IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ARC SC Mixed Mode Minutes September 2022 - Interim | | | | |
| Date: 2022-09-16 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Joseph LEVY | InterDigital Communication, Inc. | 111 W 33rd Street New York, NY 10120 | +1.631.622.4139 | [jslevy@ieee.org](mailto:jslevy@ieee.org) |
|  |  |  |  |  |
|  |  |  |  |  |

Abstract

This document contains the minutes of the IEEE 802.11 ARC SC teleconferences held on 13 September 10:30-12:30 h HT.

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

**Contents:**

[Tuesday 13 September 2022 at 10:30-12:30 h HT 3](#_Toc118292894)

[Administration: 3](#_Toc118292895)

[IEEE Std 802 project 11-22/1600r0 4](#_Toc118292896)

[Annex G – 11-22/1587r0 4](#_Toc118292897)

[Next steps 5](#_Toc118292898)

[Action Items: 5](#_Toc118292899)

[Adjourned: 12:30 h HT 5](#_Toc118292900)

# Tuesday 13 September 2022 at 10:30-12:30 h HT

## Administration:

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

**Vice Chair: Joseph Levy, InterDigital**

**Secretary: Joseph Levy, InterDigital**

**Meeting called to order by the Chair 10:32 HT**

Agenda slide deck: 11-22/1283r0

**Agenda Slides 4-15:**

**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 16)**

* Reminder: This is the only meeting slot this week
* Attendance, noises/recording, meeting protocol reminders
* Policies, duty to inform, participation rules
* Approve meeting minutes (slide 18)
* Contribution/discussion topics:
  + IEEE Std 802 project [11-22/1600r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1600-00-0arc-ieee-std-802-par-discussion-802-11-action.ppt)
  + Annex G: [11-22/1587r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1587-00-0arc-annex-g-way-forward.pptx)
* Next steps

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

The contribution number for the IEEE Std 802 project discussion and a contribution on Annex G: 11-22/1587r0 were added.

The modified agenda is approved by unanimous consent.

**Approval meeting minute**

Motion to approve the minutes of:

July plenary: [11-22/1127r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1127-00-0arc-arc-sc-mixed-mode-minutes-july-2022-plenary.docx)

* Moved: Graham Smith
* Seconded: Joseph Levy
* Result: UC

## IEEE Std 802 project [11-22/1600r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1600-00-0arc-ieee-std-802-par-discussion-802-11-action.ppt)

Presented by Joseph Levy

Background on project for 802-REVc: simple roll-up, as required per procedures. No technical changes expected.

Background on project to do technical updates: in particular discussion of whether architecture work is desired.

ARC can/should consider if the 802.11 WG should take a position on whether IEEE Std 802 should include architecture work, and if so if the 802.11 WG may provide an 802.11 WG position as to the scope of the 802 revision project should include.

**Discussion points/questions:**

C- What aspects of IEEE Std 802 do we (802.11) need or reference? Some examples: how VLANs work is not very clearly specified or architected, the LLC layer has become very fuzzy since removing 802.2, and the use and behavior of tagging is scattered around in some 802.1 documents or just not specified.

C- General feeling that a clear architecture and specification of how these entities fit/interwork seems like it should be done. But, as a practical matter, is it worth the effort, since things are working as is.

C - Do we have any feel for what other WGs are thinking? We \*think\* the 802.3 view is that we have everything we need; it’s all working.

C - Unless someone comes forward that this is important, it seems WG11 needs to take the position that we have no/insufficient interest to justify that further work should be done.

C - Let’s consider the three options on slide 3. Do we agree with any of these, or want to suggest another alternative?

* 1. “IEEE Std 802 should provide a standardized 802 architecture
  2. “IEEE Std 802 should standardize a “harmonization” / “translation” for the “802 family”
  3. “IEEE Std 802 should not provide standardized architecture”

C- We could review and consider the work going on in NENDICA/ELLA, and what they are doing and why.

Action: Joseph Levy to start a discussion on the ARC reflector, with brainstorming if there are any gaps that 802.11 really needs resolved. Bring this back for ARC discussion in November.

## Annex G – [11-22/1587r0](https://mentor.ieee.org/802.11/dcn/22/11-22-1587-00-0arc-annex-g-way-forward.pptx)

Presented by Graham Smith

**Discussion points/questions:**

C - 4th option proposed (by Marc) – replace Annex G – with a more approachable format (e.g. [11-22/0101r0](https://mentor.ieee.org/802.11/dcn/22/11-22-0101-00-0arc-the-need-for-frame-exchange-sequences.pptx), [11-21/1797r2](https://mentor.ieee.org/802.11/dcn/21/11-21-1797-02-0arc-proposal-for-new-annex-g-frame-exchange-sequence-descriptions.docx), [11-21/0414r2](https://mentor.ieee.org/802.11/dcn/21/11-21-0414-02-0arc-draft-examples-of-a-proposed-notation-for-frame-exchange-sequence-sequences-in-annex-g-of-802-11-2020.docx)).

Keeping the scope to what frame exchanges look like.

C - Should Annex G be a discussion of the concept of frame exchanges, providing a graphics frame exchange tutorial. Or, is this not necessary? It may be necessary.

C - Keeping Annex G up to date is a lot of work and it doesn’t seem to be useful and its hard to read.

C - Annex G is supposed to be useful for someone new to the group.

C - Annex G should be deleted or replaced by something useful.

C - Adding Option 4 – Replace with something else? A new Annex, maybe explaining what a frame exchange sequence really is and why it is useful, beyond the definition and detailed specifications.

And how this relates to TXOPs –

An uninterruptible sequence of frames. –

Way forward – ARC supports removing Annex G – Will recommend doing so in the closing WG plenary.

From the ARC SC Closing report: [**11-22/1637r0**](https://mentor.ieee.org/802.11/dcn/22/11-22-1637-00-0arc-arc-closing-report-sept-2022.pptx)

* **Annex G:**
  + Brainstormed some possibilities for useful material to replace Annex G
  + Considered recommendation that Annex G remain (as-is) with an explanation that it is historical and not maintained
  + Considered simply removing Annex G – would it affect any implementation/the industry?
  + Expecting a presentation in November to explore the options

## Next steps

* **Contributions requested/expected:**
  + IEEE Std 802 projects
* **November plenary planning**
  + 2 slots?
  + Topics?
* **Next Teleconference(s):**
  + Sept to Nov teleconference plan… Any/How many telecons? 0
    - Conflicts to avoid: TGbe, REVme, TGbd, TGbh
    - Continue with Monday 1PM ET and Thursday 7PM ET?
    - Dates to avoid??
  + Will be coordinated with other TG chairs, and announced later

Reviewed the slide 17 list – called for updates.

MLME – Start/Join – may be of interest.

## Action Items:

1. Contribution on IEEE Std. 802/Nendica PAR details / recommendations for 802.11 action. – Joseph Levy.
2. Chair to report to the 802.11 WG what the ARC SC recommends regarding Annex G.

## Adjourned: 12:30 h HT

Final Agenda: [**11-22/1283r1**](https://mentor.ieee.org/802.11/dcn/22/11-22-1283-01-0arc-arc-sc-agenda-sept-2022.pptx)

Closing Report: [**11-22/1637r0**](https://mentor.ieee.org/802.11/dcn/22/11-22-1637-00-0arc-arc-closing-report-sept-2022.pptx)