IEEE P802.11  
Wireless LANs

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| ARC SC teleconferences minutes 2 May 2022 | | | | |
| Date: 2021-05-02 | | | | |
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Abstract

This document contains the minutes of the IEEE 802.11 ARC SC teleconference held on 02 May 2022 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 2 May 2022, 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 19:09 ET**

Agenda slide deck: [11-22/0681r0](https://mentor.ieee.org/802.11/dcn/22/11-22-0681-00-0arc-arc-sc-agenda-may-2-2022.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**
* **Clause 6 discussion:** [**11-22/0413r2**](https://mentor.ieee.org/802.11/dcn/22/11-22-0413-02-0arc-clause-6-proposal.docx)

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

None were made –

Agenda agreed.

## Clause 6 discussion: [11-22/0413r2](https://mentor.ieee.org/802.11/dcn/22/11-22-0413-02-0arc-clause-6-proposal.docx) Graham Smith – presented

Quick reviewed the current principals of the approach, and some proposed text/text changes, this was discussed during the last ARC telecon.

Discussion of the “new” table in 11-22/0413r2 – the table in its current form is a work in progress the notes currently contain the references to the current clause 6 clauses and there are no references provided. The contributor’s plan is to provide references to the frame formats clause where the elements are provided for the “boilerplate” MLME primitives, and additional use references in the notes column.

C – Some of the rows of the table can support the boiler plate information, and anything else, e.g., more details can be provided in a clause, referenced in the table.

Most attendees shared a positive view of the table

There was some discussion on type 3 – it may be two nested types: 2 and 4

Chair - We should work through the red text and question marks and then have the x’s vs. type number discussion.

C – An MLME clause can be used to describe the MLME flow, and can be referenced in the table.

C – It will be hard to differentiate a 2 from a 5 – may need type to describe this.

C – Why do we need to note that an action frame is generated?

A – It is critical to specify how the peers interact with each other.

C – There are just 3 types of interactions: mac interactions, over the air communication, and other

C – If the number of type 5’s is small, having repetitive information is not useful. Defining the types provide more detail and the combination of notes and x’s should provide the necessary information.

C – There seems to be different views of how the MLME’s are described and used. Outbound/Inbound vs. exchange based.

R – Agree – we shouldn’t change the spec – we should keep what we have – corrections are a separate step later.

C – Doesn’t X.210 – tell one what is correct.

R – X.210 is flexible enough to support what we are doing/have done.

Discussion on event request – 6.3.48, 49, 50 – there are 3 MLMEs – and an overview of how they are used. May need to keep the figure and some description and reference it the table.

Chair – Do we keep the subclauses that are referenced in the text, in the table – lets review the open issues:

6..3.13 – keep clauses 6.3.2-13 and remove 6.3.13 from the table, as it is not an MLME primitive clause, but a description of MLME primitive behaviors.

6.3.14 – strait forward – Mark – did you verify that everyone of these primates are in the frame?

Graham – I did for this one.

Boilerplate – per MAC address and the fields in the associated frame format in clause 9 or if necessary, clause 11. (see 6.3.1.2) in 11-22/0431 - if it differs from this rule, the details are provided in clause 6. So the peer MAC address needs to be added to 6.3.1.2.

If a frame carries multiple elements, then the elements of the elements are included. – Note – the element type, frame type is not included.

One of the parameters of this MLME is the number of repetitions. There may be text in specification body that provides this information, is so all that needs to be done is reference the text if it exists. This MLME set works with both Radio Measurement and Spectrum Measurement requests.

C– if the behavior is fully defined in the MAC – then you don’t need the MLME discussion.

R – But there is a need to capture the MLME SAP behavior somewhere and it is in clause 6.

R – The details of the parameters are not necessary, as the MLME is not a real interface – the implementations can define it as it wants. Maybe the RRSI is needed on the receive side. The details of the bit fields are important. The implementer should know what need to be passed. So how deep we need to go.

Graham – we can say it looks like the figures.

Mark – the parameters are what need to be sent – the frame type will generate the type of MLME to be sent. We should not change the technical content now, simply explain. Should define depending of the primitive type which elements are included, so there are general and specific elements. Graham – will attempt to work 6.3.14 – to provide – the 14, 15,16 are lumped together.

So, include additional references in clause 9 in 6.3.13 or in the table. So 6.3.14-18 are in 6.3.13

Moving on to 6.3.19 – will keep as it is today.

Moving on to 6.3.20 - keep as it is today, as it security related. Check

MIC failure is part of TKIP – so we don’t need to “worry” about it as much, a table entry may be adequate.

Graham will work the 6.3.13-18 clauses, considering the table and element references. Target result is to update 6.3.13 and the table as necessary, so that 6.3.14-18 can be deleted. Joseph is willing to assist.

## Next Steps:

Upcoming Teleconferences:

* May plenary session (2 meetings)

## Adjourned: 15:00 h ET

## Attendance:

|  |  |
| --- | --- |
| **Name** | **Affiliation** |
| Hamilton, Mark | Ruckus/CommScope |
| Levesque, Chris | Qorvo |
| Levy, Joseph | InterDigital, Inc. |
| Montemurro, Mike\* | Huawei |
| Palayur, Saju | Maxlinear Inc. |
| Smith, Graham | SR Technologies |
| Sosack, Robert | Molex Incorporated |
| Stacey, Robert | Intel Corporation |
| Stanley, Dorothy | Hewlett Packard Enterprise |
| Taori, Rakesh | Infineon Technologies |

\* Added based on Webex participants list.