IEEE P802.11  
Wireless LANs

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| TGbi Teleconference Minutes April 25th 2024 | | | | |
| Date: 2024-04-16 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
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Abstract

This document contains the minutes for the IEEE 802.11bi task group meetings that took place Thursday April 25th.

Note: Highlighted text are action items.

Q – proceeds a question

A - proceeds an answer

C - proceeds a comment

Yellow highlight - action point

**Chair: Carol Ansley, Cox Communications**

**Secretary: Stéphane Baron**

**Vice-chairs: Jerome Henry, Cisco; Stephen McCann, Huawei**

**Technical editor: Po-Kai Huang, Intel**

Chair calls meeting to order at 10:04 ET.

Agenda slide deck: [11-24-0646r3](https://mentor.ieee.org/802.11/dcn/24/11-24-0646-03-00bi-tgbi-telecon-agenda-apr-may.pptx):

1. Reminder to do attendance
2. The chair mentioned the call for essential patents

No one responded to the call for essential patents but there is a comment.

1. Review of policies and procedures.

IEEE individual process slides were presented.

1. The chair covered the IEEE copyright policy and participation rules.
   1. Questions

No Questions

1. **Discussion of agenda 11-24-0646r3 (slide #14)**
   1. Discussion on agenda

Request to add 24/637r1 and 11-23/1148r1

Chair to create an upload revision 4

* 1. Adoption of agenda by unanimous consent (15participants).

1. **Administrative**
   1. Upcoming teleconferences planning

* May 2nd, 9th

Chair indicates she will not be in person in Warsaw for next F2F meeting.

1. **Technical presentations**
   1. [11-24/0731r0](https://mentor.ieee.org/802.11/dcn/24/11-24-0731-00-00bi-harmonization-proposal.pptx) -- Harmonization proposal– Duncan Ho

Document presented by Duncan.

Present a document in a PPT format to explain his proposal to harmonize proposals that are on the table today for Epoch management.

* + 1. Discussion:

C: I think a STA always ask to create a individual Epoch and the AP then decides if it creates a group based on that.

C: I like the idea of having an approximating number of STA in a group provided by the AP.

Q: Can we deside here what should be the minimum viable duration of the Epoch? Do you think we should vote on this now using an SP.

A: I know what I think is reasonable and acceptable for me so I can vote, but not everybody make implementation and may find it difficult to answer.

C: This 5 minutes Epoch duration is by far too long for some scenario. Maybe 1ms is too extreme, so maybe multiple of TBTTs can be something we can agree on.

C: The AID assignment is ok to me, but this provides a large overhead. If we go to larger epoch duration, I think we can find a solution to AID issues.

Q: Can you explain the insider attack?

A: As an insider I subscribe to the AP and get the AID offset. Based on that I can know AID offset for all the other users.

Q: So, this is only visible for a given BSS?

A: Yes, but an attacker may register to several APs, even to all the groups and then get AID offset.

Q: About retransmission, what is the problem here?

A: You are supposed to used old parameters. Since the frame body will remain the same, it can be correlated and then changing the header obfuscation becomes useless. Then if you need old params and change epoch very frequently, you may need to remind potentially very old parameters to be kept memory. **So**, a station may have to store different parameters for different stations.

C: I think the way to proceed should be the opposite as what you propose. Having a shorter Epoch as possible for each Stations, and the AP ask to everybody to change all together every 5 min for instance. For me Epoch is becoming too complex.

A: I take your point of having 5min for everybody and then do something more frequent for some stas.

C: I don’t like that you send parameters for each STA at each epoch.

A: this is only AID.

A: yes, but this is too much overhead. We should work on a mechanism to generate AID by station.

Q: Can we agree on some numbers, a set of ideas, that let us produce a first draft end of May?

Chair: Please people, think to a minimum of things we can agree on.

A: I think we are not that far; it seems that the minimum epoch duration is on the critical path. If we can agree of ranges and put it in the draft, we can put comments asking for other values.

* 1. 24/[637r1](https://mentor.ieee.org/802.11/dcn/24/11-24-0731-00-00bi-harmonization-proposal.pptx) --– Po-Kai

Document presented by po-kai

Same content as presented last time since he didn’t receive any comments since last presentation.

* + 1. Discussion:

Q: Chair: Do you want to run a straw poll, or a motion in latter meeting?

A: Let’s start with a SP first.

**SP#1:** do you support adding the text from doc 24/637r1 to Draft 0.4?

Y/N/A

**SP#1 results**: Y:9/ N:0/ Abs:5 and 1 no answer

* 1. [11-23/1148r1](https://mentor.ieee.org/802.11/dcn/23/11-23-1148-01-00bi-rcm-follow-up.pptx) – RCM Follow up– Stéphane Baron

Document presented by Stéphane.

This is a second presentation of the document presented last year, to trigger discussion on the transition period operations in light of recent EDP Epoch operation’s proposal.

* + 1. Discussion:

Q: What is the purpose of the Epoch ready in slide 6

A: To take into account current discussions about TSF drifts.

Q: Is it related for all STAs or only one?

A: Each non-AP station have a different clock drift compared to the AP.

C: I preferred a link specific obfuscation procedure.

Q: Do you also imagine that the AP is late (slide 6)?

A: Yes, in slide 6 the Station is late, but the other case will of course occur. The margin and transition period rules, indicated for the STA in this slide, also applies to the AP to covers all the cases.

C: I think the use of old CPE params during the transition period is not the good solution. Retransmissions after new epoch start could be optional. Flushing is better to save memory and to simplify the mechanism.

A: No retransmission means loss of connection.

A: Using old CPE params is necessary. The problem comes from the payload that will not be modified and using new CPE params with same retransmitted payload make correlation very easy.

Q: Why do you want to end the transmission period soon. I don’t see any problem in using multiple MAC@ at the same time.

A: If the Epochs are very short, many contexts must be saved because a retransmission may occur several Epochs after the initial transmission. We need to clean memory before starting another context.

Q: how much can this drift be?

A: This is the TSF clock drift and as best as I can remember, I think the maximum is around 25us.

Due to lack of time, remaining questions will be handled at the beginning of next session.

1. **AoB**

No other business.

1. Chair adjourned the meeting at 12:00 EDT.

**Attendance**

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| Breakout | | Timestamp | | Name | | Affiliation | |
| TGbi | | 4/25 | | Ansley, Carol | | Cox Communications Inc. | |
| TGbi | | 4/25 | | baron, stephane | | Canon Research Centre France | |
| TGbi | | 4/25 | | Das, Subir | | Peraton Labs | |
| TGbi | | 4/25 | | DeLaOlivaDelgado, Antonio | | InterDigital, Inc. | |
| TGbi | | 4/25 | | Hawkes, Philip | | Qualcomm Incorporated | |
| TGbi | | 4/25 | | Henry, Jerome | | Cisco Systems, Inc. | |
| TGbi | | 4/25 | | Kakani, Naveen | | Qualcomm Incorporated | |
| TGbi | | 4/25 | | McCann, Stephen | | Huawei Technologies Co., Ltd | |
| TGbi | | 4/25 | | Nezou, Patrice | | Canon Research Centre France | |
| TGbi | | 4/25 | | Yee, Peter | | NSA-CSD | |
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