Minutes IEEE P802.11  
Wireless LANs

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| 802.11 bh Telecon Meeting Minutes | | | | |
| Date: 2021-03-01 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
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Abstract

This document contains the minutes of the IEEE 802.11 bh telecom meeting 1 March 2021 at 11:00 hrs EDT,

Note: Highlighted text are action items.

Q- proceeds a question asked at the meeting

A- proceeds an answer given by the presenter

C- proceeds a comment

**Chair: Mark Hamilton**

**Acting Secretary: Graham Smith**

**1. The teleconference was called to order by Chair 11:00 hrs. EDT,**

Graham Smith (SRT) volunteered to be acting secretary.

Agenda slide deck 11/21/0264r2

1. **Policies and procedures were presented by the chair. (Slides 5 to 15)**

No Patent declarations.

Copyright policy slides were presented (Slides 11 and 12)

See attendance list at the bottom of this document.

1. **Agenda:**

* **Attendance, noises/recording, meeting protocol reminders**
* **Policies, duty to inform, participation rules**
* **Organization topics:**
  + **Leadership positions – Chair; Vice Chair(s); Secretary; Editor**
  + **March Plenary plan: Tuesday, 13:30-15:30; Thursday 13:30-15:30**
  + **Teleconferences – to be discussed during March plenary – suggestions?**
  + **PAR/CSD:** [**11-20/1795r1**](https://mentor.ieee.org/802.11/dcn/20/11-20-1795-01-0rcm-updated-bh-par-for-review.pdf)**;** [**11-20/1117r5**](https://mentor.ieee.org/802.11/dcn/20/11-20-1117-05-0rcm-rcm-sg-proposed-rcm-csd-draft.docx)
  + **Work Plan**
  + **Timeline estimate – develop during March plenary**

The Chair reviewed the agenda.

The proposed agenda was approved without objection.

1. **Leadership positions**

Positions are open. Anyone interested please nominate.

Any opinions on number of Vice Chairs?

Q – What are reasons for 1 or 2

A – Depends on the size of group. 1 or 2 for this group is acceptable.

Any objection to having 2 Vice chairs? None

Nomination window will be closed at the first meeting in March Plenary, next week.

1. **Telecons**

No fixed slot yet.

1. **PAR and CSD**

Links provided. No changes are known but will post to reflector when official versions available.

Approved PAR:

<https://development.standards.ieee.org/myproject-web/public/view.html#pardetail/8770>

Chair discussed slide 17, “TGbh PAR Scope” and went through it. Certain methods for existing services may now not be possible or are effected. We do not want to do anything that affects User privacy. Also drew attention to 11bi Privacy.

There is a need to:

* Ensure that IEEE Std 802.11 provisions that refer to a STA MAC address remain valid when that MAC address is random or changes.
* Design mechanisms that enable an optimal user experience when the MAC address of a STA in an ESS is randomized or changes. These mechanisms should not decrease user privacy.

Chair’s intention is to try to keep focused on this scope.

1. **Workplan**

Slide 18. Chair’s high level approach.

Contribution driven and Issue Tracking.

* Gather requirements (start with RCM/ARC materials, add to it)
  + Identify specific features/operations/services of 802.11 that are impacted by randomized and/or changing MAC addresses
  + “Real world” use case(s) for each would be helpful, to understand the impact and what/who is impacted
* Proposals for specification amendments to address/mitigate the impact
  + High-level/general overview of a solution is helpful, to start
  + Specific text proposals needed

Want to solve issues, not so much as look for new items.

Q – 11bh follows 11be where some architecture changes, any need to liaise with 11be to track any MAC changes?

A – Need to co-ordinate with any other group which may be impacting MAC addressing. We must not break anything. Obviously anything new in 11be is dealt with in 11be.

C – 11bh should be a quick fix. There are many places where the MAC address is “misused”, do not assume we can “fix” everything. Let’s point at better ways of doing something.

C – Look at “behaviors” and not always layer 2 issues and should be solved elsewhere.

