Minutes IEEE P802.11  
Wireless LANs

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| IEEE 802.11 TGbh Meeting Minutes, July 25th, 2023  Randomized and Changing MAC addresses (RCM) | | | | |
| Date: 2023-07-25 | | | | |
| Author(s): | | | | |
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Abstract

This document contains the minutes of the IEEE 802.11bh telecon meeting of July 25th, 2023.

Note: Highlighted text are action items.

Q- proceeds a question asked at the meeting

A- proceeds an answer

C- proceeds a comment

**Meeting July, 4th, 2023 9:30 a.m. to 11:30 a.m. ET**

**Chair: Mark Hamilton (Ruckus/CommScope)**

**Vice Chair: Peter Yee (NSA-CSD/AKAYLA)**

**Vice Chair: Stephen Orr (Cisco)**

**Secretary: Peter Yee**

**Editor: Carol Ansley (Cox)**

**The teleconference was called to order by the Chair at 09:32 ET.**

Agenda slide deck [**11-23/1310r0**](https://mentor.ieee.org/802.11/dcn/23/11-23-0592-00-00bh-agenda-tgbh-2023-april-4.pptx)

1. **Policies and procedures were presented by the Chair (Slides 4 to 14)**

There were no Patent declarations.

Copyright policy slides were presented (Slides 10 and 11)

1. **Agenda:**

* **Attendance, noises/recording, meeting protocol**
* **Policies, duty to inform, participation rules**
* **Organization topics:**
  + Timeline reminder (slide 16)
  + Motions record: [**11-22/0651r21**](https://mentor.ieee.org/802.11/dcn/22/11-22-0651-21-00bh-tgbh-motions-list.pptx)
* **Comment Resolution**
* **Tracking document:** [**11-23/1152r10**](https://mentor.ieee.org/802.11/dcn/23/11-23-1152-10-00bh-ieee-802-11bh-lb274-comments.xlsx)
* **Comment topics list (slide 17)**
* **Comment resolution queue (slide 18)**
* **Discussion on response to WBA liaisons:** [**11-21/0703r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-0703-00-0000-2021-april-liaison-from-wba.docx)**,** [**11-21/1141r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-1141-00-00bh-excerpts-of-wba-document-wi-fi-id-scope.pptx)**,** [**11-22/0668r0**](https://mentor.ieee.org/802.11/dcn/22/11-22-0668-00-0000-liaison-statement-from-wba-re-wi-fi-devices-identification-group.pdf)**,** [**11-22/0653r0**](https://mentor.ieee.org/802.11/dcn/22/11-22-0653-00-0000-2022-march-wba-whitepaper-re-device-identification.pdf)
  + [**11-23/0888r0**](https://mentor.ieee.org/802.11/dcn/23/11-23-0888-00-00bh-wba-liaison-discussion.pptx) **Stephen Orr**

Any comments? [None]

Any objections to agenda? [None] – approved

1. Timeline

The timeline is fine at the moment and there should be a re-circulation letter ballot in November 2023.

1. Discussions about Multi-Link Operation (MLO) in TGbi

Regarding the discussions within TGbi about MLO, nothing has been decided at the moment.

C: The MLD MAC address is currently exchanged in the clear and this may cause an issue.

C: There’s another approach, as a link MAC address could also be used.

1. [**11-23/1286r1**](https://mentor.ieee.org/802.11/dcn/23/11-23-1286-01-00bh-cr-for-the-status-code.pptx) – CR for the status code (Jay Yang)

CID 15,17,100,101,132,134

These CIDs have proposed comment resolutions to be rejected.

There were several comments to tidy up the reject reason.

C: Regarding the trouble shooting case, a graphical user interface could be used. Alternatively, the network could help.

C: The network operator could delete a log and therefore the user identity make be lost.

C: I’m not convinced that this issue is standards essential.

C: The status code is ok, but the IEEE 802.11 handshake should allow this type of information to be transmitted to the network. Therefore we don’t need to specify it’s use, as it will be implementation specific.

C: From the AP side, it will have to access a network database to verify the identifier from the non-AP STA. This is the main task of the AP. Therefore the status code does not really provide any extra information.

C: I think the status code is beneficial if the non-AP STA has been absent for some time. Either the WFA or WBA may be able to use this code at the network layer.

Chair: No objection to rejecting these CIDs. These will be formally motioned at some point in the future.

1. [**11-23/1245r7**](https://mentor.ieee.org/802.11/dcn/23/11-23-1245-07-00bh-cid-resolutions-irm-1.docx) - CID resolutions IRM – 1 (Graham Smith)

CID 135, 224

Q: Is the device ID per BSS or ESS?

