10, 16:00 – 18:00**
  - Call Meeting to order
  - IEEE 802 and 802.11 IPR Policy and procedure.
  - Presentations
  - TG Motions
  - Goals for November 2016
  - Telecon Schedule
  - Adjourn

TGax Schedule in a Glance

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

*** Ad Hoc group is tbd**

Agenda for Monday November 07, 08:00 – 10:00

- **Call meeting to order**
- **Ad Hoc Meeting (no Motions)**
- **Patent policy, etc.**
- **Call for submissions**
- **Set Ad Hoc Groups schedule**
- **Set and approve agenda for Ad Hoc (this) Meeting**
- **Presentations, Comment Resolution, and straw polls**
  - 11-16/1348 Coexistence assurance document
  - 11-16/1363 11ax PAR Verification through OFDMA
  - 11-16/1414 Verifying 11ax¡¯s PAR by UL MU-MIMO
  - 11-16/1435 PAR Verification Simulation Followup
  - More presentations if time allows
- **Adjourn**

Submissions

- **A list of all submissions are included in the embedded spread sheet**



Microsoft Excel Worksheet

PHY Submissions

DCN	Title	Author	Ad hoc
11-16/1340	CR HE-PHY Miscellaneous Part-3	Lochan Verma	PHY
11-16/1341	CR HE-PHY-Introduction-Part-2	Lochan Verma	PHY
11-16/1295	CC23 PHY CR Miscellaneous Part-1	Yongho Seok	PHY
11-16/1356	Spec text for HE NDP	Yongho Seok	PHY
11-16/1370	CCA Section	Laurent cariou	PHY
11-16/1371	CR HE-SIG-B part III	Ross Jian Yu	PHY
11-16/1372	Some proposed changes to D0.5	Ross Jian Yu	PHY
11-16/1374	Resoluction on CID495 and Removal of Unnecessary PHY TBDs	Yujin Noh	PHY
11-16/1375	Commont Resolution for CID2867 and Text Change Proposal of 26.3.10.8 HE-SIG-B	Yujin Noh	PHY
11-16/1377	Comment resolution on Clauses 26.3.9 and 26.3.10	Yusuke Asai	PHY
11-16/1387	Comment resolution on CID2506 and proposed changes	Jinsoo Choi	PHY
11-16/1393	EVM Definition for UL OFDMA	Ron Porat	PHY
11-16/1398	CR for CID 2077	Sriram Venkateswaran	PHY
11-16/1399	Changes to D0.5	Sriram Venkateswaran	PHY
11-16/1402	11ax Receiver Specification	Bin Tian	PHY
11-16/1406	Spec Text for 11ax Receiver Requirements	Bin Tian	PHY
11-16/1407	Changes to D0.5	Xiaogang Chen	PHY
11-16/1408	PHY CRs 26.3.3,26.3.18,26.3.19	Xiaogang Chen	PHY
11-16/1410	Clause 26 Fixes	Hongyuan Zhang	PHY
11-16/1411	TXTIME and RXTIME Fixes	Hongyuan Zhang	PHY
11-16/1421	Smoothness Recommendation for 4x HE-LTF	Feng Jiang	PHY
11-16/1427	Remove TBDs in PHY Transmit Spec.	Yujin Noh	PHY
11-16/1434	Miscellaneous HE PHY corrections	Lochan Verma	PHY
11-16/1437	Updated Text for DCM	Jianhan Liu	PHY
11-16/1438	0.8us GI with 4x HE LTF	Jianhan Liu	PHY
11-16/1439	Error correction to D0.5_on Beam-change text	Jianhan Liu	PHY
11-16/1443	spec text: Smoothness Recommendation for HE-LTF	Feng Jiang	PHY
11-16/1448	Remaining CR on secition-26-2-2 TXRXVECTOR Parameters	Ke Yao	PHY
11-16/1449	Proposed Text Changes to TXRXVECTOR in Clause 26.2.2	Ke Yao	PHY

