IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IEEE 802.11 TGbq  Plenary Meeting Minutes March 2025 | | | | |
| Date: 2025-03-12 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jonghoe Koo | Samsung Electronics |  |  | jh89.koo@samsung.com |

Abstract

This document contains the IEEE 802.11 TGbq minutes for the March Pleneary 2025.

Revision history:

R0: initial version

Abbreviations:

Q Question

A Answer

C Comment

# Wednesday AM2, March 12, 2025, 10:30am - 12:30am (EDT)

TGbq Chair: Edward Au (Huawei)

TGbq secretary: Jonghoe Koo (Samsung)

**Opening formalities (10:30am EDT)**

1. The IEEE 802.11 TGbq meeting was called to order at 10:30am EDT by the Chair.
2. Chair reminded the meeting registration.
3. Chair presented the TGbq meeting agenda [IEEE 802.11-25/0205r2](https://mentor.ieee.org/802.11/dcn/25/11-25-0205-02-00bq-tgbq-agenda-2025-march-plenary.xlsx) and reviewed the agenda items.
4. Chair designated Robert Stacey (Intel) as a co-host of Webex for slido setup.
5. Chair reviewed the meeting agenda and the agenda was approved by unaminous consent.

**[Administrative items]**

1. Chair presented TGbq supplementary materials [IEEE 802.11-25/0417r0](https://mentor.ieee.org/802.11/dcn/25/11-25-0417-00-00bq-supplementary-material-for-march-2025-plenary.pptx) slides.
2. Chair reviewed IEEE 802 required notices (emphasizing to ensure to announce name and affiliation at the first time to speak, anti-trust compliance, IEEE 802 WG rules and policies, etc.), IEEE SA meeting guidelines, IEEE Codes of Ethics and Conduct, IEEE individual process, and IEEE-SA standards activities with the fair and equitable consideration.
3. Chair remineded all to record their attendance in IMAT and other meeting reminders.

## General buisness

**Meeting minutes**

1. Motion: (Procedural): Move to approve the 26 February 2025 teleconference call meeting minutes ([25/0330r2](https://mentor.ieee.org/802.11/dcn/25/11-25-0330-02-00bq-tgbq-february-26-2025-teleconference-call-meeting-minutes.docx))
   1. Motion: Tuncer Baykers (Offino)
   2. Seconded: Cheng Chen (Intel)
   3. Discussion: No discussion
   4. Result: Approved by unaminous consent

**Task Group leadership**

1. There was one editor candidate and there were four vice-chair candidiates. The candidates' self-introductions were followed by a discussion and straw poll on the appropriate number of vice-chairs.
2. The editor candidate introduction: Cheng Chen (Intel) introduced himself remotely.
3. Vice-chair candidate introduction: three candidates, Rui Cao (NXP), Abhishek Patil (Qaulcomm), and Sang Kim (LG Eletronics) introduced themselves as vice-chair candidates in order.
4. The introduction of fourth vice-chair candidate, Micky Mehta (Pharrowtech BV), was skipped since he had introduced himself at the last telecon meeting.
5. Chair wanted to listen any opinion from members on the preferred number of vice-chairs before running the straw poll for the preferred number of vice-chairs.
6. Q: what is the role and responsibilities for each vice-chair?
7. A: It depends on the number of vice-chairs. We can set the roles for them later, e.g., chairing and leading teleconference call on behalf of chair and managing separate MAC/PHY ad-hoc calls if there are lots of technical contributions in the future.
8. C: For the case of TGbn, we have three vice-chairs. Having an adequate number of vice-chairs is particularly beneficial when dealing with ad-hoc meetings.
9. C: The workload may depend on the number of contributions we receive. Furthermore, we cannot predict the exact number of contributions. In brief, I propose that we have three vice-chairs.
10. C: Supportive of having three vice-chairs
11. Straw Poll: Please identify your preference on the number of vice chairs for the task group.

a) 1

b) 2

c) 3

d) Abstain

Result: 3 (50%, 107 votes), 2 (43%, 92 votes), 1 (6%, 13 votes), abstain (1%, 2 votes)

