IEEE P802.11
Wireless LANs

|  |
| --- |
| IEEE 802.11TGax March 2019 Vancouver Meeting Minutes |
| Date: 2019-04-02 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Yasuhiko Inoue | NTT | 1-1 Hikari-no-oka, Yokosuka, Kanagawa 239-0847 Japan | +81 46 859 5097 | yasuhiko.inoue.br@hco.ntt.co.jp |
|  |  |  |  |  |

Abstract

This document contains the TGax meeting minutes from the IEEE 802.11 March 2019 Vancouver session.

The minutes of PHY and MAC ad hocs are contained in separate documents:

* PHY
	+ https://mentor.ieee.org/802.11/dcn/19/11-19-0462-00-00ax-mar-2019-vancouver-tgax-phy-ad-hoc-minutes.docx
* MAC
	+ https://mentor.ieee.org/802.11/dcn/19/11-19-0501-00-00ax-mac-ad-hoc-meeting-minutes-march-2019.docx

**IEEE 802.11 Task Group AX March 2019 Meeting**

**Hyatt Regency Vancouver, Vancouver, BC, Canada**

**March 11th – 15th, 2019**

**Chair Osama Aboul-Magd (Huawei Technologies)**

**The 1st Vice-Chair Ron Porat (Broadcom Ltd.)**

**The 2nd Vice-Chair Alfred Asterjadhi (Qualcomm)**

**Secretary Yasuhiko Inoue (NTT Corporation)**

**Technical Editor Robert Stacey (Intel Corporation)**

**Monday, March 11th, 2019, PM1 TGax Session (13:30 - 15:30)**

1. **The meeting called to order at 13:30 AM by Osama Aboul-Magd (Huawei Technologies), the chairperson of 802.11 TGax.**
	1. Introduction of TGax leadership.
	2. Agenda document 19/0238r1 on the server. R2 is the working document.
2. **Announcements**
	1. Chair asked people to announce name and the affiliation when addressing the group for the first time during a meeting slot.
	2. Attendance: <https://imat.ieee.org/attendance>
	3. Chair asked people to put the cellphone mute of switch off.
3. **Agenda Setting**
	1. Proposed agenda for Monday AM2
		1. Call meeting to order
		2. IEEE-SA IPR policy and Procedure
		3. Summary from January 2019 meeting
		4. TG motions
			1. Approve TG meeting and Teleconference minutes since January 2019 meeting.
		5. Editor Report and comment assignment – Robert Stacey
		6. Need for an ad hoc meeting before the May 2019 meeting
		7. Submissions and Comment Resolution
		8. Recess
	2. Chair asked if there is any item to add to the agenda. 🡪 No response.
	3. Chair asked if there is any objection to proceed with this agenda. 🡪 No objection.
		1. The agenda for Monday PM1 is approved.
4. **IEEE-SA IPR Policy & Procedure**
	1. Chair read the following 5 slides:
		1. Participants have a duty to inform the IEEE – done.
		2. Ways to inform IEEE – done
			1. Chair asked if anyone in this meeting is aware of any potentially essential patents. 🡪 There was no response.
		3. Other guidelines for IEEE WG meetings – done
		4. Patent-related information – done
		5. Participation in IEEE 802 Meetings – done
5. **Agenda Items for the week – slide 12 of the agenda file (11-19-0238-04)**
	1. Approve meeting and teleconference minutes since January 2019.
	2. Start the resolution of comments received on draft D4.0
	3. Comment Resolution Submissions.
	4. Schedule TG ad hoc meeting, if needed.
	5. Schedule TG teleconference times.
6. **General flow and the TGax meeting schedule**
	1. TGax plans to have 7 sessions this week. Three of them are assigned to the ad hoc meetings.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Monday** | **Tuesday** | **Wednesday** | **Thursday** |
| **AM1** |  |  |  | **TGax** |
| **AM2** |  | **TGax** |  |  |
| **PM1** | **TGax** |  | **TGax** | **TGax** |
| **PM2** |  | **TGax** | **TGax** |  |
| **PM3 (EVE)** |  |  |  |  |