A: It’s supposed to be per ESS.

C: If the values are different, then the AP can respond with “identify unknown”.

C: I can volunteer to work on CID 23 (Antonio de la Oliva)

Q: If the AP indicates an error, then what is the next step?

A: Perhaps there could be a new error code, about two identifiers being in conflict.

C: IRM is just an indicator to say that “you have been here before”.

C: Although the IRM does match a known MAC address. The Device ID is a long time identifier.

C: I think a new error code would be a good idea. Let’s define it and produce some new text.

More work required.

CID 38

Accepted without objection.

CID 49, 56, 102

The comment resolution proposes a re-write of this section.

Editorial instructions will be added to the revised text.

Revised without objection

1. [**11-23/1250r0**](https://mentor.ieee.org/802.11/dcn/23/11-23-1250-00-00bh-cr-for-cids-in-annex-b.docx) - CR for CIDs in annex B (Jay Yang)

CID 110

Q: Isn’t this conditional on 11bh being supported?

A: So one of these would have to be enabled for 11bh to operate. They can’t be both optional.

Chair: Perhaps it would be better to use CFCMA: O1 or O2 in the PICS.

C: 11bh could be in use, but a user has decided not to use it.

Chair: Perhaps the author can contact Robert Stacey to determine how to specific conditional optional in the PICs

More work required

CID 152

The comment is rejected

No objection

1. [**11-23/1261r1**](https://mentor.ieee.org/802.11/dcn/23/11-23-1261-01-00bh-802-11bh-d1-0-cr-rejects.docx) - 802.11bh D1.0 CR Rejects (Kurt Lumbatis)

CID 138

C: I think this comment should be rejected, as the length can be already be determined.

C: The Working Group has changed the style of variable length fields, since IEEE 802.11-2020. Therefore the comment is strictly correct, but the comment still needs to be rejected.

The comment is rejected

No objection

1. [**11-23/1258r3**](https://mentor.ieee.org/802.11/dcn/23/11-23-1258-03-00bh-comment-resolutions-draft-3-0-section-12-7.docx) - Comment Resolutions Draft 3.0 Section 12.7 (Kurt Lumbatis)

CID 8

C: There are several CIDs that discuss the length of the Device ID.

C: Remember that this Device ID sub-field may be contained within an association request, so the maximum length may need to be reduced to avoid fragmentation. This will be passed within the 4 way handshake, so it needs to be kept small.

C: Why not use 0..128?

Chair: Perhaps send an email out to the TGbh reflector to seek feedback on a suitable length constraint.

Further work required

CID 10, 36, 272

Revised without objection

CID 11

Revised without objection

C: REVme has removed formulas in figure field lengths for KDEs only.

1. [**11-23/0537r7**](https://mentor.ieee.org/802.11/dcn/23/11-23-0537-07-000m-reassociating-sta-recognition.docx) REVme comment CID 4069 (Mike Montemurro)

There is a note within this submission about REVme and TGbh. Therefore REVme needs to be synchronized with TGbh.

Chair: I will try to follow this up in REVme.

**Meeting adjoined at 11:31 ET.**

**Attendance**

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| Breakout | | Timestamp | Name | Affiliation | |
| TGbh | | 7/25 | Bredewoud, Albert | Broadcom Corporation | |
| TGbh | | 7/25 | DeLaOlivaDelgado, Antonio | InterDigital, Inc. | |
| TGbh | | 7/25 | Hamilton, Mark | Ruckus/CommScope | |
| TGbh | | 7/25 | Henry, Jerome | Cisco Systems, Inc. | |
| TGbh | | 7/25 | li, yan | ZTE Corporation | |
| TGbh | | 7/25 | Lumbatis, Kurt | CommScope, Inc. | |
| TGbh | | 7/25 | McCann, Stephen | Huawei Technologies Co., Ltd | |
| TGbh | | 7/25 | Montemurro, Michael | Huawei Technologies Co., Ltd | |
| TGbh | | 7/25 | Patwardhan, Gaurav | Hewlett Packard Enterprise | |
| TGbh | | 7/25 | Petrick, Albert | InterDigital | |
| TGbh | | 7/25 | Rosdahl, Jon | Qualcomm Technologies, Inc. | |
| TGbh | | 7/25 | Sam, Harvey | Broadcom Corporation | |
| TGbh | | 7/25 | Sevin, Julien | Canon Research Centre France | |
| TGbh | | 7/25 | Smith, Graham | SRT Wireless | |
| TGbh | | 7/25 | Smith, Luther | Cable Television Laboratories Inc. (CableLabs) | |
| TGbh | | 7/25 | Yang, Jay | Nokia | |