IEEE P802.11  
Wireless LANs

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| ARC SC teleconferences minutes 07 December 2020 | | | | |
| Date: 2020-12-09 | | | | |
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Abstract

This document contains the minutes of the IEEE 802.11 ARC SC teleconference held on 07 December 2020 at 19:00-21:00 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 07 December 2020, 19:00-21:00 h ET

## Administration

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

**Vice Chair: Joseph Levy, InterDigital**

**Secretary: Joseph Levy, InterDigital**

**Meeting called to order by the Chair 19:02 ET**

Agenda slide deck: [11-20/11931r0](https://interdigital-my.sharepoint.com/personal/joseph_levy_interdigital_com/Documents/802/20_03-xx_On_Line/ARC_SC/20_12_07_Teleconference/11-20-1931-00-0arc-arc-sc-agenda-7-dec-2020.pptx)

**Call for Patents:**

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

**Participation:**

The chair reviewed the participation policy

**Approval of the Agenda:**

**ARC Agenda – 07 Dec 2020**

**Introductory Info**

**802.11 TGbe’s evolving multi-link architecture**

* + **How does the architecture (still evolving) within 802.11 TGbe fit into or affect the overall (baseline) 802.11 architecture?**
  + **Contributions:**
  + [**11-20/1639r7**](https://mentor.ieee.org/802.11/dcn/20/11-20-1639-07-00be-11be-ap-mld-architecture-discussion.pptx) **- 11be AP MLD Architecture Discussion - Mark Hamilton**

The Chair reviewed the agenda and called for comments or amendments to the agenda - there was no response to the call.

The proposed agenda was accepted without comment.

## 802.11 TGbe’s evolving multi-link architecture contributions

Chair provided an overview of the documents to be discussed, a call was made for additional contributions.

None were provided.

[**11-20/1639r7**](https://mentor.ieee.org/802.11/dcn/20/11-20-1639-07-00be-11be-ap-mld-architecture-discussion.pptx) **- 11be AP MLD Architecture Discussion - Mark Hamilton**

Reviewed by Mark Hamilton. Started review on slide 2 – AP focused continued through slide 9 – then jumped to slide 18 – 22 – completing the review.

C – There are parallel MAC stacks with each one connected to a specific MAC SAP. The MAC stacks may share hardware and some information, but it may be easier to describe them as separate stacks. With the behavior of each stack defined by what the STA is servicing. A “legacy” stack would be servicing “legacy” STAs and the MLD stack would service MLDs.

C – There was support for the above view – as it seems to be making things simpler - by clearly stating SAP 1 is for one thing and SAP2 is for something else.

C – In the figure on slide 22 is there such an entity as a Multi-link BSS?

A – There has been no agreement that a Multi-link BSS as shown by the dashed cloud is an 802.11 concept. It should be removed from the figure.

A - Why it is helpful to look at it as two components, is there a benefit?

C – The only thing added to the “legacy” beacon frame is MLO element IE.

C – For the single radio, there will only be one link at a time, but if you have two links at the same time this gets more complex.

R – This is just implementation, either the two links get processed in parallel or sequentially – but that is not a function of the stack or logical architecture. So, is there a problem?

C – Discussing address filtering: we need to make sure there is no confusion regarding how address one filtering will work for MLO and legacy. Clearly stating any differences if they exist. Clarity is the goal. If there are cases not covered, we may need to add a figure – similar to the FST case where a figure and description were added.

General agreement that we need a clear picture to describe what is going on and that everyone agrees how things work.

Chair – calling for other comments.

C – Document 11-20/1545r1 may be helpful in moving this work forward. As it discusses AADs and addressing.

R – The document discusses AAD swapping – it does not deviate from what is currently in MLO. The document addresses a particular use case – where MLO is driven a controller and the data encryption is common, using the MLD address in the encryption.

A – the retransmission has the AAD challenge.

C – It is based on the need to keep the addressing in line with MLO decision, therefore there is a need for an AAD swap.

## Next Steps:

**Next Teleconference(s):**

* Note: There is a plan for some additional discussion with TGbd, as part of their comment resolution process. A TGbd teleconference with this specifically included in the agenda will be announced. (This might not be before the January plenary at this point.)
* TGbe/TGbd related teleconference(s) during January plenary:
  + Monday, January 11, 13:30-15:30 ET
  + Wednesday, January 13, 11:15-13:15 ET

## Adjourned – 20:04 h EDT.

**Attendance:**

| **Name** | **Affiliation** |
| --- | --- |
|  |  |
| Aboulmagd, Osama | Huawei Technologies Co., Ltd |
| Au, Kwok Shum | Huawei Technologies Co., Ltd |
| Dong, Xiandong | Xiaomi Inc. |
| Hamilton, Mark | Ruckus/CommScope |
| Hong, Hanseul | WILUS Inc. |
| Huang, Po-Kai | Intel Corporation |
| Levy, Joseph | InterDigital, Inc. |
| Montemurro, Michael | Huawei Technologies Co. Ltd |
| Park, Minyoung\* | Intel Corporation |
| Nariboe, Sharan\* | Samsung |
| Palayur, Saju | Maxlinear Inc. |
| Petrick, Albert | Jones-Petrick and Associates, LLC. |
| Rolfe, Benjamin | Blind Creek Associates |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Sun, Bo | ZTE Corporation |
| Torab Jahromi, Payam | Facebook |
| Wang, Lei | Futurewei Technologies |
| Yang, Rui\* | InterDigital, Inc |

\* Added based on Webex participants list