1. **Call for submissions**
	1. PHY submissions
		1. 11-18-1774, “Resolution to HESIGB-related CIDs,” Brian Hart (Cisco Systems)
		2. 11-19-0378, “D4.0 CID20395 – Unused Tone EVM,” Youhan Kim (Qualcomm)
		3. 11-19-0379, “D4.0 PHY Comment Resolution – Part 1,” Youhan Kim (Qualcomm)
		4. 11-19-0385, “Resolution for CIDs in 27.1.1,” Sameer Vermani (Qualcomm)
		5. 11-19-0386, “Disallowed Subchannels Comment Resolution,” Ron Porat (Broadcom)
		6. 11-19-0407, “Comment Resolutions for xVECTORs,” Bo Sun (ZTE)
		7. 11-19-0422, “CR for CID 21497, 21501, 21502,” Xiaogang Chen (Intel)
	2. MAC submissions
		1. 11-18-0218, “Fragment Flushing BlockAckReq,” Matthew Fischer (Broadcom Ltd.)
		2. 11-18-1822, “Temporary Limited Connection,” Matthew Fischer (Broadcom Ltd.)
		3. 11-19-0301, “Comment resolutions for HE beacon in 6 Ghz band,” Alfred Asterjadhi (Qualcomm)
		4. 11-19-0302, “Comment resolutions for HE BSS operation,” Alfred Asterjadhi (Qualcomm)
		5. 11-19-0303, “Comment resolutions for QoS Control,” Alfred Asterjadhi (Qualcomm)
		6. 11-19-0305, “Comment resolutions for transmit power control,” Alfred Asterjadhi (Qualcomm)
		7. 11-19-0309, “Comment resolutions for Frame Control,” Alfred Asterjadhi (Qualcomm)
		8. 11-19-0315, “Comment resolutions for TWT power save,” Alfred Asterjadhi (Qualcomm)
		9. 11-19-0316, “Comment resolutions for BSR operation,” Alfred Asterjadhi (Qualcomm)
		10. 11-19-0325, “11ax D4.0 MAC Comment Resolution for SM Power Save,” Po-Kai Huang (Intel)
		11. 11-19-0339, “11ax D4.0 MAC Comment Resolution for Co-hosted BSSID,” Po-Kai Huang (Intel)
		12. 11-19-0394, “Resolution for CIDs in 9.3.1.22,” Abhishek Patil (Qualcomm)
		13. 11-19-0395, “Resolution for CIDs related to BSS Color – Part 1,” Abhishek Patil (Qualcomm)
		14. 11-19-0413, “CR for MU EDCA parameters,” Laurent Cariou (Intel)
		15. 11-19-0414, “CR for NFRP,” Laurent Cariou (Intel)
		16. 11-19-0416, “CR for Spatial reuse,” Laurent Cariou (Intel)
		17. 11-19-0427, “Comment resolution on CID 20175,” Zhou Lan (Broadcom Ltd.)
		18. 11-19-0436, “Resolution for CIDs in clause 11.1.4,” Abhishek Patil (Qualcomm)
2. **TG Motion**
	1. Approval of TG Minutes (November 2018 Meeting and Teleconferences Minutes)
	2. **Motion: Approve TGax minutes of meetings and teleconferences from January 2019 Interim meeting to today:**
		* [**https://mentor.ieee.org/802.11/dcn/19/11-19-0126-01-00ax-tgax-january-2019-st-louis-meeting-minutes.docx**](https://mentor.ieee.org/802.11/dcn/19/11-19-0126-01-00ax-tgax-january-2019-st-louis-meeting-minutes.docx)
		* [**https://mentor.ieee.org/802.11/dcn/19/11-19-0296-00-00ax-munites-of-tgax-teleconferences-from-feb-to-mar-2019.docx**](https://mentor.ieee.org/802.11/dcn/19/11-19-0296-00-00ax-munites-of-tgax-teleconferences-from-feb-to-mar-2019.docx)
		1. **Moved by Allan Jones, Seconded by Al Petricj.**
		2. **Result: The motion was approved with unanimous consent.**
3. **Editors Report, Robert Stacey (Intel)**
	1. D4.0 Comment spreadsheet: <https://mentor.ieee.org/802.11/dcn/19/11-19-0292-02-00ax-comments-on-tgax-d4-0.xlsx>
		1. There are about 200 unassigned comments.
		2. Robert calls for volunteer for those unassigned comments.
	2. Comments on the CA document: <https://mentor.ieee.org/802.11/dcn/19/11-19-0290-00-00ax-comments-on-tgax-ca-doc-r5.xlsx>
4. **Ad hoc meeting discussion**
	1. Before May 2019 Interim: May 8 – 10, 2019 in San Diego
	2. Before July 2019 Plenary: July 10 – 12, 2019 in Rennes, France
5. **Discussion - Comments on the CA document**
	1. Participant A: 6 GHz gets blocked! There is no resolution – Could “No resolution” be the resolution?
	2. Participant B: Coexistence between Bluetooth and Wi-Fi. There was market need for such device/service. 802.15.2 RP may be a good example.
	3. Participant C: We cannot resolve coexistence issue of UWB and Wi-Fi in the 6 GHz band. It’s impossible to detect the UWB signal.
6. **AoB**
	1. No other business.
	2. We have ad hoc meetings tomorrow AM2 and PM2.
	3. The next TGax full session is Wednesday PM1.
7. **Recess**
	1. TGax is in recess @ 14:38.