30 Submissions

17

MAC Submissions

11-16/1238	Setting Quiet time period - text	Chao-Chun Wang	MAC
11-16/1352	CC23 MAC CR Miscellaneous Part-1	Yongho Seok	MAC
11-16/1354	CC23 CR Annex C	Yongho Seok	MAC
11-16/1355	Spec text for 10.22.2.5 and 3.2	Yongho Seok	MAC
11-16/1358	CC0-Remaining CIDs on BA	Alfred Asterjadhi	MAC
11-16/1359	CC0-Some remaining CIDs related to TWT	Alfred Asterjadhi	MAC
11-16/1360	CC0-HE variant HT control - Some Remaining CIDs	Alfred Asterjadhi	MAC
11-16/1362	CC0-Complete RTS_Enablement	Alfred Asterjadhi	MAC
11-16/1367	NDP feedback report	Laurent cariou	MAC
11-16/1368	Follow-up on MU EDCA parameters	Laurent cariou	MAC
11-16/1380	Proposed text changes for TWT in congested environment	Laurent cariou	MAC
11-16/1381	Proposed text changes for fragmentation operation	Laurent cariou	MAC
11-16/1404	Early TWT SP Termination in TWT Operation	Jayh hyunhee Park	MAC
11-16/1409	A-MSDU Fragmentation	Matthew Fischer	MAC
11-16/1413	CID193 BSS Color Disabled Indication	Abhishek Patil	MAC
11-16/1415	CID72 BSS Color change mechanism	Abhishek Patil	MAC
11-16/1416	CC0-HE BSS operation11-16-xxxx-00-00ax-CC0-HE BSS operation	Alfred Asterjadhi	MAC
11-16/1417	CC0-HE BSS operation	Alfred Asterjadhi	MAC
11-16/1418	CC0-HE Multirate Support and 2G4 40MHz HE STA	Alfred Asterjadhi	MAC
11-16/1419	MCS_NSS_BW_PPDU_Selection_for_11ax	Alfred Asterjadhi	MAC
11-16/1420	TWT Information frames in 11ax	Alfred Asterjadhi	MAC
11-16/1423	NAV Update Rule Considering UL MU Operation	Geonjung Ko	MAC
11-16/1424	Issue on the CWmax value in MU EDCA	Woojin Ahn	MAC
11-16/1425	Clarification on applying MU EDCA parameter set	Woojin Ahn	MAC
11-16/1431	IEEE 802.11ax Annex G	Osama Aboul-Magd	MAC
11-16/1442	Spec texts for section 25.4 BA	Jeongki Kim	MAC
11-16/1452	Multiple BSSID and MU	Liwen Chu	MAC
11-16/1453	A-MPDU content	Liwen Chu	MAC
11-16/1454	Multiple BSSID and MU Discussion	Liwen Chu	MAC
11-16/1456	A-MPDU content discussion	Liwen Chu	MAC
11-16/1458	Comment Resolution for Sub-clause 25.13.2	Chittabrata Ghosh	MAC
11-16/1459	Considerations on Quiet Time Period	Jinsoo Ahn	MAC
11-16/1461	MU BAR comment resolutions	Reza Hedayat	MAC
11-16/1464	RD Protocol	Jarkko Kneckt	MAC
11-16/1468	A-MPDU Content Capabilities	Raja Banerjea	MAC
11-16/1477	CC-23 PR TWT	Matthes	MAC

35 Submissions

SR Submissions

DCN	Title	Author	Ad hoc
11-16/0947	Proposed text changes for OBSS_PD-based SR parameters	Matthew Fischer	SR
11-16/1063	Unified SR text DSC, ATPC, inter-BSS	Graham Smith	SR
11-16/1064	Unified SR approach DSC, ATPC and Inter-BSS	Graham Smith	SR
11-16/1121	Spec Texts: Spatial Reuse Indication for Trigger	Po-Kai Huang	SR
11-16/1337	cr-on-SR-CCA-rules-clause-25.9	Bo Sun	SR
11-16/1403	SR Backoff Procedure	Jayh hyunhee Park	SR
11-16/1430	Comment Resolution for SR on BSS Color	Junichi Iwatani	SR
11-16/1440	Proposed Resolutions to CID 2719	Jing Ma	SR
11-16/1450	CR-for-CID 2492-section-25-9-spatial-reuse-operation	Kaiying Lv	SR
11-16/1476	SRP	Matthew Fischer	SR

9 submissions

MU Submissions

DCN	Title	Author	Ad hoc
11-16/1353	CC23 MAC CR Miscellaneous Part-2	Yongho Seok	MU
11-16/1357	CC0 Remaining CIDs on sounding	Alfred Asterjadhi	MU
11-16/1361	CC0- Remaining CIDs on MU Operation	Alfred Asterjadhi	MU
11-16/1382	MAC support of preamble puncture	Zhou Lan	MU
11-16/1383	spec text: MAC support of preamble puncture	Zhou Lan	MU
11-16/1389	Comment Resolution for CID 807	Po-Kai Huang	MU
11-16/1390	Spec Text: Revision for NAV Setting Rule under Immediate Response	Po-Kai Huang	MU
11-16/1391	comment-resolution-random-access-miscellaneous	Young Hoon Kwon	MU
11-16/1392	comment-resolution-CID-2624-and-2738	Young Hoon Kwon	MU
11-16/1426	DL/UL indication in MU-RTS	Woojin Ahn	MU
11-16/1441	Consideration on Internal Contention Between Data and Trigger Frame	Jing Ma	MU
11-16/1457	11ax D0.1 Comment Resolution for Clause 25.5.3	David Xun Yang	MU

