IEEE P802.11
Wireless LANs

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| TGax teleconference minutes April 2018 |
| Date: 2018-5-1 |
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Abstract

This document contains minutes of TGax teleconference April 2018.

Rev. 0: Initial version.

Created TGax teleconferences on April 12th, 19th and 26th, 2018.

#  Teleconference on Thursday, April 12th, 2018, 20:00 – 22:00 (ET)

1. **Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 20:05 (ET).**
	1. Introduction of the chairperson Osama Aboul-Magd (Huawei Technologies) and the secretary Yasuhiko Inoue (NTT).
2. **Agenda Setting**
	1. Proposed Agenda
		1. Call the meeting to order
		2. IEEE 802 and 802.11 IPR Policy and Procedure
		3. Attendance (Please send an e.mail to Yasuhiko Inoue (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama Aboul-Magd (osama.aboulmagd@huawei.com))
		4. Announcements
		5. May ad hoc meeting
			1. ePoll: <https://mentor.ieee.org/802.11/poll-status?p=28300008>
		6. Presentation
			1. 11-18-0155-01, “Resolutions for CIDs related to GCR,” Yusuke Tanaka (Sony).
		7. AOB
		8. Adjourn
	2. Approval of the agenda
		1. Chair asked if there is any item to add to the agenda. 🡪 No item to add to the agenda.
		2. Chair asked if there is any objection to approve the agenda. 🡪 No objection.
		3. The agenda was approved.
3. **IEEE 802 and 802.11 IPR Policy and Procedure**
	1. Chair mentioned that we are operating under the IEEE 802 and 802.11 Policy and Procedure.
	2. Relevant documents
		1. IEEE Patent Policy - <http://standards.ieee.org/board/pat/pat-slideset.ppt>
		2. Patent FAQ - <http://standards.ieee.org/board/pat/faq.pdf>
		3. LoA Form - <http://standards.ieee.org/board/pat/loa.pdf>
		4. Affiliation FAQ - <http://standards.ieee.org/faqs/affiliationFAQ.html>
		5. Anti-Trust FAQ - <http://standards.ieee.org/resources/antitrust-guidelines.pdf>
		6. Ethics - <http://www.ieee.org/portal/cms_docs/about/CoE_poster.pdf>
		7. IEEE 802.11 Working Group Operartions Manual - <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-18-0000-802-11-operations-manual.docx>
		8. Participation in IEEE 802 Meetings
	3. Chair asked if there is any potentially essential patent that people are aware of.
		1. No potentially essential patent reported.
4. **Attendance**
	1. Chair asked the attendees to send an email to Yasu (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama (osama.aboulmagd@huawei.com) to record attendance.
5. **Announcement**
	1. Chair asked people to put cellphone on mute if not speaking.
	2. Chair asked people to state name and affiliation when addressing for the first time during the session.
6. **Reminder of the TGax May 2018 Ad Hoc meeting.**
	1. Chair reminded the audience to go to the ePoll and vote yes if they plan to attend the ad hoc.
7. **Presentations**
	1. **Yusuke Tanaka is not on the call.**
8. **AOB**
	1. None.
	2. Eldad will present updated CA document in the next teleconference.
9. **Adjournment**
	1. No time to go through the rest of the agenda items.
	2. Meeting adjourned at 20:18 (ET).
10. **List of Attendees – following people were on the call.**

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|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Stephane Baron | Canon |
| 3 | Yasu Inoue | NTT |
| 4 | Pooya Monajemi | Cisco |
| 5 | Sai Shankar Nandagoparan | Cypress |
| 6 | Abhishek Patil | Qualcomm |
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# Teleconference on Thursday, April 19th, 2018, 10:00 – 12:00 (ET)