**Tuesday, March 12th, 2019, AM2 TGax Ad Hoc Session (10:30 AM - 12:30)**

* PHY ad hoc
	+ Regency C
* MAC ad hoc
	+ Regency D

**Tuesday, March 12th, 2019, PM2 TGax Ad Hoc Session (16:00 - 18:00)**

* PHY ad hoc
	+ Regency C
* MAC ad hoc
	+ Regency D

**Wednesday, March 13th, 2019, PM1 TGax Session (13:30 - 15:30)**

1. **The meeting called to order at 8:00 AM by Osama Aboul-Magd (Huawei Technologies), the chairperson of 802.11 TGax.**
	1. Introduction of TGax leadership.
	2. Agenda document 18/2114r5 available.
2. **Agenda Setting**
	1. Proposed Agenda for Wednesday AM1:
		1. Call meeting to order
		2. IEEE-SA IPR policy and Procedure
		3. Submissions and comment resolution
		4. Recess
	2. Chair asked if there is any objection to proceed with this agenda. 🡪 No objection.
	3. The agenda for AM1 was approved.
3. **Announcements**
	1. Chair reminded that we are still operating under the IEEE-SA P&P.
	2. Chair asked people to state name and affiliation when addressing the group for the first time in a session.
	3. Attendance: <https://imat.ieee.org/attendance>
4. **Comment Resolution**
	1. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for BSR operation,” based on the submission 11-19-0316-00.**
		1. Summary
			1. The submission contains the proposed resolutions for the comments submitted for TGax D4.0 with the following CIDs on the BSR operation:
				1. CIDs: 20495, 20530, 21343, 21344, 21345, 21346, 21347
		2. Discussion
			1. A participant mentioned he/she would like to see the text in the draft.
		3. Straw Poll – deferred until Thursday for the people to have more time to review.
	2. **Alfred Asterjadhi (company) presented “Comment resolutions for QoS Control,” based on the submission 11-19-0303-00.**
		1. Summary
			1. The submission contains the proposed resolutions for the comments submitted for TGax D4.0 with the following CIDs on the QoS Control field:
			2. CIDs: 20459, 20460, 20461, 20462, 20463, 20572, 20734, 20907, 20908, 21123, 21452, 21465, 21453
		2. Discussion
			1. A member commented on the QoS Control field in the BSR
		3. **Straw Poll: Do you accept the resolution for CIDs 20459, 20460, 20461, 20462, 20463, 20572, 20734, 20907, 20908, 21123, 21452, 21465, 21453 in doc 11-19/0303r1?**
			1. **3 CIDs (20672, 20717, 21123) deferred.**
			2. **Result: Accepted with no objection.**
	3. **Alfred Asterjadhi (Qualcomm) presented “Comment resolutions for Frame Control,” based on the submission 11-19-0309-00.**
		1. Summary
			1. Resolutions for the comments received from WGLB 238 on the IEEE 802.11ax D4.0 with following CIDs on Frame Control field:
				1. CIDs: 20174, 20269, 20270, 20570, 20853, 21475, 21585
		2. Discussion
			1. Re: CID 20174
				1. A member commented additional complexity is not needed.
				2. Another member commented on the data rate of the 2.4 GHz case.
			2. Re: CID 20853
				1. Numbering of the NOTE – there will be a rule to be sequential in a clause.
			3. The document was updated from r0 to r1.
		3. **Straw Poll: Do you accept the resolutions to CIDs 20174, 20269, 20270, 20570, 20853, 21475, 21585 in document 11-19/0303r1?**
			1. **Result: Accepted with no objection.**
	4. **Zhou Lan (Broadcom Ltd.) presented “Comment resolution on CID 20175,” based on the submission 11-19-0427-00.**
		1. Summary
			1. When an AP wants a STA to terminate the current MU EDCA time out value, there is no mechanism defined in the current spec to do so.
				1. CID: 20175
			2. Zhou discussed two potential mechanisms.
		2. Discussion
			1. A member asked for the differences between the two mechanisms. 🡪 The point is how to change the EDCA timer from MU to SU.
			2. Another member discussed the signaling scheme valid for all STAs.
		3. Straw Poll – Deferred.
5. **AoB**
	1. None.
6. **Recess**
	1. TGax meeting is in recess @ 15:15 until start of PM1 session (13:30) today.