12 submissions

20

TG Submissions

DCN	Title	Author	Ad hoc
11-16/0995	Editor's report	Robert Stacey	TG
11-16/1363	11ax PAR Verification through OFDMA	Suhwook Kim	TG
11-16/1414	Verifying 11ax¡¯s PAR by UL MU-MIMO	Jason Yuchen Guo	TG
11-16/1435	PAR Verification Simulation Followup	James Yee	TG

4 submissions

Agenda for Monday November 07, 13:30 – 15:30

- **Call meeting to order**
- **Patent policy, etc.**
- **Set and approve agenda**
  - Approve Ad Hoc Groups schedule
- **Summary from September 2016 meeting**
- **TG motions**
  - Approve TG meeting and Telecon minutes since September 2016 meeting.
  - Approve resolutions of comments, if needed.
- **Comment Resolution Status – Robert Stacey**
  - Presentation on the new style – deferred to Wednesday AM1
- **Timeline**
- **Presentations and Comment Resolution**
  - Discussion Related to PAR Verification work.
  - 11-16/1473 Spatial Reuse Subfield Encoding Rule Clarification – James Wang
  - 1340 – 1341, and 1434
- **Recess**

Summary from September 2016 Meeting

- **Continue with the resolution of comments received on CC-23**
- **Good progress on the comment resolution**
- **Adjusted the TG timeline with draft D1.0 available after November meeting.**
- **Draft D0.5 was prepared by the TG Editor.**
- **Conducted "almost" weekly telecons since September F2F meeting.**
  - Covered 13 submissions
  - Discussed resolutions of almost 55 CIDs
  - Please refer to telecon minutes
  - https://mentor.ieee.org/802.11/dcn/16/11-16-1308-02-00ax-tgax-teleconference-minutes-from-september-to-october.docx



Microsoft Word Document

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

- **Approve TGax minutes of meetings and teleconferences from September 2016 Interim meeting to today:**
  - https://mentor.ieee.org/802.11/dcn/16/11-16-1231-00-00ax-tgax-september-2016-warsaw-meeting-minutes.docx
  - https://mentor.ieee.org/802.11/dcn/16/11-16-1308-02-00ax-tgax-teleconference-minutes-from-september-to-october.docx
  - https://mentor.ieee.org/802.11/dcn/16/11-16-1300-00-00ax-september-2016-tgax-spatial-reuse-ad-hoc-group-meeting-minutes.docx
  - https://mentor.ieee.org/802.11/dcn/16/11-16-1276-00-00ax-september-2016-warsaw-tgax-phy-ad-hoc-meeting-minutes.docx
  - https://mentor.ieee.org/802.11/dcn/16/11-16-1252-01-00ax-september-2016-warsaw-tgax-mac-ad-hoc-meeting-minutes.docx
  - https://mentor.ieee.org/802.11/dcn/16/11-16-1275-00-00ax-mu-ad-hoc-meeting-minutes-september-2016.docx