C – Privacy laws have to be adhered to. Need to liaise, RCM does have the potential to change adversely. Must not break anything.

C – Sequencing of amendment. 11bh started after 11be, BUT 11bh can finish before 11be and can publish before 11be.

C – It was envisaged that 11bh completes ‘quickly’ to get any amendments into the field.

C – Group needs to decide the direction.

Discussion on device changing address pre and post association.

“8.1 Additional Explanatory Notes: 5.2.b: The IEEE Std 802.11TM-2020 requirements regarding changing a MAC address will be maintained. A non-AP STA MAC address shall not change during an ESS connection.”

C – This does violate standard. Hope we do not go down a path where the standard may be violated.

C – Not aware of anyone doing this. No need to spend time on it. Re-associate using a different MAC address is not allowed.

C – Have looked at MAC address configuration on devices, and do see a timeout.

C – Scope has been set, the PAR. Corner cases were delegated to 11bi. 11bh should be concentrated and be on a fast track.

C – Explanatory notes are not part of the Scope.

C – Have seen APs holding onto “old” MAC addresses.

A lot of discussion on this subject.

**Chair referred to 21/0332. Tracking Document”.**

Terminology, Use Cases, Technical details “under the hood” (what got broken), proposed solutions.

Intended to help us stay in scope.

C - Please look off line and bring comments.

**Meeting Adjoined at 12.00 noon.**

**Attendance from IMAT:**

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| Breakout | Timestamp | Name | Affiliation |
| TGbh | 3/1 | Aboulmagd, Osama | Huawei Technologies Co. Ltd |
| TGbh | 3/1 | Ansley, Carol | IEEE Member / Self Employed |
| TGbh | 3/1 | Bahn, Christy | IEEE STAFF |
| TGbh | 3/1 | DeLaOlivaDelgado, Antonio | InterDigital, Inc. |
| TGbh | 3/1 | Goto, Fumihide | DENSO |
| TGbh | 3/1 | Hamilton, Mark | Ruckus/CommScope |
| TGbh | 3/1 | Harkins, Daniel | Hewlett Packard Enterprise (Aruba Networks) |
| TGbh | 3/1 | Henry, Jerome | Cisco Systems, Inc. |
| TGbh | 3/1 | Huang, Po-Kai | Intel Corporation |
| TGbh | 3/1 | Kain, Carl | USDoT |
| TGbh | 3/1 | Kandala, Srinivas | SAMSUNG |
| TGbh | 3/1 | Kang, Sugbong | Apple, Inc. |
| TGbh | 3/1 | Kneckt, Jarkko | Apple, Inc. |
| TGbh | 3/1 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbh | 3/1 | Lumbatis, Kurt | CommScope, Inc. |
| TGbh | 3/1 | Malinen, Jouni | Qualcomm Incorporated |
| TGbh | 3/1 | Marks, Roger | EthAirNet Associates |
| TGbh | 3/1 | Max, Sebastian | Ericsson AB |
| TGbh | 3/1 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbh | 3/1 | Morioka, Hitoshi | Koden Techno Info K.K. |
| TGbh | 3/1 | NANDAGOPALAN, SAI SHANKAR | Infineon Technologies |
| TGbh | 3/1 | Ng, Boon Loong | Samsung Research America |
| TGbh | 3/1 | Orr, Stephen | Cisco Systems, Inc. |
| TGbh | 3/1 | RISON, Mark | Samsung Cambridge Solution Centre |
| TGbh | 3/1 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| TGbh | 3/1 | Shafin, Rubayet | Samsung Research America |
| TGbh | 3/1 | Smith, Graham | SRT Wireless |
| TGbh | 3/1 | Stacey, Robert | Intel Corporation |
| TGbh | 3/1 | Stanley, Dorothy | Hewlett Packard Enterprise |
| TGbh | 3/1 | Torab Jahromi, Payam | Facebook |
| TGbh | 3/1 | Yee, Peter | NSA-CSD |