**Wednesday, March 13th, 2019, PM2 TGax Ad Hoc Session (16:00 - 18:00)**

* PHY ad hoc
	+ Room: Regency C
* MAC ad hoc
	+ Room: Regency D

**Thursday, March 14th, 2019, AM1 TGax Session (8:00 - 10:00 AM)**

1. **The meeting called to order at 8:00 AM by Osama Aboul-Magd (Huawei Technologies), the chairperson of 802.11 TGax.**
	1. Introduction of TGax leadership.
	2. Agenda document 19/0238r4 available.
2. **Agenda Setting**
	1. Proposed Agenda for Thursday AM1 and PM1:
		1. Call meeting to order
		2. IEEE-SA IPR policy and Procedure
		3. TG Motions
		4. Ad hoc meeting Motion
		5. Telecon Schedule
		6. Comment Assignment
		7. Submissions and comment resolution
		8. Adjourn
	2. Chair asked if there is any objection to proceed with this agenda. 🡪 No objection.
	3. The agenda for Thursday AM1 and PM1 was approved.
3. **Announcements**
	1. Chair reminded that we are still operating under the IEEE-SA P&P.
	2. Chair asked people to state name and affiliation when addressing the group for the first time in a session.
	3. Attendance: <https://imat.ieee.org/attendance>
4. **TG Motions**
	1. **CR Motions**
		1. **CR Motion #808: Move to accept resolutions to CIDs 21163, 21571, 21296, 21292, 21293, 21508 in doc 11-19/0288r2.**
			1. **Moved by Po-Kai Huang, Seconded by Alfred Asterjadhi.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		2. **CR Motion #809: Move to accept resolutions to CIDs; 20419, 20093, 20283, 20002, 20003, 21480, 21101, 21481, 20597, 20218, 20971, 21545, 20509, 20999, 21000, 20004, 21546, 20005, 20191, 21602, 20478, 20479, 20639, 21040, 21504, 20574, 20285, 20287, 20008, 20009 in doc 11-19/0394r1.**
			1. **Moved by Abhishek Patil, Seconded by Alfred Asterjadhi.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		3. **CR Motion #810: Move to accept resolutions to CIDs; 20061, 21489, 21490, 20063, 20064, 21491, 20084, 20930, 20931 in doc 11-19/0395r1.**
			1. **Moved by Abhishek Patil, Seconded by Alfred Asterjadhi.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		4. **CR Motion #811: Move to accept resolutions to CIDs; 21147, 21148, 21149, 21150, 21151, 21152, 21153, 21154, 21155, 21156, 21165, 20412, 20031 in doc 11-19/0289r2.**
			1. **Moved by Po-Kai Huang, Seconded by Abhishek Patil.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
			4. **CID 20018 in doc 11-19/0289r2 was deferred.**
		5. **CR Motion #812: Move to accept resolutions to CIDs; 20256, 20257 in doc 11-19/0447r1.**
			1. **Moved by Jarkko Kneckt, Seconded by Alfred Asterjadhi.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		6. **CR Motion #813: Move to accept resolutions to CIDs 20115, 20298, 20706, 21569, 20076, 20704, 21159, 21284, 21494, 21568, 21570 in doc 11-19/0301r1.**
			1. **Moved by Alfred Asterjadhi, Seconded by Abhishek Patil.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		7. **CR Motion #814: Move to accept resolutions to CIDs 20038, 21507 in doc 11-19/0305r0.**
			1. **Moved by Alfred Asterjadhi, Seconded by Abhishek Patil.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		8. **CR Motion #815: Move to accept resolutions to CIDs 20233, 20234, 20406, 21204, 21205 in doc 11-19/0315r1.**
			1. **Moved by Alfred Asterjadhi, Seconded by Abhishek Patil.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
			4. **CID 20235 and 20836 in doc 11-19/0315r1 are deferred.**