- **Move: Simone Merlin Second: Robert Stacey**
- **Accepted with no objection**

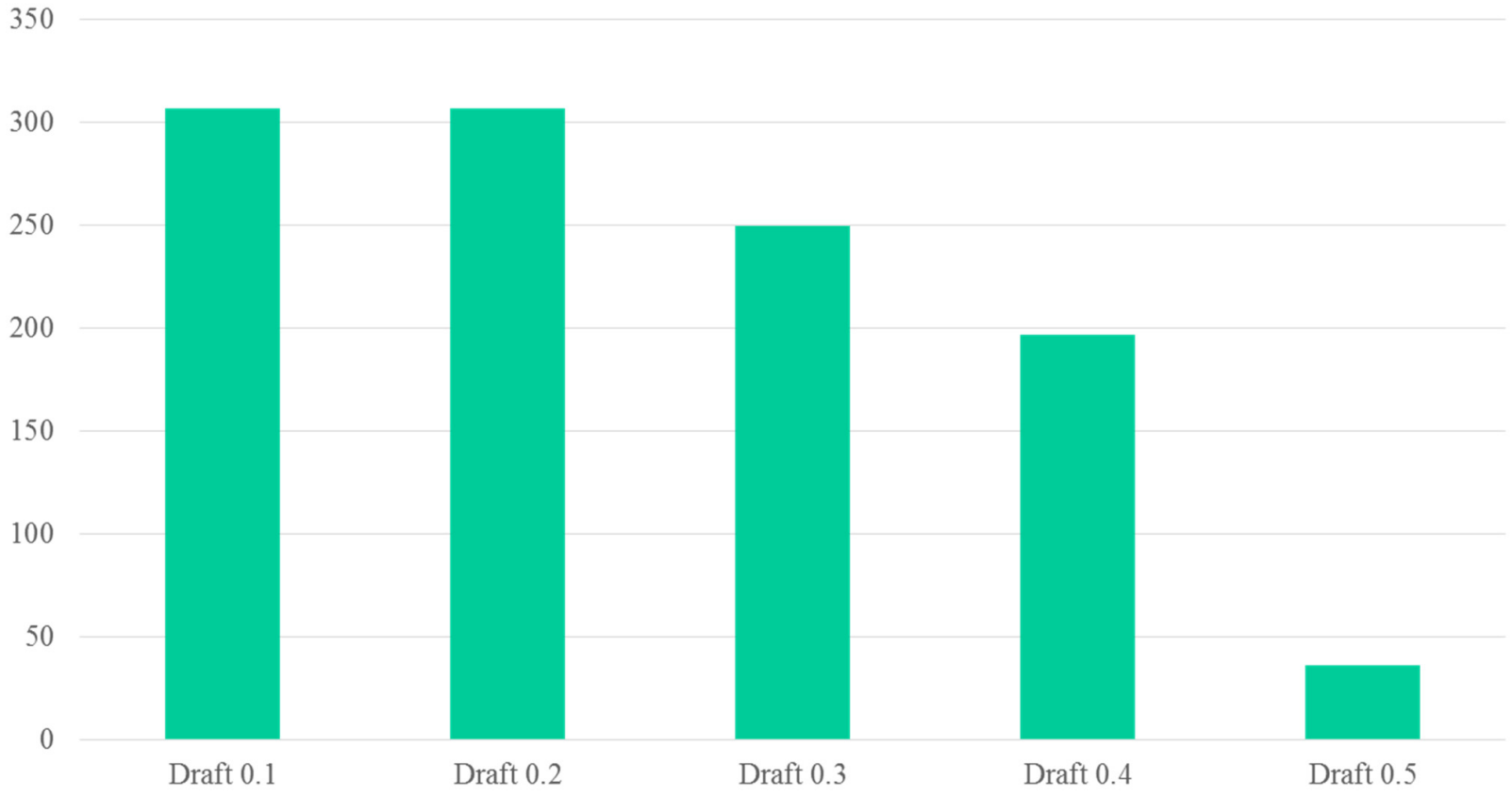
Comment Resolution Status (Editor Report)

- **Robert Stacey**
- **https://mentor.ieee.org/802.11/dcn/16/11-16-0995-02-00ax-editor-s-report.pptx**

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
- November 2016: Draft 1.0 and WG letter ballot
- May 2017: Draft 2.0 and recirculation
- November 2017: MDR (Mandatory Document Review)
- January 2018: Formation of SB pool
- March 2018: Sponsor Ballot
- December 2018: RevCom

Number of TBDs



PAR Verification Discussion

- **Discussion on continuing the work on PAR verification**
  - 4 time improvement is already shown for outdoor scenarios in 11-16/1363
  - 4 times for indoor scenario is observed in 11-16/1414

PAR Verification

- **SP from 11-16/1435**

While we continue to look for additional gain under new modes - combination of 11ax features, do we:

- **Option 1**
  - Continue to use current EVM [2] and SS scenarios.
- **Option 2**
  - Modify scenarios in the EVM [2] and SS. E.g.
    - Adding single BSS scenarios
    - New OBSS scenarios

- **Strawpoll: Option 1 or Option 2**

- **No objection to option 2. New scenarios will be discussed on TG conference calls.**

Agenda for Monday November 08, 16:00 – 18:00

- **Ad Hoc Meetings**
  - PHY → Texas D
  - MAC → Texas E

Agenda for Monday November 08, 19:30 – 21:30

- **Ad Hoc Meetings**
  - SR → Texas D
  - MU → Texas E

Agenda for Tuesday November 08, 10:30 – 12:30

- **Ad Hoc Group Meetings**
  - PHY → Texas D
  - MAC → Texas E

Agenda for Tuesday November 08, 16:00 – 18:00

- **Ad Hoc Group Meetings**
  - SR → Texas D
  - MU → Texas E

Agenda for Wednesday November 09, 08:00 – 10:00

- **TG Meeting**
- **Call Meeting to order**
- **IEEE 802 and 802.11 IPR Policy and procedure.**
- **Progress Review**
- **Presentations**
  - 11-16/1472 New Amendment Style – Robert Stacey
  - 11-16/1431 IEEE 802.11ax Annex G - Osama
  - Presentations from ad hocs
- **Recess**