1. On Thursday AM2 session, vice-chair election would take place.

**Contributions (11:05am EDT)**

**Presentation of** [**IEEE 11-25/0238r**](https://mentor.ieee.org/802.11/dcn/25/11-25-0238-01-00bq-immw-system-reuses.pptx)**1, IMMW System Reuses (Yanchun Li, Huawei)**

1. Yanchun presented IEEE 11-25/0238r1, IMMW System Reuses.
2. Q: 11be PHY may not be proper if we investigate 11ac OFDM and phase noise model on this PHY.
3. A: 11be PHY automatically has the backward compatibility with the legacy including 11ac OFDM PHY. In addition, 11ac has wider subcarriers spacing. Uplocking ofdm would be useful.
4. Q: It is generally good direction to resue the existing one. In slide 4, there are several things missing, e.g., channel access and so on; we need to add more consideration points not to lose any essential consideration and parameters for the candidate design.
5. A: For 11ad/11ay, SP-based channel access is used. We can reuse various 11be features such as TWT SP, improved EDCA and etc.
6. Q: How can we synchronize with TGbn? If TGbn work is delayed or finishes much faster, then do we have such a plan?
7. A: There is minimal dependency on the TGbn timeline. Although TGbn offers features like QEM, which provide a slight improvement, its impact on TGbq timeline may be negligible. The majority of the baseline features come from 11be, so we do not have a dependency on TGbn.
8. Q: Agree with the general approach of resusing. Features to be considered (sub-7GHz, mmW) described in Slide 7 need further clarification.
9. A: For the synchronization, we can use the lower band. We need to simply the design. The first answer can cover your question. Synchronization on the sub-7Ghz can make simple for mmW synchronization operation. Short ranging media steaming and high throughput take advantage of higher bandwidth, e.g., TDLS, P2P.
10. Q; Slide 5, some clarification. PPDU structure of OFDM, what does the RTS/CTS-based means?
11. A: As an initial thought for mmW. Not omnidirectional. It’s directional. So we can use RTS only to one direcetion. Then receiver cannot receive RST in the other direction.
12. Q: It’s just an initial control frame. No change on ICF correct?
13. Q: In slide 4, regarding the beam tracking, what is the expected performance that you have in mind or expected ranging?
14. A: We may assume an indoor scenario. No more operation on the system may be required. A link is prepared and then quickly switch to secondary beam if needed. Simple scheme can be considred.

**Presentation of** [**IEEE 11-25/261r2**](https://mentor.ieee.org/802.11/dcn/25/11-25-0261-02-00bq-immw-for-consumer-device-and-tgbq-timeline.pptx)**, IMMW for Consumer Device and TGbq timeline (Jonghoe Koo, Samsung)**

1. Jonghoe presented [IEEE 11-25/261r2](https://mentor.ieee.org/802.11/dcn/25/11-25-0261-02-00bq-immw-for-consumer-device-and-tgbq-timeline.pptx).
2. Q: Option 3 with big feature set may not be appropriate if you want to consider to put a big feature set for 11bq since our scope is not to put a big feature.
3. A: Putting a big feature is not the intention. Just give an example that option 3 with longer timeline is typically used for TG developing a big fieature.
4. Q: We may need enough time to have many discussions with big audience since a big group is expected. The current timeline is very tough. It is a good starting point to revisit the timeline. For the second point, everything is okay but we need to further talk about a single antenna described in slide 5.
5. Q: We are going to reuse sub-7GHz and people had an optimistic view on the initial timeline. So may not require more time to complete the 11bq timeline.
6. A: It is expected that there will be so many contributions to be discussed. We need sufficient time to have open discussions with various contributions even though TGbq will develop a solution with a small change on top of sub-7GHz.
7. Q: Short timeline is good I think.
8. A: There are various point of view on what is the realistic, praticial and reasonable timeline.
9. Q: We need to talk about the real use cases since we already had 11ad/11ay so we need to show the nice use cases of 11bq with the benefit of using sub-7GHz.