		9. **CR Motion #816: Move to accept resolutions to CIDs 20032, 20491, 20033, 20272, 20080, 20271, 20035, 20025 in doc 11-19/0436r2.**
			1. **Moved by Abhishek Patil, Seconded by Bin Tian.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
			4. **CID 20257 resolved in another document**
			5. **CIDs 20080 and 20035 are deferred and resolved in r2.**
		10. **CR Motion #817: Move to accept resolution to CID 20012 in doc 11-19/0479r0.**
			1. **Moved by Abhishek Patil, Seconded by Alfred Asterjadhi.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		11. **CR Motion #818: Move to accept resolutions to CIDs 21210, 21448, 21449, 21540 in doc 11-19/0325r1.**
			1. **Moved by Po-Kai Huang, Seconded by Laurent Cariou.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
			4. **CID 21211 is deferred.**
		12. **CR Motion #819: Move to accept resolutions to CIDs 20459, 20460, 20461, 20462, 20463, 20572, 20672, 20717, 20734, 20907, 20908, 21123, 21452, 21465, 21453 in doc 11-19/0303r1.**
			1. **Moved by Alfred Asterjadhi.**
			2. **Result: This motion was deferred..**
		13. **CR Motion #820: Move to accept resolutions to CIDs 20269, 20270, 20570, 20853, 21475 in doc 11-19/0309r1.**
			1. **Moved by Alfred Asterjadhi, Seconded by Abhishek Patil.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
			4. **CIDs 20174 and 21585 are deferred**
		14. **CR Motion #821: Move to accept resolutions to CIDs 20007, 20159, 20160, 20721, 20888, 20994, 20995, 21125, 20310, 20311, 21413, 21460, 20540, 20548, 21181, 21488 in doc 11-19/0492r1.**
			1. **Moved by Po-Kai Huang, Seconded by Laurent Cariou.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		15. **CR Motion #822: Move to accept resolutions to CIDs 20337, 20338, 20569, 20615, 20669, 20677, 20948, 21094, 21483, 21484, 21485 in doc 11-19/0416r1.**
			1. **Moved by Laurent Cariou, Seconded by Alfred Asterjadhi.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
			4. **CIDs 21038, 21060, and 21095 are deferred**
		16. **CR Motion #823: Move to accept the proposed comment resolution to CID 20395 and the corresponding modification proposal to IEEE P802.11ax D4.0 as in 11-19/0378r4.**
			1. **Moved by Youhan Kim, Seconded by Bin Tian.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		17. **CR Motion #824: Move to accept the proposed comment resolution to the following CIDs and the corresponding modification proposal to IEEE P802.11ax D4.0 as in 11-19/0379r1.**
* **CID 21209, 21421, 20665, 21386, 20635, 21387, 20096, 21428, 20379, 21217, 20089, 20148, 20149, 20360, 20986.**
	+ - 1. **Moved by Youhan Kim, Seconded by Bin Tian.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		1. **CR Motion #825: Move to accept the proposed comment resolution to the following CIDs and the corresponding modification proposal to IEEE P802.11ax D4.0 as in 11-19/0386r1.**
* **CID 20164, 21324, 21498.**
	+ - 1. **Moved by Youhan Kim, Seconded by Bin Tian.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		1. **CR Motion #826: Move to accept the proposed comment resolution to the following CIDs and the corresponding modification proposal to IEEE P802.11ax D4.0 as in 11-19/0385r2.**
* **CID 20095, 20695, 21146, 21359, 21377, 21379, 21380, 21555.**