1. **Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 10:05 (ET).**
	1. Introduction of the chairperson Osama Aboul-Magd (Huawei Technologies) and the secretary Yasuhiko Inoue (NTT).
2. **Agenda Setting**
	1. Proposed Agenda
		1. Call the meeting to order
		2. IEEE 802 and 802.11 IPR Policy and Procedure
		3. Attendance (Please send an e.mail to Yasuhiko Inoue (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama Aboul-Magd (osama.aboulmagd@huawei.com))
		4. Announcements
		5. TGax May ad hoc
			1. ePoll: <https://mentor.ieee.org/802.11/poll-status?p=28300008>
			2. Chair mentioned that he would send the list of attendees to Stephane soon.
		6. Presentation
			1. 11-16-1348-03, “Coexistence Assurance Document,” Eldad Perahia (HPE-Aruba).
		7. AOB
		8. Adjourn
	2. Approval of the agenda
		1. Chair asked if there is any item to add to the agenda. 🡪 No item to add to the agenda.
		2. Chair asked if there is any objection to approve the agenda. 🡪 No objection.
		3. The agenda was approved.
3. **IEEE 802 and 802.11 IPR Policy and Procedure**
	1. Chair mentioned that we are operating under the IEEE 802 and 802.11 Policy and Procedure.
	2. Relevant documents
		1. IEEE Patent Policy - <http://standards.ieee.org/board/pat/pat-slideset.ppt>
		2. Patent FAQ - <http://standards.ieee.org/board/pat/faq.pdf>
		3. LoA Form - <http://standards.ieee.org/board/pat/loa.pdf>
		4. Affiliation FAQ - <http://standards.ieee.org/faqs/affiliationFAQ.html>
		5. Anti-Trust FAQ - <http://standards.ieee.org/resources/antitrust-guidelines.pdf>
		6. Ethics - http://www.ieee.org/portal/cms\_docs/about
		7. Participation in IEEE 802 Meetings
	3. Chair asked if there is any potentially essential patent that people are aware of.
		1. No potentially essential patent reported.
4. **Attendance**
	1. Chair asked the attendees to send an email to Yasu (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama (osama.aboulmagd@huawei.com) to record attendance.
5. **Announcement**
	1. Chair asked people to put cellphone on mute if not speaking.
	2. Chair asked people to state name and affiliation when addressing for the first time during the session.
6. **Reminder of the TGax May 2018 Ad Hoc meeting.**
	1. Chair posted the proposed agenda for the TGax ad hoc meeting.
	2. Proposed schedule
		1. Wednesday: 9:00 – 18:00
		2. Thursday: 9:00 – 18:00
		3. Friday: 9:00 – 16:00
7. **TGax draft 2.3**
	1. Robert has sent out the current status of comment resolution.
	2. We will resolve all comments in the May 2018 session.
8. **Presentations**
	1. **Eldad Perahia (HPE-Aruba) presented “Coexistence Assurance Document,” based on the submission 11-16-1348-03.**
		1. Summary
			1. TGax PAR has been modified to consider frequency band up to 7.125 GHz.
			2. Eldad has made modification to the CA document accordingly.
		2. Discussion
			1. A member asked for the channelization in the document is agreed or not. 🡪 It is based on the latest submission we discussed during the March 2018 meeting..
		3. Next Step
			1. We will approve this document during the May 2018 session.
			2. Chair asked people to review the document.
9. **AOB**
	1. No other submission for today’s call.
10. **Adjournment**
	1. No time to go through the rest of the agenda items.
	2. Meeting adjourned at 10:25 (ET).
11. **List of Attendees – following people were on the call.**

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|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Lili Hervieu | CableLabs |
| 3 | Yasu Inoue | NTT |
| 4 | Eldad Perahia | HPE-Aruba |
| 5 | Al Petrick | InterDigital Communications |
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# Teleconference on Thursday, April 26th, 2018, 20:00 – 22:00 (ET)

1. **Meeting called to order by Osama Aboul-Magd (Huawei Technologies), the chairperson of TGax @ 20:05 (ET).**
	1. Introduction of the chairperson Osama Aboul-Magd (Huawei Technologies) and the secretary Yasuhiko Inoue (NTT).
2. **Agenda Setting**
	1. Proposed Agenda
		1. Call the meeting to order
		2. IEEE 802 and 802.11 IPR Policy and Procedure
		3. Attendance (Please send an e.mail to Yasuhiko Inoue (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama Aboul-Magd (osama.aboulmagd@huawei.com))
		4. Announcements
		5. May ad hoc meeting
			1. ePoll: <https://mentor.ieee.org/802.11/poll-status?p=28300008>
		6. Presentation
			1. 11-18-0705-00, “Comment Resolution section 4, 5 and 27.1,” Guoqing Li (Apple).
			2. 11-18-0720-00, “CR section 9.4.1.17,” Guoqing Li (Apple)
			3. 11-18-0733-00, “,” Tomoko Adachi (Toshiba)
			4. 11-18-0734-00, “,” Tomoko Adachi (Toshiba)
			5. 11-18-0737-00, “,” Mark Rison (Samsung)
		7. AOB
		8. Adjourn
	2. Approval of the agenda
		1. Chair asked if there is any item to add to the agenda. 🡪 No item to add to the agenda.
		2. Chair asked if there is any objection to approve the agenda. 🡪 No objection.
		3. The agenda was approved.
3. **IEEE 802 and 802.11 IPR Policy and Procedure**
	1. Chair mentioned that we are operating under the IEEE 802 and 802.11 Policy and Procedure.
	2. Relevant documents
		1. IEEE Patent Policy - <http://standards.ieee.org/board/pat/pat-slideset.ppt>
		2. Patent FAQ - <http://standards.ieee.org/board/pat/faq.pdf>
		3. LoA Form - <http://standards.ieee.org/board/pat/loa.pdf>
		4. Affiliation FAQ - <http://standards.ieee.org/faqs/affiliationFAQ.html>
		5. Anti-Trust FAQ - <http://standards.ieee.org/resources/antitrust-guidelines.pdf>
		6. Ethics - <http://www.ieee.org/portal/cms_docs/about/CoE_poster.pdf>
		7. IEEE 802.11 Working Group Operartions Manual - <https://mentor.ieee.org/802.11/dcn/14/11-14-0629-18-0000-802-11-operations-manual.docx>
		8. Participation in IEEE 802 Meetings
	3. Chair asked if there is any potentially essential patent that people are aware of.
		1. No potentially essential patent reported.
4. **Attendance**
	1. Chair asked the attendees to send an email to Yasu (inoue.yasuhiko@lab.ntt.co.jp) and/or Osama (osama.aboulmagd@huawei.com) to record attendance.
5. **Announcement**
	1. Chair asked people to put cellphone on mute if not speaking.
	2. Chair asked people to state name and affiliation when addressing for the first time during the session.
6. **Presentation**
	1. **Guoqing Li (Apple) presented “Comment resolutions for 27.15.2,” based on the submission 11-18-0720-00.**
		1. Summary
			1. Resolutions for the comments related to TGax D2.0 with the following 3 CIDs
		2. Discussion
			1. A participant suggested editorial change: Block Ack 🡪 BlockAck
			2. Another member commented that M-BA is a variant of BlockAck and is covered by description of BlockAck.
		3. Next Step
			1. Guoqing to update the document (will be r2)..
	2. **Mark Rison (Samsung) presented “Single-STA trigger-based sounding,” based on the submission 11-18-0737-00.**
		1. Summary
			1. This submission proposes changes to 802.11ax/D2.2 to allow an AP to use trigger-based sounding with a single STA.
			2. Currently, in the HE Trigger-based souding procedure, the HE NDP Announcement frame contains two or more STA Info fields.
			3. It is proposed to allow single-STA trigger-based sounding.
		2. Discussion
			1. Some people commented that the single-STA case is covered by non-trigger-based sounding procedure.
			2. A participant mentioned that similar mechanism is allowed in other system.
			3. The benefit of this proposal is that trigger-based sounding is allowed even when there is only one (HE) STA in the BSS.
			4. Some people mentioned that the related text in clause 9.3.1.20 needs to be modified as well.
			5. A participant mentioned that the different behavor is required for the beamformee depending on the sounding mechanism, i.e., trigger-based or non-trigger based, and it is not clear how a beamformee can tell which of the sounding mechanism is used.
		3. Straw Poll: Do you prefer to allow TB sounding with a single STA by:

a) allowing a broadcast NDPA with a single STA Info field

b) allowing a STA Info field with an AID that indicates that no STA is being addressed (e.g .2046)

c) allowing a STA Info field with an AID that has not been assigned to any STA in the BSS

d) none of the above

* + - 1. Result: a/b/c/d = 8/14/13/0
		1. Next Step
			1. Need more discussion to reach a consensus.
	1. **Tomoko Adachi (Toshiba) presented “Resolutions to LB230 comments submitted to**
	2. **subclauses 9.3.1.8 and 10.24.6,” based on the submission 11-18-0733-00.**
		1. Summary
			1. Resolutions for the following 4 CIDs related to the subclauses 9.3.1.8 and 10.24.6, and modifications to the baseline text are proposed.
				1. Relevant CIDs: 11498, 14323, 13659, 11056
		2. Discussion
			1. A participant asked for the relationship with the Multi-TID Block Ack.
			2. There was a comment that different resolutions for CIDs 11498 and 14323 are proposed during the TGax March 2018 ad hoc meeting (18/218).
		3. Next Step
			1. Tomo to talk with the author(s) of 18.218.
	3. **Tomoko Adachi (Toshiba) presented “Resolutions to LB230 comments submitted to subclause 9.3.1.9.1,” based on the submission 11-18-0734-00.**
		1. Summary
			1. Resolutions for the following CIDs related to subclause 9.3.1.9.1 (BlockAck frame format) are proposed.
				1. Relevant CIDs: 11745, 11112, 11113
			2. Modifications to the related texts are also presented.
		2. Discussion
			1. No discussion.
		3. Next Step
			1. Ready for motion.
1. **AOB**
	1. None.
2. **Adjournment**
	1. No time to go through the rest of the agenda items.
	2. Meeting adjourned at 10:25 (ET).
3. **List of Attendees – following people were on the call.**

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Affiliation** |
| 1 | Osama Aboul-Magd | Huawei Technologies |
| 2 | Tomoko Adachi | Toshiba |
| 3 | Stephane Baron | Canon Research |
| 4 | Liwen Chu | Marvell |
| 5 | Yasu Inoue | NTT |
| 6 | Youhan Kim | Qualcomm |
| 7 | Jarkko Kneckt | Apple |
| 8 | Guoqing Li | Apple |
| 9 | Al Petrick | InterDigital |
| 10 | Kome Oteri | InterDigital |
| 11 | Abhishek Patil | Qualcomm |
| 12 | Ron Porat | Broadcom Ltd. |
| 13 | Mark Rison | Samsung |
| 14 | Kiseon Ryu | LG Electronics |
| 15 | Yongho Seok | MediaTek |
| 16 | Ian Sherlock | TI |
| 17 | L. Sun |  |
| 18 | Lochan Verma | Qualcomm |
| 19 | Xiaofei Wang | InterDigital |
| 20 | Ross Jian Yu | Huawei Technologies |
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