IEEE P802.11  
Wireless LANs

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| ARC SC February 2023 Teleconference Minutes | | | | |
| Date: 2023-02-27 | | | | |
| Author(s): | | | | |
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Abstract

This document contains the minutes of the IEEE 802.11 ARC SC teleconferences held on 06 February 2023 at 13:00-15:00 h ET and 27 February 2023 at 13:00-15:00 h ET.

r1 – Some editorial corrections to the 2023.02.06 minutes, and added the 2023.02.27 minutes.

Note: Highlighted Yellow text are action items. Highlighted Cyan text are comments to be summitted. A- precedes comments from the document’s author, C- precedes comments, R- precedes responses to comments.

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# Monday 6 February 2023 at 13:00-15:00 h ET

## Administration:

**Chair: Mark Hamilton, Ruckus/CommScope**

**Vice Chair: Joseph Levy, InterDigital**

**Secretary: Joseph Levy, InterDigital**

**Meeting called to order by the Chair 13:03 ET**

Agenda slide deck: [11-23/0183r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0183-00-0arc-arc-sc-agenda-feb-6-2023.pptx)

**Agenda Slides 4-14:**

**Registration Reminder**

**Reminders to Attendees**

**Call for Patents:**

The Chair reviewed the Patent policy and called for potentially essential patents – there was no response to the call.

**IEEE SA Copyright Policy:**

The chair reviewed the Copyright policy.

**Participation:**

The chair reviewed the participation policy.

**Approval of the Agenda (Slides 15)**

* Attendance, noises/recording, meeting protocol reminders
* Policies, duty to inform, participation rules
* (Current) February/March plan reminder:
  + Teleconferences today, and Feb 27, to discuss/review IEEE Std 802 Working Group ballot
  + Teleconference(s) on unicast Beacons (etc.) TBA, with 10 days’ notice
  + Annex G discussion to resume at the March plenary
* IEEE Std 802 Working Group ballot (slide 17)

The Chair reviewed the agenda and called for comments and additions.

No comments or additions were made, approved by unanimous consent.

## February/March plan reminder

The Chair reviewed the current working plan as outlined in the agenda.

## IEEE Std 802 Working Group ballot

Discussion was had as to how to progress the review of IEEE Std 802 REVc D1.0 – it was agreed that the group would work through the draft to review the discuss the changes proposed in the draft. Additional review of content or concepts may be necessary to determine if additional content should be included or removed.

A summary of the review of the draft is provided below, the discussion/comment/changes are reference to the page and line of D1.0 (page.line number), which proceeds the text, and proposed changes are highlighted:

25.23 - Discussion was had on the definition of frame. No change was agreed, and the definition was acceptable.

32.3 Discussion was had regarding if “Bridges” should be included in the list of devices. Also “Switches” were discussed. It was not agreed to add either to the list. It was proposed to clean up the wording by replacing “support various data devices” with “support communication between”.

32.10 Add to line 10: and VOIP phone (desk phone)

32.11 – Generalize the listed devices as IOT devices by adding to the beginning of the item: IOT devices, e.g., ….

32.31 Figure 1 has both standards and recommended practices, there for recommended practices should not be deleted from the text. Note 802E is a recommended practice. It was agreed to add recommended practices back into the text.

[*During post meeting review it was noted that foot note 10 already expands the term standards to include standards, recommended practices and guides, therefor no change may be necessary – this should be reviewed*]

Check standards in Figure 1, for completeness and accuracy.

34.15 Grammar correction the “which” should be proceeded by a “,”.

37.9 The first paragraph of clause 5.2.3 has been changed. It was suggested that additional review may be warranted – note that 802.3-2018 definition: MAC frame: Consists of the Destination Address, Source Address, Length/Type field, MAC Client Data, Pad (if required), and Frame Check Sequence.

