IEEE P802.11  
Wireless LANs

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| IEEE 802.11 TGbp Ambient Power Communication  Teleconference Minutes February & March 2025 | | | | |
| Date: 2025-02-25 | | | | |
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Abstract

This document contains the IEEE 802.11 TGbp minutes for the teleconferences in February and March 2025.

Rev 0: Minutes for the IEEE 802.11 TGbp teleconference on 2025-02-11 added

Rev 1: Minutes for the IEEE 802.11 TGbp teleconference on 2025-02-25 added

TG Chair: Bo Sun (Sanechips)

TG Vice Chairs: Steve Shellhammer (Qualcomm)

Rakesh Taori (Infineon)

TG Secretary: Sebastian Max (Ericsson)

TG Technical Editor: Yinan Qi (OPPO)

Abbrevations:

Q Question

A Answer

C Comment

SP Straw Poll

# Tuesday, February 11 2025, 09:00am - 11:00am (EDT)

## Opening

The TG Chair, Bo Son (Sanechips), presents the TG bp meeting agenda slides (IEEE 802.11-25/0227r0).

* Chair calls the meeting to order at 09:00 EDT.
* Chair instructs members to record attendance in IMAT.
* Chair reviews the meeting rules and patent policy (slides 2-6).
* No response to the call for patents.
* Chair reviews IEEE-SA COPYRIGHT POLICY (slides 7-8)
* Chair reviews other Guidelines, Participation, Suggested Best Practices (slides 9-10).
* Chair reviews the current TGbp session submission list (slide 11&12), and the meeting agenda for the telephone conference (slide 15).

## Agenda

Chair presents the agenda of the session: https://mentor.ieee.org/802.11/dcn/24/11-25-0227r0 (slide 15).

* + Call meeting to order and remind the group to record attendance on imat.ieee.org
  + IEEE-SA IPR policies and meeting rules
  + Approve meeting agenda
  + Review updated SFD (11-24/1613r4)
  + Contribution discussion
    - ~~11-25/0096, Active AMP STA polling procedure, Liwen Chu (NXP)~~
  + Any other business?
  + Recess

Presenter of 11-25/0096 not present on the call.

Chair calls for approval of the agenda of the TGbp session.

No objection, agenda approved.

## Review of the updated SFD (11-24/1613r4)

Yinan Qi (OPPO) presents document IEEE 802.11-24/1613r4, which includes updates according to the motions passed during the January meeting.

Q: Section Definitions. Only AM-2 should be in the definitions section. AM-1 is for architecture, AM-3 in WPT section. Both are not definitions, but functionality.

A: Agree that these are not strictly definitions. But they are closely related to architecture.

Q: Suggest moving to "Architecture feature".

C: SFD is still taking shape. We can still shuffle things around. In the interest of moving forward let's keep them here.

C: Suggest moving AM-1 and AM-3 to "Architecture Feature"

C: SFD text will not map exactly to the specification text. The corresponding text may end up in different sections later.

## Adjourn

The chair announces the session adjourned at 10:31 EDT.

Next telephone conference will be on February 25th.

## List of Attendees

Timestamp Name Affiliation

TGbp 02/11/2025 Wilhelmsson, Leif Ericsson AB

TGbp 02/11/2025 Ben Arie, Yaron Huawei

TGbp 02/11/2025 Trainin, Solomon Wiliot

TGbp 02/11/2025 Ha, Taeyoung Samsung Electronics Co., Ltd.

TGbp 02/11/2025 Sun, Bo Sanechips Technology Co., Ltd.

TGbp 02/11/2025 Bower, Patricia HaiLa Technologies, Inc

TGbp 02/11/2025 Qi, Yinan Guangdong OPPO Mobile Telecommunications Corp....