	+ - 1. **Moved by Youhan Kim, Seconded by Bin Tian.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		1. **CR Motion #827: Move to accept the proposed comment resolution to the following CIDs and the corresponding modification proposal to IEEE P802.11ax D4.0 as in 11-19/0407r4.**
* **CID 20477, 20557, 20707, 20726, 20731, 20775, 20787, 20894, 20899, 21020, 21025, 21363, 21382, 21384, 21407.**
	+ - 1. **Moved by Bo Sun, Seconded by Bin Tian.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		1. **CR Motion #828: Move to accept the proposed comment resolution to the following CIDs and the corresponding modification proposal to IEEE P802.11ax D4.0 as in 11-19/0422r2.**
* **CID 21497.**
	+ - 1. **Moved by Xiaogang Chen, Seconded by Bo Sun.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
		1. **CR Motion #829: Move to accept the proposed comment resolution to the following CIDs and the corresponding modification proposal to IEEE P802.11ax D4.0 as in 11-19/0407r4.**
* **CID 21409, 20711.**
	+ - 1. **Moved by Bo Sun, Seconded by Bin Tian.**
			2. **Discussion: No discussion**
			3. **Result: Accepted with unanimous consent.**
1. **TGax ad hoc in May 2019**
	1. **From May 8th to 10th, 2019.**
	2. **Venue: San Diego.**
		1. **TGax Ad Hoc Meeting Motion: Authorize TGax to hold an ad-hoc meeting on May 8-10 in San Diego, for the purpose of resolving comments received on draft D4.0..**
			1. **Moved by Abhishek Patil, Seconded by George Cherian.**
			2. **Discussion: No discussion**
			3. **Result: Y/N/A = 41/0/3, motion passes.**
2. **Presentation**
	1. **Laurent Cariou (Intel) presented “CR for NFRP,” based on the submission 11-19-0414-01.**
		1. Summary
			1. Resolutions for the comments on the IEEE 802.11ax D4.0, NFRP with following CIDs are proposed.
				1. CIDs: 20260, 20261, 20362, 20363, 20364, 20575, 21134, 21135, 21136, 20420, 21142.
			2. This is continuation of the presentation from the MAC ad hoc session.
		2. Discussion
			1. C) An AP sends NFRP and the STA has choice of not responding to it. 🡪 People discussed the relation between the NFRP and STA’s power management mode.
			2. Q) What is the purpose of sending NFRP to a STA that may be in a power save mode? 🡪 To see if the STA is in awake state or not.
			3. Some people asked for clarification of the behaviors of the AP and the STA.
			4. A member commented that this is not the right way to go.
			5. As the result od discussions, three CIDs are deferred for now.
		3. Next Step
			1. Laurent to come back with a new resolution for the deferred CIDs.
	2. **Kaiying Lv (ZTE) presented “Resolution for CID 20346 related to BSS Color,” based on the submission 11-19-0494-01.**
		1. Summary
			1. A resolution for the comment on the IEEE 802.11ax D4.0 with CID 20346 related to the BSS Color is proposed.
		2. Discussion
			1. C) A TDLS STA has no way of choosing the BSS Color. Need to define how to set the HE-SIG-A field if we disable it.
			2. Chair suggested more offline discussion.
		3. Next Step
			1. Kaiying to come back with a new resolution and text for this CID.
3. **Teleconference**
	1. Thursday March 28, 10:00 – 12:00 ET
	2. Thursday April 11, 10:00 – 12:00 ET
	3. Thursday April 25, 10:00 – 12:00 ET
	4. Thursday May 21, 10:00 – 12:00 ET
4. **Comment Assignment**
	1. We still have 172 unassigned comments.
	2. Robert Stacey, the TGax technical editor, lead the discussion.
5. **Recess**
	1. TGax session is in recess @ 10:00 until start of PM1 today.

