IEEE P802.11  
Wireless LANs

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| ARC SC teleconferences minutes 13 December 2021 | | | | |
| Date: 2021-12-13 | | | | |
| 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) |
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Abstract

This document contains the minutes of the IEEE 802.11 ARC SC teleconference held on 13 December 2021 at 13:00-15:00 h ET.

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

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# Monday 13 December 2021, 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: [11-21/1993r2](https://mentor.ieee.org/802.11/dcn/21/11-21-1993-02-0arc-arc-sc-agenda-dec-13-2021.pptx)

**Agenda Slides 4-14:**

**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:**

* **Attendance, noises/recording, meeting protocol reminders**
* **Policies, duty to inform, participation rules**
* **Updates on Std 802 project planning**
  + [11-21/2002r0](https://mentor.ieee.org/802.11/dcn/21/11-21-2002-00-0arc-nendica-ella-update.pdf) – Roger Marks (EthAirNet)
  + Nendica calls are discussing and drafting PAR/CSD(s), Thursdays 9am ET
  + <https://mentor.ieee.org/802.1/dcn/21/1-21-0076-00-ICne-proposed-draft-ella-report.pdf> has some “draft” PAR text
  + ARC response/comment on the direction for the project(s); and on the draft PAR text?

The Chair reviewed the agenda and called for comments or amendments to the agenda.

These items were removed from the agenda (as critical proponents were not able to attend this meeting):

* **Annex G way forward contribution/discussion:**
  + Discussion on “replacement” for Annex G:
    - Proposal for New Annex G Frame Exchange Sequence Descriptions –[11-21/1797r02](https://mentor.ieee.org/802.11/dcn/21/11-21-1797-02-0arc-proposal-for-new-annex-g-frame-exchange-sequence-descriptions.docx) - Harry Bims
* **Clause 6 discussion:** [**11-21/1822r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-1822-00-0arc-clause-6-discussion.docx)

The proposed agenda was accepted without objection.

The Chair reviewed the slide 16 – noting the “other” architecture items are.

## Updates on Std 802 project planning

[**11-21/2002r0**](https://mentor.ieee.org/802.11/dcn/21/11-21-2002-00-0arc-nendica-ella-update.pdf) **– Presented by Roger Marks (EthAirNet)**

Nendica calls are discussing and drafting PAR/CSD(s), Thursdays 9am ET

Reviewed the activity to date, based on the references provided in this document.

* 1-21-0070 –
* 802.1 actions and what the current direction is
* Also reviewed the status of Nendica activity on Std 802 and related efforts (ELLA).
* The schedule plans for the PAR submission – a short time frame but do-able.
* Detailed meeting dates and plans were provided.
* 1-21-0076 –
* Jumping to slide 14 – project deadline risk – the 2024 deadline. Roger’s personal opinion is that the impact is small. The ISO/IEC/IEEE standards will still exist and be active in the ISO realm – so there will continue to be a standard that references it.

Chair – 802.11 does reference Std 802 – what is the impact?

R – Theoretically there is an issue – but the document will still exist.

Chair – 802.11 doesn’t reference a particular version of Std 802, but just the current IEEE Std 802, when we point to 802.2 – we use the ISO reference as the 802.2 spec is no longer active.

* On slide 15 is a proposed development – for an aggressive approach was not supported. Resulting in an agreement to have a less aggressive approach based on 2 PARs. 1 PAR to do the minimal maintenance (roll-up/fix things that are broken), the other PAR would be an amendment to enhance/fix other issues (e.g., gaps in the architecture).
* The rest of the slides provide the PAR content.

C – The maintenance PAR will hopefully stay on target and the voters providing comments will hopefully understand the focus of the PAR and bring complex issues to the revision PAR and allow the maintenance PAR to proceed quickly.

C - A standard can reference nonactive standards.

C – If the references don’t get updated – there is currently a reference in 802.11 to 802.2 which should be fixed.

A – The LLC is important, 802.2 is a thoughtful standard, so the LLC should be specified, and it is a common LLC for all 802 specifications.

Chair – 802 2014 has an LLC.

A – There are LLC concepts that are not well defined, these concepts are not anchored in anything.

R – We tried to be careful in defining the LLC in 802-2014.

A – It is not really called out, and any reference to 802.2 are not there. The introduction in 802 says that 802.2 has been deprecated, but it is not clear where/who deprecated it. 802 specifications need an LLC, and it needs to be clear what the LLC is and what it does. LLC is common in all our architecture and is above our MAC SAPs. The job of the LLC is to provide the interface between the outside world and the 802 service.