Agenda for Wednesday November 09, 13:30 – 15:30

- **Ad Hoc Group Meetings**
  - PHY → Texas D
  - MAC → Texas E

Agenda for Wednesday November 09, 16:00 – 18:00

- **Ad Hoc Group Meeting**
  - PHY → Texas D
  - MAC → Texas E

Agenda for Thursday November 10, AM1, PM1, and PM2

- **TG Meeting**
- **Call Meeting to order**
- **IEEE 802 and 802.11 IPR Policy and procedure.**
- **Presentations**
- **TG Motions**
- **New Business:**
  - 11-16/1238r4 Setting Quiet time period – text Chao-Chun
- **WG LB _ Coexistence doc Motion**
- **13-16/1537 Guido**
- **Goals for January 2017**
- **Telecon Schedule**
- **Adjourn**

Motions

PHY Motion 175#

- **Move to accept the proposed changes to 11ax D0.5 spec text as in 11-16/1356r0**

- **Move: Young Hoon Kwon**
- **Second: Alfred**

- **Accepted with no objection**

PHY Motion #176

- **Move to accept the proposed spec changes in doc 11-16/1387r3**

- **Move: Jinsoo Choi**
- **Second: Kiseon Ryu**
- **Accepted with no objection**

PHY Motion #177

- **Move to accept the proposed spec text changes in doc 11-16/1427r2**

- **Move: Yujin Noh**
- **Young Hoon Kwon**

- **Accepted with no objection**

PHY Motion #178

- **Do you agree the proposed spec text changes as in doc 11-16/1370r4**

- **Move: Laurent Cariou**
- **Second: Chitto**

- **Accepted with no objection**

PHY Motion #179

- **Move to accept the proposed spec text changes in doc 11-16/1399r2**

- **Move: Sriram Venkateswaran**
- **Second: Ron Porat**

- **Accepted with no objection**

PHY Motion #180

- **Move to adopt the spec text in doc 11/16-1406r1 on 11ax Receiver Requirements**

- **Move: Bin Tian**
- **Second: Abhishek**

- **Accepted with no objection**

PHY Motion #181

- **Move to adopt the changes to the 11ax spec text in doc 11/16-1407r4**

- **Move: Xiaogang Chen**
- **Second: Chitto**

- **Accepted with no objection**

PHY Motion #182

- **Move to adopt the spec text in doc 11/16-1443r0 into 11ax draft**

- **Move: Feng Jiang**
- **Second: Chitto**
- **Accepted with no objection**

PHY Motion #183

- **Move to adopt the spec text in doc 11/16-1410r2 into 11ax draft**

- **Move: Hongyuan Zhang**
- **Second: Sai**

- **Accepted with no objection**

PHY Motion #184

- **Move to adopt the spec text in doc 11/16-1411r1 into 11ax draft**

- **Move: Hongyuan Zhang**
- **Second: Sai**

- **Accepted with no objection**

PHY Motion #185

- **Move to adopt the spec text in doc 11/16-1437r0 into 11ax draft**

- **Move: Tianyu Wu**
- **Second: Hongyuan Zhang**

- **Accepted with no objection**

PHY Motion #186

- **Move to adopt the spec text in doc 11/16-1438r4 into 11ax draft**

- **Move: Tianyu Wu**
- **Second: Hongyuan Zhang**

- **Accepted with no objection**

PHY Motion #187

- **Move to adopt the spec text in doc 11/16-1439r1 into 11ax draft**

- **Move: Tianyu Wu**
- **Second: Hongyuan Zhang**

- **Accepted with no objection**

PHY Motion #188

- **Move to adopt the spec text in doc 11/16-1449r3 into 11ax draft**

- **Move: Bin Tian**
- **Second: Alfred**

- **Accepted with no objection**

PHY Motion #189

- **Move to adopt the spec text in doc 11/16-1434r2 into 11ax draft**

- **Move: Sameer Vermani**
- Second: **Abhishek**

- **Accepted with o objection**

PHY Motion #190

- **Move to adopt the spec text in doc 11-16/1372r1 into 11ax draft**

- **Move: Ross Jian Yu**
- **Second: Ron Porat**

- **Accepted with no objection**

MAC Motion #94

- **Move to update the 11ax specification D0.5 according to the instructions in document 16/1355r0.**

- **Move: Young Hoon Kwon**
- **Second: Eric Wong**

- **Accepted with no objection**

MAC Motion #95

- **Move to update the 11ax specification D0.5 according to the instructions in document 16/1362r1**