**Thursday, March 14th, 2019, PM1 TGax Session (13:30 - 15:30)**

1. **The meeting called to order at 13:35 AM by Osama Aboul-Magd (Huawei Technologies), the chairperson of 802.11 TGax.**
	1. Introduction of TGax leadership.
	2. Agenda document 19/0238r5 available.
2. **Agenda Setting – already approved**
	1. Proposed Agenda for Thursday AM1 and PM1:
		1. Call meeting to order
		2. IEEE-SA IPR policy and Procedure
		3. TG Motions
		4. Ad hoc meeting Motion
		5. Telecon Schedule
		6. Comment Assignment
		7. Submissions and comment resolution
		8. Adjourn
	2. Chair asked if there is any objection to proceed with this agenda. 🡪 No objection.
	3. The agenda for Thursday AM1 and PM1 was approved.
3. **Announcements**
	1. Chair reminded that we are still operating under the IEEE-SA P&P.
	2. Chair asked people to state name and affiliation when addressing the group for the first time in a session.
	3. Attendance: <https://imat.ieee.org/attendance>
4. **TG Motions**
	1. **CR Motion #819 is deferred.**
	2. **CR Motion #830: Move to accept resolutions to CIDs ; 20126, 20347, 20348, 20905, 21268, 21493 in doc 11-19/0302r1.**
		1. **Moved by Alfred Asterjadhi, Seconded by Abhishek Patil.**
		2. **Discussion: No discussion.**
		3. **Result: Approved by unanimous consent.**
	3. **CR Motion #831: Move to accept resolutions to CIDs 20495, 20530, 21343, 21344, 21345 in doc 11-19/0316r1.**
		1. **Moved by Alfred Asterjadhi, Seconded by Abhishek Patil.**
		2. **Discussion: No discussion.**
		3. **Result: Approved by unanimous consent.**
5. **Presentation**
	1. **Zhou Lan (Broadcom) presented “,” based on the submission 11-19-0427-01.**
		1. Summary
			1. A resolution for the comment with CID 20175 that asks for a mechanism to exit current MU EDCA backoff period when AP stops triggering is proposed.
			2. Two proposals are contained in slides 6 and 8.
		2. Discussion
			1. A member commented the difference between the two proposals is not clear.
			2. Another member commented that this is an implementation issue.
		3. Straw Polls
			1. Straw Poll #1: Do you accept one of the following signaling method for the AP to terminate the current MU EDCA time-out at the STAs?

Option 1: A-Control

Option 2: Trigger Frame

Option 3: HE Action frame

Option 4: non of the above

* + - * 1. Discussion
				2. Result: Option 1/Option 2/Option 3/Option 4 = 13/4/6/30.
			1. Straw Poll #2: Do you agree to consider one of the following inactivity detection and time-out mechanisms for the STA to exit from the current MU EDCA time-out

Option 1: A STA may exit from MU EDCA Time-out if it has observed no frame transmitted by AP during a newly defined inactivity time out period.

Option 2: A STA may exit from MU EDCA Time-out if it has observed no Trigger Frames transmission addressed to it during a time out period.

Option 3: A STA may exit from MU EDCA Time-out if it has observed no Trigger Frames transmission during a time out period.

Option 4: none of the above.

* + - * 1. Discussion
				2. Result: Option 1/Option 2/Option 3/Option 4 = 6/4/6/33.
1. **Comment Assignment**
	1. Robert Stacey lead the discussion.
	2. The result is summarized in the e-mail that Robert sent to the reflector.
		1. <http://www.ieee802.org/11/email/stds-802-11-tgax/msg01392.html>
2. **Adjournment**
	1. **TGax has adjourned for the week @ 15:31.**