**Presentation of** [**IEEE 11-25/0372r0**](https://mentor.ieee.org/802.11/dcn/25/11-25-0372-00-00bq-proposed-selection-procedure-for-ieee-802-11bq.pptx)**, Proposed Selection Procedure for IEEE 802.11bq (Abhishek Patil, Qualcomm)**

1. Abhishek Patil presented [IEEE 11-25/0372r0](https://mentor.ieee.org/802.11/dcn/25/11-25-0372-00-00bq-proposed-selection-procedure-for-ieee-802-11bq.pptx). There is no question.

**Presentation of** [**IEEE 11-25/310r0**](https://mentor.ieee.org/802.11/dcn/25/11-25-0310-00-00bq-new-cca-schemes-for-immw.pptx)**, New CCA Schemes for IMMW (Wei-Han Chen, MediaTek)**

1. Wei-Han presented [IEEE 11-25/310r0](https://mentor.ieee.org/802.11/dcn/25/11-25-0310-00-00bq-new-cca-schemes-for-immw.pptx).
2. Q: I have a concern about your SP, particularly the first technique. The AP performs CCAs with different directions in sequence using a single radio. I am generally concerned about ED detection on the preamble from other STAs.
3. A: For the preamble detection part, we need further consideration. Thanks for the comment.
4. Q: Is this to support D2D with IMMW? Would EDCA not be required?
5. A: First, it is AP to non-AP communication, so it is not necceassary for D2D case. Secondly, regarding EDCA which is the default channel access mechanism right now. Therefore, we may develop a brand new mechanism. Otherwise, we will follow the EDCA rules.
6. Q: Why do you limit the case for STA-to-STA case?
7. A: mSTA can be either AP MLD and non AP MLD.
8. Q: A device has capability whether it can do entire CCA and management.
9. A: It is up to a device’s capability.
10. Q: The CCA capability has reciprocity and this may not be considered by the different device. Different channel access capabitiy is used for the different use case. The framework should consider the basic fundamental use case first.
11. Q: It seems targeting D2D communication. In 11ad/ay, they use the SP-based scheduling. Then AP send something when a non-AP STA is prepared to receive. Is there any signaling between AP STA and non-AP STA for beam preparation?
12. Q: In Slide 4, what does the multiple transmission mean?
13. A: It’s multiple transmissions coming from different directions.
14. Q: There is only one backoff counter and timer intidicating that channel is idle. We have only one couter so that we need to wait.
15. A: In slide 5, at a give time, for a example, STA performs CCA in direction 2 with green region. At this moment, the STA does not care about the other three directions.
16. Q: There are three schemes proposed and it is better to provide and clarify the use cases suitable for each scheme.
17. A: Proposal 1, we have a simplified CCA capability. For the prosposal 2 and 3, we can take more for these approaches.

**Closing formalities**

1. The next meeting will be from 10:30am to 12:30pm EDT on Wednesday, March 12.
2. Chair called for contribution again and noted that contribution should be uploaded one day before the presentation.

**Adjourn (12:26am EDT)**

1. The chair announced that the call was adjourned at 12:26am EDT.

**List of Attendees**

# Thursday AM2, March 13, 2025, 10:30am - 12:30am (EDT)

TGbq Chair: Edward Au (Huawei)

TGbq secretary: Jonghoe Koo (Samsung)

**Opening formalities (10:30am EDT)**

1. The IEEE 802.11 TGbq meeting was called to order at 10:30am EDT by the Chair, Edward Au (Huawei)
2. Robert Stacy supported the meeting as administrator.
3. Registration reminder.

**[Administrative items]**

1. Chair presented TGbq supplementary materials [IEEE 802.11-25/0417r0](https://mentor.ieee.org/802.11/dcn/25/11-25-0417-00-00bq-supplementary-material-for-march-2025-plenary.pptx) slides.
2. Chair reviewed IEEE 802 required notices (emphasizing to ensure to announce name and affiliation at the first time to speak, anti-trust compliance, IEEE 802 WG rules and policies, etc.), IEEE SA meeting guidelines, IEEE Codes of Ethics and Conduct, IEEE individual process, and IEEE-SA standards activities with the fair and equitable consideration.
3. Chair remineded all to record their attendance in IMAT and other meeting reminders.