- **Move: Alfred Asterjadhi**
- **Second: George Cherian**

- **Accepted with no objection**

MAC Motion #96

- **Move to update the 11ax specification D0.5 according to the instructions in slide 16 of document 16/1367r0.**

- **And append the following sentence at the end of slide 16**
  - This mechanism is optional for non-AP STA

- **Move: Laurent Cariou**
- **Second: Alfred**

- **Accepted with no objection**

MAC Motion #97

- **Move to update the 11ax specification D0.5 according to the instructions in document 16/1368r2**

- **Move: Laurent Cariou**
- **Second : Eric Wong**

- **Accepted with no ojection**

MAC Motion #98

- **Move to update the 11ax specification D0.5 according to the instructions in slide 16 of document 16/1404r1**

- **Move: Kiseon Ryu**
- **Second: Alfred**

- **Accepted with no objection**

MAC Motion #99

- **Move to update the 11ax specification D0.5 according to the instructions in document 16/1409r3**

- **Move: Zhou Lan**
- **Second: Eric Wong**

- **Accepted with no objection**

MAC Motion #100

- **Move to update the 11ax specification D0.5 according to the instructions in slides 8, 9 and 10 in document 16/1420r0**

- **Move: Alfred Asterjadhi**
- Second: **Abhishek**

- **Accepted with no objection**

MAC Motion #101

- **Move to update the 11ax specification D0.5 according to the instructions in document 16/1380r3**

- **Move: Laurent Cariou**
- Second: **Abhishek**

- **Accepted with no objection**

MAC Motion #102

- **Move to update the 11ax specification D0.5 according to the instructions in slide 6 of document 16/1425r2**

- **Move: Woojin Ahn**
- **Second: John Son**

- **Accepted with no objection**

MAC Motion #103

- **Move to update the 11ax specification D0.5 according to the instructions in document 16/1452r2**

- **Move: Liwen Chu**
- Second: **Abhishek**

- **Accepted with no objection**

MAC Motion #104

- **Move to update the 11ax specification D0.5 according to the instructions in document 16/1453r1**

- **Move: Liwen Chu**
- **Second: Eric Wong**

- **Accepted with no objection**

MAC Motion #105

- Move to update the 11ax specification D0.5 according to the instructions in document 16/1381r2

- Move: Laurent Cariou
- Second : Chitto

- Accepted with no objection

MAC Motion #106

- **Move to instruct the TGax editor to remove the sentence below from IEEE802.11ax D0.5 in clause 9.3.1.23.**

"The exact location of each 20 MHz for 80 MHz BW is TBD"

Move: Alfred

Second: Ron Porat

Accepted with no objection

MAC Motion #107

- **Move to instruct the TGax Editor to make the following changes (related to HE Link adaptation A-Control format):**
  - Replace “TBD” with “16” in P17L21 of TGax D0.5
  - Replace “TBD” with “Reserved” in P19L8 of TGax D0.5
  - Replace “B6+X” with “B15” in P19L6 of TGax D0.5
  - Replace “X” with “9” in P19L6 of TGax D0.5
- Move: **Abhishek**
- **Second: Alfred**
- **Accepted with no objection**

MAC Motion #108

- **Move to instruct the TGax Editor to make the changes as shown in 16/1529r0**

- **Move: Zhou Lan**
- **Second: Eric Wong**

- **Accepted with no objection**

MAC Motion #109

- **Move to instruct the TGax Editor to make the changes as shown in slide 6 of document 16/1424r2**

- **Move: Woojin Ahn**
- **Second: John Son**

- **Accepted with no objection**

MAC Motion #110

- **Move to instruct the TGax Editor to make the changes as shown in 16/1442r0**

- **Move: Jeongki Kim**
- **Second: Kiseon Ryu**

- **Accepted with no objection**

MAC Motion #111

- **Move to instruct the TGax Editor to make the changes as shown in 16/1238r4**

- **Chao-Chun Wang Second: Dengyu Qiao**
- **Approved with no objection**

MU Motion #61

- **Move to update the 11ax draft specification D0.5 according to editor instruction in document 802.11-16/1383r2.**
  - A HE AP transmits a new trigger variant (Bandwidth Query Report Poll) to solicit bandwidth Query Report from one or multiple HE non AP STAs
  - A HE non AP STA after receiving Bandwidth Query Report Poll from a HE AP responds with channel availability information in a new A-control field (Bandwidth Query Report)
  - It is optional for a non AP STA to support the Bandwidth Query mechanism