40.16 The “Harvard comma” was deleted, concern was raised that given the complexity of the sentence the deletion of the comma makes the sentence less clear. “The standard also enables a service provider to use the architecture and protocols specified in order to offer the equivalent of separate LANs, bridged LANs or virtual bridged LANs to a number of customers, while requiring no cooperation between the customers and minimal cooperation between each customer and the service provider.” For clarity insert a comma after “bridged LANs” as it was in the prior standard.

43.37 – “The entity that does the network communication of the management protocol and the interaction to and from the managed objects is called the *agent*.” passive voice - replace the sentence with: “The *agent* is the entity that does the network communication of the management protocol and the interaction to and from the managed objects.”

[*To be reviewed:* *Is this discussion about the “agent” necessary, as the term in not mentioned in the draft anywhere else?]*

48.2 Questioned: Is RA defined in this document - should it be Registration Authority (RA).

[*Additional review following the meeting noted that at 45.31 the IEEE Registration Authority (RA) is correctly expanded at first use, therefore there is no issue, also it is in 3.2 at 28.32.*]

48.18 It was question if the note is necessary. Has 1Q softened the requirement enough so the note is no longer necessary. Additional review was called for.

72.6 Additional detailed review of B.2 was requested.

84.19 It is noted that IEEE Std 802.17 was removed from Annex D “List of IEEE 802 standards” but IEEE 802.17 is mentioned in the draft at 4 locations: 40.33, 40.34, 40.35, and in Figure 8, 41.1. Should it be removed from Annex D or should the Bridging example be updated to replace 802.17 with something else? Additional discussion required.

## Action Items:

32.31 Check standards in Figure 1, for completeness and accuracy.

37.9 Additional review of the first paragraph of clause 5.2.3 is suggested

48.18 Additional review of the need for the note is suggested

72.6 Additional detailed review of B.2 is suggested

84.19 IEEE Std 802.17 was removed from Annex D should it be, additional discussion is suggested

Comments highlighted above to be transferred to a comment spreadsheet – Joseph Levy

## Adjourned: 15:00 h ET

## Attendance 06 February 2023:

From IMAT:

|  |  |
| --- | --- |
| **Name** | **Affiliation** |
| Hamilton, Mark | Ruckus/CommScope |
| Levy, Joseph | InterDigital, Inc. |
| Montemurro, Michael | Huawei Technologies Co., Ltd |
| Petrick, Albert | InterDigital, Inc. |
| RISON, Mark | Samsung Cambridge Solution Centre |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |

# Monday 27 February 2023 at 13:00-15:00 h ET

## Administration:

**Chair: Mark Hamilton, Ruckus/CommScope**

**Vice Chair: Joseph Levy, InterDigital**

**Secretary: Joseph Levy, InterDigital**

**Meeting called to order by the Chair 13:09 ET**

Agenda slide deck:

**Agenda Slides 4-14:**

**Registration Reminder**

**Reminders to Attendees**

**Call for Patents:**

The Chair reviewed the Patent policy and called for potentially essential patents – there was no response to the call.

**IEEE SA Copyright Policy:**

The chair reviewed the Copyright policy.

**Participation:**

The chair reviewed the participation policy.

**Approval of the Agenda (Slides 15)**

* **Attendance, noises/recording, meeting protocol reminders**
* **Policies, duty to inform, participation rules**
* **(Current) February/March plan reminder:**
  + Teleconferences today, and Feb 27, to discuss/review IEEE Std 802 Working Group ballot
  + Teleconference(s) on unicast Beacons (etc.) TBA, with 10 days’ notice
  + Annex G discussion to resume at the March plenary
* **IEEE Std 802 Working Group CC (slide 17)**

Agenda approved by unanimous consent

## February/March plan reminder

The Chair reviewed the current working plan as outlined in the agenda.

The authors of the Unicast Beacons have not asked for any meeting time, at this time.

Annex G discussions are expected, there are two potential sources of contribution.