**Task Group leadership**

1. Motion: (Procedural): Confirm Cheng Chen as an IEEE 802.11 Task Group bq editor
   1. Motion: Sang Kim (LGE)
   2. Seconded: Abhishek Patil (Qualcomm)
   3. Discussion: No discussion
   4. Result: Approved by unaminous consent
2. Robert Stacey setup multiple choice poll with slide of Webex.
3. Guide for the poll is to choose up to 3. If you choose 4 then it goes invalid.
4. Vice Chair election – Vote for 1 individual (select up to 3 candidates)
   1. Total voters: 218
   2. Rui Cao (172 votes)
   3. Abhishek Patil (156 votes)
   4. Sang Kim (143 votes)
   5. Micky Mehta (64 votes)
5. Motion: (Procedural): Confirm Rui Cao as IEEE 802.11 Task Group bq co-vice chair
   1. Motion: Cheng Chen (Intel)
   2. Seconded: Stephen McCann (Huawei)
   3. Discussion: No discussion
   4. Result: Approved by unaminous consent
6. Motion: (Procedural): Confirm Abhishek Patil as IEEE 802.11 Task Group bq co-vice chair
   1. Motion: Yanchun Li (Huawei)
   2. Seconded: Cheng Chen (Intel)
   3. Discussion: No discussion
   4. Result: Approved by unaminous consent
7. Motion: (Procedural): Confirm Sang Kim as IEEE 802.11 Task Group bq co-vice chair
   1. Motion: HanGyu Cho (LGE)
   2. Seconded: Suhwook Kim (Samsung)
   3. Discussion: No discussion
   4. Result: Approved by unaminous consent

**Contributions (10:53am EDT)**

**Presentation of** [**IEEE 11-25/0366r0**](https://mentor.ieee.org/802.11/dcn/25/11-25-0238-00-00bq-immw-system-reuses.pptx)**, Simulation of Indoor Millimeter-Wave Signal Received Power Using an Omnidirectional Antenna Pattern (Ning Gao, OPPO)**

1. Ning Gao presented IEEE 11-25/0366r0.
2. Q&A wiil be added after text polishing as revision 1

**Presentation of** [**IEEE 11-25/0360r0**](https://mentor.ieee.org/802.11/dcn/25/11-25-0360-00-00bq-high-level-thoughts-on-immw-phy-design.pptx)**, High-level thoughts on IMMW PHY Design (Rui Cao, NXP)**

1. Rui Cao presented IEEE 11-25/0360r0.
2. Q&A wiil be added after text polishing as revision 1

**Presentation of** [**IEEE 11-25/0294r0**](https://mentor.ieee.org/802.11/dcn/25/11-25-0294-00-00bq-a-service-period-based-integrated-mmwave-link-operation-scheme.pptx)**, A Service Period Based Integrated mmWave Link Operation Scheme (Shuling Feng, MediaTek)**

1. Shuling presented IEEE 11-25/0294r0.
2. Q&A wiil be added after text polishing as revision 1

**Presentation of** [**IEEE 11-25/0370r0**](https://mentor.ieee.org/802.11/dcn/25/11-25-0370-00-00bq-mlo-assisted-beam-training-protocols-in-immw.pptx)**, MLO assisted beam training protocols in IMMW (Xiayu Zheng, NXP)**

1. Xiayu presented IEEE 11-25/0370r0.
2. Q&A wiil be added after text polishing as revision 1

**Closing formalities**

1. Chair announced the future teleconference call schedules:
2. Future teleconference calls:
   1. 9:30am ET to 11:00am ET
   2. Tuesday, starting from 1 April, 8 April, 15 April, 22 April to finish the presentaiotn in the queue.
3. Chair announced the plan for the 2025 May interim meeting for TGbq.
4. Plan for the 2025 May wireless interim:
   1. a) Confirm the Task Group timeline.
   2. b) Confirm the selection procedure for draft development. Please review the uploaded contributions.
   3. c) Review and discuss technical contributions
5. Chair called for contribution again and noted that contribution should be uploaded one day prior to the the presentation.

**Adjourn (12:30am EDT)**

1. The chair announced that the call was adjourned at 12:30am EDT.

**List of Attendees**