- **Move: Zhou Lan**
- **Second: Ron Porat**
- **Accepted with no objection**

MU Motion #62

- **Move to accept the proposed changes to D0.5 in 802.11-16/1390r0**

- **Move: Po-Kai Huang**
- **Second: Kiseon Ryu**

- **Accepted with no objection**

SR Motion #13

- **Move to incorporate 11-16/947r18 into the TGax draft**

- **Move: Zhou Lan**
- **Second: Ron Porat**

- **Result: Y/N/A: 45/19/51 Fails**

- **Motion to table till January F2F meeting:**
- **Move to table SR Motion #13**
  - Move: Sean Coffey Second: Graham Smith
  - Y/N/A: 16/42/43 fails

SR Motion #14

- **Move to incorporate 11-16/1121r2 into the TGax draft**

- **Move: Po-Kai Huang**
- **Second: Laurnet Cariou**

- **Accepted with no objection**

SR Motion #15

- **Move to add the following text in the 11ax spec draft (11-16/1403r1)**

  25.9.2.1 General

  - SR Backoff procedure for SR delayed case
    - The STA may resume its backoff procedure after the end of the PPDU carrying the SR delay entry by following the procedure defined in 10.22.2 HCF contention based channel access (EDCA)
    - NOTE - The countdown of an existing backoff procedure is suspended until the end of the PPDU carrying the SR delay entry since the medium is busy during the duration of the PPDU carrying the SR delay entry."
- **Move: Kiseon Ryu**
- **Second: Po-Kai Huang**
- **Accepted with no objection**

SR Motion #16

- **Move to accept the changes to the TG draft in doc 11-16/1473r0**

- **Move: James Wang**
- **Second: Bahar Sadeghi**

- **Accepted with no objection**

CR Motion #125 (PHY) - I

- **Move to accept resolutions to CIDs**
  - CID 495 as in **11-16/1374r1**
  - CID 2867 in **11-16/1375r1**
  - CID 2043, 2044, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2058, 2059, 2062 in doc **11-16/1377r6**
  - CID 2431 in **11-16/1295r0**
  - CID 2077 in doc **11-16/1398r1**
  - CID 1031, 1827, 2472, 2753 in doc **11-16/1448r0**
  - CID 1116, 2350, 2460, 2461, 1038, 2147, 275 in doc **11-16/1408r0**
  - CID 1864 and 1849 in doc **11-16/1341r6**
  - CID 2506 in doc **11-16/1387r3**
  - CID 2147 in doc **11-16/1522r2**
  - 1932, 2106, 2572, 2796 in doc **11-16/1340r4**

CR Motion #125 continued (PHY)- II

- **Move to accept resolutions to CIDs**
  - CID 308, 1619, 2874 in doc 11-16/1371r0

- **Move: Bin Tian**
- **Second: Jianhan Liu**
- **Approved with no objection**

CR Motion #126 (PHY)

- **Move to accept the following resolution to CID 85**
  - Resolution: Rejected
  - Reason: The comment doesn't provide an applicable change suggestion to the spec draft

- **Move: Jianhan Liu**
- **Second: Hongyuan Zhang**
- **Accepted with no objection**

CR Motion #127 (MAC)

- **Move to accept resolutions to CIDs**
  - CIDs: 150, 1020, 2201 in doc **11-16/1354r0**
  - CIDs: 135, 658, 2389 in doc **11-16/1358r0**
  - CIDs: 385, 419, 458, 459, 514, 630, 741, 743, 2844, 2846 in doc **11-16/1359r0**
  - CIDs: 93, 824, 819, 989, 1067, 2388, 147, 161 in doc 11-16/1360r1
  - CID 72 in doc **11-16/1415r2**
  - CID 193 in doc **11-16/1413r8**
  - CIDs: 195, 723, 779, 780, 1087, 1088, 2179, 2387, 2672, 2673, and 2674 in doc **11-16/1458r0**
  - CID 6 and 7 in doc **11-16/1461r1**
  - CIDs: 969, 1517, 1558, 1560, 1917, 2180 in doc **11-16/1357r0**
- **Move: Reza Hedayat Second: George Cherian**
- **Accepted with no objection**

CR Motion #128 (MAC)

- **Move to accept resolutions to CIDs**
  - CID 682 in doc **11-16/1477r2**
  - CID 991 in doc **11-16/1503r2**
  - CID 1012 in doc **11-16/1350r0**
  - CID: 861, 1073, 16, 1398, 1212, 1211, 1176, 964, 823, 798, 797, 781, 733, 1400, 1072, 735 in doc **11-16/1332r3**
  - CID: 81, 82, 710, 1226, 1235, 1236, 1351, 1707, 1776 in doc **11-16/1336r1**
  - CID 2186 in doc **11-16/1342** (Editor)
  - CID 154 in doc **11-16/1417r0**
  - CID 203 in doc **11-16/1418r0**
  - CID 1430, 1703, and 2503 in doc **11-16/1431r1**
  - CID 1700 and 2504 in doc **11-16/1335r3**
- **Move: Yongang Second: Reza Hedayat**
- **Accepted with no objection**