TGbp 02/11/2025 Campiglio, Ugo Cisco Systems, Inc

TGbp 02/11/2025 McCann, Stephen Huawei Technologies Co., Ltd

TGbp 02/11/2025 Max, Sebastian Ericsson AB

TGbp 02/11/2025 Costa, D.Nelson HaiLa Technologies

TGbp 02/11/2025 Choi, JinHo SAMSUNG ELECTRONICS

TGbp 02/11/2025 Kezys, Vytas HaiLa Technologies

# Tuesday, February 25 2025, 09:00am - 11:00am (EDT)

## Opening

The TG Chair, Bo Son (Sanechips), presents the TG bp meeting agenda slides (IEEE 802.11-25/0227r1).

* Chair calls the meeting to order at 09:00 EDT.
* Chair instructs members to record attendance in IMAT.
* Chair reviews the meeting rules and patent policy (slides 2-6).
* No response to the call for patents.
* Chair reviews IEEE-SA COPYRIGHT POLICY (slides 7-8)
* Chair reviews other Guidelines, Participation, Suggested Best Practices (slides 9-10).
* Chair reviews the current TGbp session submission list (slide 11&12), and the meeting agenda for the telephone conference (slide 17).

## Agenda

Chair presents the agenda of the session: https://mentor.ieee.org/802.11/dcn/24/11-25-0227r1 (slide 17).

* + Call meeting to order and remind the group to record attendance on imat.ieee.org
  + IEEE-SA IPR policies and meeting rules
  + Approve meeting agenda
  + Contribution discussion
    - ~~11-25/0096, Active AMP STA polling procedure, Liwen Chu (NXP)~~
    - 11-25/0252, Slotted vs Pure Aloha for Active Transmitter AMP Use Cases, Amichai Sanderovich (Wiliot)
  + Any other business?
  + Recess

Presenter of 11-25/0096 not present on the call.

Chair calls for approval of the agenda of the TGbp session.

No objection, agenda approved.

## Contributions

Presentation of IEEE 802.11-25/0252, Slotted vs Pure Aloha for Active Transmitter AMP Use Cases, Amichai Sanderovich (Wiliot)

Q: We do not see impact of collisions in Aloha.

A: We do see ACK causes more collisions in slotted Aloha.

Q: So slot duration affects the efficiency.

A: The slot indication includes the slot duration.

Q: Slide 5, given the number of interfering Tags is the same. We would expect the pure Aloha would have more collisions.

A: it comes from the slotted Aloha only has 20 opportunities to TX, while there are 31 opportunities for slotted Aloha. We see there are more collisions with Aloha, which make the overall efficiency approximately the same. Would like to see others confirm our simulation.

Q: What does the success rate mean?

A: It’s the number of successful communications over the time.

Q: The maximum clock drift during the TXOP, we could add a guard time and then drop the Slot Indication transmissions. Would that improve the efficiency of the slotted Aloha.

A: Removing Slot Indication will reduce overhead. We assume 10,000 PPM clock. Do not want to have a high frequency clock.

Q: Slide 8, please explain the # TXOP.

A: The total time is #TXOP time the TXOP time.

Q: please explain the number of success reads. Why is there less than 100% success reads.

A: Its an artifact of simulation since we stop the simulation at some time. The effect is small.

Q: Why did you choose isotropic deployment I Slide 7?

A: It was for simplicity of the simulation.

C: Other deployments might make sense to consider.

Q: Can we assume in pure Aloha can also hear the ACKs to other STAs?

A: Good point, it is a design consideration. They can also hear an ACK on a different channel. We are open to studying that.

Q: I assume the slot indication are needed.

A: Slot indications are used for synchronization and can also be used to indicate the slot duration. In these simulations we used fixed slot durations.

Q: For a fixed slot time and TXOP = 3.8ms, If you get 1% clock accuracy, you can do without slot indication, is that correct?

A: I need to do the calculations.

## Adjourn

The chair announces the session adjourned at 10:15 EDT.

Next telephone conference will be on March 4th.

## List of Attendees