C – Agreeing that 802 doesn’t describe the LLC service.

A – The only place you will see that claim is in 802.2.

* Some discussion on to 1) discuss the PAR(s) or 2) discuss the potential LLC issues?
* Continued the PAR discussion.

A – Expressed concern on the EPD/LPD views – 802.11 has a different view from that 802.1

C – A maintenance PAR would only do the roll-in of the amendments, and if there is a spec conflict fix it. All other work would move to the amendment project,

C – Getting a PAR done in 3 years should allow for some new work. A roll-up would be 18 months. The reality is that the document is completely open to comment on the first ballot. It constantly amazes me how many changes are proposed to change how the document is written. So, making better, will occur – but work can be separated and hopefully it won’t eat too much time.

C – To help keep a roll-up revision on schedule and progress quickly an amendment project could be started.

C – There was discussion about deleting broken text is that still in scope of a roll-up revision?

A – The 802.1Q EPD/LPD stuff was removed, but that was ok as it is in 802.1AC and 802.

C – If you just delete controversial stuff in the revision, then you will not have a standard that defines these things. It also opens the revision project to discussion and debate. The only way this two track approach will work, it to roll in the amendments and fix anything that is basically broken by roll in. Otherwise, it should not be fixed in the revision.

C – We should be able to be disciplined enough – to simply do a roll-up – the narrow scope needs to be maintained – it will be up to the leadership to maintain the focus.

C – While this doesn’t get put into the PAR, it is up to the group to follow its own agreed scope of action.

A – But there will be a ballot – when I look at the whole document and I see things are broken – I will have to vote no on the ballot and provide the comment.

C – Adding new material is different than fixing something that is broken. Adding a feature may be useful, but should not be part of a roll-up. The amendments all been balloted and completed their ballots, so hopefully that will allow for a roll-up to be done with minimal changes and allow it to be completed in a timely manner.

C – There maybe something in the baseline that is broken, there is a difference with something that breaks due to the roll-in and something is broken in the baseline or the amendments. The resolution of comments that are fixing the baseline or the amendments could be: the group could not reach consensus. Then the commentor would know to move the discussion/comment to the amendment activity for resolution.

C – We are discussing the architecture – what do we ARC SC have to do.

Chair – We can comment on the PAR and the process as ARC if we want to. If we have comments on how things should be done, we should make them known.

A – There are enough references in 802.11 to 802 that we do care and should avoid the interruption of 802 being withdrawn. The 2 PAR approach removes the “time-line” pressure.

[**https://mentor.ieee.org/802.1/dcn/21/1-21-0076-00-ICne-proposed-draft-ella-report.pdf**](https://mentor.ieee.org/802.1/dcn/21/1-21-0076-00-ICne-proposed-draft-ella-report.pdf) **has some “draft” PAR text**

**ARC response/comment on the direction for the project(s); and on the draft PAR text:**

Based on the discussion, those present informally agreed (there were no objections):

* Prefer the IEEE Std 802 to not become inactive/reserved status
* Recommend having two parallel projects to ensure the deadline is met (so IEEE Std 802 does not become inactive) and technical discussions/updates will be addressed:
  + One project dedicated to the maintenance roll-in of approved amendments. The project group/chair should work to limit discussions only the roll-in and any issues that arise directly from the roll-in.
  + A second project to address technical topics of interest to commenters and members related to IEEE Std 802. Allowing for corrections and new material to be proposed, considered, and added to the standard.
    - Recommending at least the following topics be considered: the specification of the LLC service, the LSAP, Link-layer connections, and the support of/mapping to the MSAP(s).

## Next Steps:

Upcoming Teleconferences:

* Jan interim session

## Adjourned: 15:02 h ET

## Attendance:

| **Name** | **Affiliation** |
| --- | --- |
| Andersdotter, Amelia | Sky UK Group |
| Ansley, Carol\* | Cox |
| Fang, Yonggang | MediaTek Inc. |
| Hamilton, Mark | Ruckus/CommScope |
| Huang, Po-Kai | Intel Corporation |
| Kandala, Srinivas\* | Samsung |
| Levy, Joseph | InterDigital, Inc. |
| Marks, Roger\* | EthAirNet Associates |
| Petrick, Al\* | InterDigital |
| Rolfe, Benjamin\* | Blind Creek |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Stanley, Dorothy | Hewlett Packard Enterprise |
| Taori, Rakesh | Infineon Technologies |

\* Added based on Webex participants list.