CR Motion #129 (MAC)

- **Move to accept resolutions to CIDs**
  - CID 52, 2459, and 2632 in doc **11-16/1464r1**
  - CID 2113 in **doc 11-16/1346r1**
  - CIDs: 1920, 2441, 2671, 2262, 2396, 2454, 2604, 2605, 1734, 118, 691, 822, 1353 in doc **11-16/1352r1**

- **Move: Reza Hedayat Second: George Cherian**
- **Accepted with no objection**

CR Motion 130 # (MU)

- **Move to accept resolutions to CIDs**
  - CIDs 2490 and 2505 as proposed in **11-16/1353r1**
  - CIDs 37, 38, 171, 759, 761, 763, 764, 815, 950, 1219, 1540, 2273, 2320, 2449, 2467, 2636, 2656 and 2910 as proposed in **11-16/1361r1**
  - CIDs 59, 2652 and 2653 as proposed in **802.11-16/1391r0**
  - CIDs 2624 and 2738 as proposed in **802.11-16/1392r0**
  - CID 807 as proposed in **802.11-16/1389r0**
  - CIDs 53, 54, 56, 57, 604, 1553, 1554, 1555, 1557 and 2655 as proposed in **802.11-16/1457r3**
  - CID: 729, 1069, 806, 2261, 2909, 1468, 1637, 998, 730, 245, 246, 247, 248, 399, 421, 1464, 588, 256, 812, 1661 in **doc 11-16/1339r1**
- **Move: Kiseon Ryu Second: Yungang**
- **Accepted with no objection**

CR Motion #131 (SR)

- **Move to accept resolutions to CIDs**
  - CIDs 187, 224, 803, 1233, 1578, 1579, 2284, 2433, 2666, 2912, 2915, 2916, 2917 in doc **11-16/1337r0**.
  - CIDs 448, 833, and 1232 in doc **11-16/1430r0**
  - CID 2492 as provided in submission **11-16/1450r0** and to modify the 802.11ax draft amendment as shown in the submission
  - CID 2719 and to modify (adding text to the end of section 25.9.2.1 on page 153 line 15) the 802.11ax draft amendment as proposed in submission **11-16/1440r4**
- **Move: Alfred Second: Po-Kai Huang**
- **Accepted with no objection**

CR Motion 132(SR)

- **Move to accept resolution of CID**
  - CID 944, 64, and 2911 in doc **11-16/1476r6 with the exeption that 11-16/1476r6 replaces 11-16/: 461476r4 in the resolution**

- **Move: VK Jones Second: Ron Porat**
- **Y/N/A: 46/29/38**
- **Fails**

87

Move to Reconsider

- **Move to reconsider motion SR-13 on OBSS_PD SR**
- **Move: Sriram Second: Sai**
- **Accepted with no objection**

SR Motion #13

- **Move to incorporate 11-16/947r18 into the TGax draft**

- **Move: Sriram**
- **Second: Sai**

- **Result: Y/N/A: 46/18/38**
- **Fails**

WG LB Motion

- **Instruct the editor to prepare TGax Draft D1.0**
- **Approve a 30 day Working Group Technical Letter Ballot asking the question "Should TGax Draft 1.0 be forwarded to Sponsor Ballot?"**
-
- **[Moved by <name> on behalf of <group>**
- **<group> vote:**
- **Moved: Robert Stacey, Seconded: Vinko Erceg, Result: 89-0-6**

Coexistence Assurance Document

- **Move to Adopt 11-16/1348r2 as coexistence assurance document for 802.11ax amendment.**

- **Move: Robert Stacey**
- **Second: Yasu Inoue**

- **Y/N/A: 82/0/7**
- **Passes**

- **Authorize TGax to hold an ad-hoc meeting on January 11-13/2017 in Stockholm, Sweden, for the purpose of comment resolution.**
-
- **[Moved by <name> on behalf of <group>**
- **<group> vote:**
- **Moved: Guido, Seconded: Hakan, Result: 9-52-32**
- **Fails**

Conference call times

- **Dec. 1**
- **Dec. 8** PAR Verification
- **Dec. 15**
- **All at 21:00 ET**

- **Jan 5 at 11:00 ET**
- **and Jan 12 at 20:00 ET**