## IEEE Std 802 Working Group CC

## Action Item Review:

32.31 Check standards in Figure 1, for completeness and accuracy.

37.9 Additional review of the first paragraph of clause 5.2.3 is suggested

48.18 Additional review of the need for the note is suggested

72.6 Additional detailed review of B.2 is suggested

84.19 IEEE Std 802.17 was removed from Annex D should it be, additional discussion is suggested

Comments highlighted above to be transferred to a comment spreadsheet, Joseph Levy -[**11-23/0222r0**](https://mentor.ieee.org/802.11/dcn/23/11-23-0222-00-0arc-draft-comments-for-802-11-cc44.xlsm)

Discussion:  
The above action items were reviewed.

32.31 – Figure 1 is complete and accurate regarding 802.11, the remaining parts of the figure were not checked – it was felt that the other 802 groups should check their parts of the figure.

37.9 – The first paragraph was reviewed. There was some discussion regarding “… a MAC frame or simply frame.” The conclusion was this is consistent with how 802.11 discusses MAC frames, so no additional comments are warranted.

48.18 – Some discussion on if 802.1Q specifies a single EUI-48 or EUI-64 to identify all of the system’s points of attachment. However, it was observed that the phrase “done not inherently meet” basically says that 802.1Q does not specify this, so there was no need to comment on this.

72.6 – There was some concern that figure B.5 has not been updated to match what is currently in 802.11-2020. The figure was updated to simply call the physical layer “PHY”, hence the PLCP Sublayer, the PMD\_SAP, and the PMD sublayer should be removed, and all replaced by PHY Sublayer. Please see Figure 4-25 IEEE Std 802.11-2020. A comment was added to [11-23/0222r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0222-01-0arc-draft-comments-for-802-11-cc44.xlsm) to correct this.

During the discussion it was noted the PHY is not a sublayer, it is a layer and should **not** be referred to as a sublayer. This is an error in the current 802.11 draft that should be corrected. Therefore, this should be referred to TGme. Both Figure 4-24 (324.2) and Figure 4-25 (325.2) should be corrected, “PHY sublayer” should become “PHY”, “PHY Sublayer Management Entity” should become “PHY Management Entity” in both Figures. Also, note there are 19 instances of “PHY Sublayer” in text of 802.11me D2.0 which should be reviewed and probably correct to be “PHY” of “PHY Layer”, they are located at: 66.1, 72.2, 73.38, 3126.24, 3128.40, 3133.6, 3152.30, 3157.12, 3162.12, 3194.27, 3199.34, 3217.28, 3217.33, 3221.52, 3528.1, 3569.50, 3581.20, 4673.38, 4689.29.

84.19 – IEEE Std 802.17 is a withdrawn standard (as of 2016) and therefore should not be referenced in IEEE Std 802. Therefore, the example in 5.3.2.6, referencing 802.17, should be replaced/updated to remove all references to the withdrawn standard. A comment was added to [11-23/0222r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0222-01-0arc-draft-comments-for-802-11-cc44.xlsm).

## Action Items:

[11-23/0222r0](https://mentor.ieee.org/802.11/dcn/23/11-23-0222-00-0arc-draft-comments-for-802-11-cc44.xlsm) should be updated to [11-23/0222r1](https://mentor.ieee.org/802.11/dcn/23/11-23-0222-01-0arc-draft-comments-for-802-11-cc44.xlsm) to include the comments noted above. – Joseph Levy

All comments should be uploaded to the 802.11 CC44 – Joseph Levy

A contribution correcting the “PHY Sublayer” issue should be provided to TGme – Joseph Levy

## Adjourned: 14:40 h ET

## Attendance 27 February 2023:

From IMAT:

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| --- | --- |
| **Name** | **Affiliation** |
| Ansley, Carol | Cox Communications Inc. |
| Hamilton, Mark | Ruckus/CommScope |
| Levy, Joseph | InterDigital, Inc. |
| Stanley, Dorothy | Hewlett Packard Enterprise |
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