IEEE P802.11
Wireless LANs

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| ARC SC Minutes May 2014 |
| Date: 2014-5-14 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Joseph Levy | InterDigital Communications, Inc. | 2 Huntington Quadrangle 4th floor, South WingMelville, NY 11747 | +1.631.622.4139 | joseph.levy@interdigital.com |
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Abstract

Minutes of the IEEE 802.11 ARC Standing Committee Meeting held 14 May 2014, in Waikoloa Village, Hawaii.

**Wednesday 14 May 2014, AM1, 8:00 AM (HT)**

**Chair: Mark Hamilton, Spectralink**

**Vice Chair/Secretary: Joseph Levy, InterDigital**

**Agenda – 11-14/0488r3** (<https://mentor.ieee.org/802.11/dcn/14/11-14-0488-03-0arc-arc-sc-agenda-may-2014.ppt> ):

* Administration
* Officer elections
* Updates, no action expected:
	+ IEEE 1588 mapping to IEEE 802.11
	+ IETF/802 coordination (RFC 4441, PAWS)
	+ 802 O&A sponsor ballot
* IETF/802 coordination
	+ Secure Hybrid Wireless Mesh Protocol draft review
	+ CAPWAP Hybrid MAC draft review
	+ CAPWAP Extension for 802.11n
* 802.1AC revision
	+ Proposed view of Portal (and Annex R), if implemented with a Bridge
* AP/DS/Portal architecture and 802 concepts
* Future sessions / SC activities
* Joint session with TGak, Thursday, AM1
	+ Architectural view of 11ak Bridged LAN

**Administration:**

The Chair reviewed the Administrative information in slides 6-11 in the Agenda document (11-14/0488r3)

**Call for Patents:**

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

The Chair noted that the previously announced and scheduled conference call called by the 802 O&A comment resolution committee, that was scheduled for Tuesday, 13 May, 7:00 AM (HT) was Cancelled

**Approval of the Agenda:**

The proposed Agenda slide 12 of the Agenda document (11-14/0488r3) copied above was approved.

**Approval of the minutes of past meetings:**

March F2F Meeting Minutes: <https://mentor.ieee.org/802.11/dcn/14/11-14-0501-00-0arc-arc-minutes-march-2014.docx> - Approved by unanimous consent

April Teleconference Minutes: <https://mentor.ieee.org/802.11/dcn/14/11-14-0502-00-0arc-arc-cc-minutes-april-8-2014.docx> - Approved by unanimous consent.

**Officer elections:**

Call for nominations – no additional nominations, nominations closed

Nominated for Chair – Mark Hamilton

Nominated for Vice Chair – Joseph Levy

Approved by unanimous consent. (13 present)

**Updates:**

**1588 mapping to IEEE.11 – update**

No new efforts required from our side.

**IETF/802 coordination –**

**RC-4441**- update, no number yet – coordination document – the revision of the coordination document has been approved, but not yet published it will get a new number.

**Secure Hybrid Wireless Mesh Protocol (SHWMP)** – (<https://datatracker.ietf.org/doc/draft-avula-shwmp/?include_text=1>)

This has been requested to be published – there is concern that there may be overlap/conflict with 802.11s – We are requested to review the document and provides concerns.

Donald – I did look at the document – I don’t know if they are doing a good job – I don’t see anything wrong with it. – procedural comments would be a useful addition – I think they should adapt a new code point – I think this needs to be constant in the mesh. I’d be happy to help draft a reply.

Dorothy – so we would define a code point –

Donald – well they shouldn’t be using an existing one.

Dan – I am curious as to why they didn’t bring this here to 802.11.

Dorothy – Is there an issue that this is published by IETF?

Mark – Are you suggesting that they work with us and narrow their scope?

Dan – I would suggest that this be brought to 802.11 – this seems to be only addressing 11s.

Donald – We don’t have to allocate a mesh point – the way it is designed they can allocate one. We can point out that they can bring this to 802.11 if they want to.

Dorothy – I’m hearing that there is not strong objection to this being published. There is a linkage to 11s that is present.

Donald – there is a reference to the 802.11 standard.

Mark – one obvious thought is that they want to go quickly.

Donald – this seems to be from universities members, I don’t see an industry push for this.

Mark – I don’t know if we have enough interest. We can feed the suggestion back that they should bring this to 802.11 (WNG).

Dorothy – can we just incorporate this into 802.11. Does this set a precedent which we don’t want sent.

Donald – well this extends our protocol, which was intended to be extendable.

Bruce – what is the motivation of this proposal in IETF.

Dan – the IETF is not really involved in this, for documents on this track it is not reviewed.

Mark – does the document have any standing?

Donald – this document is experimental – it gets an RRC number – there are two uses in the IETF: 1) for experiments, 2) you wanted it to be a standard, but can’t get it through the IETF as a standard.

Bruce – I would suggest we arrange a conference call – to find out the intent.

Mark – could a LS letter be a better?

Dorothy – I don’t think we want to try to block this. We can provide some feedback on how to avoid interoperability conflict. We can also invite the authors to bring this to WNG, but it should be done in a general way.

Donald – I am thinking I might contact them directly, to explain how easy it is to generate a code point: A code point can be provided, or a code point can be generically generated from an existing OUI, or it can be from another OUI. I see no text addressing the code point allocation.

Adrian – I would expect a discussion and a motion to approve an ANA code point.

Donald – we could do this.

Dorothy and Donald – will generate an LS to IETF, to Nevel. The LS response will include the request.

**CAPWAP** – Hypbrid Stucture update:

* + CAPWAP draft(s) update:
		- Hybrid MAC structure
			* <http://datatracker.ietf.org/doc/draft-ietf-opsawg-capwap-hybridmac/?include_text=1>

Dorothy – The title is misleading – but it will probably be revised. – What this document does is it defines an additional CAPWAP profile – profile 0 and profile 1 –

Mark – is this negotiating where the work is done?

Dorothy – we are being asked if we have any comments on this document.

Dan – profile 0 is what is done by Andrews company, profile 1 is what is done by my company. – But I think they are putting lipstick on a pig.

Dorothy – I have some clean up editing, but I think this a fairly simple change.

Mark – Given they are doing CAPWAP, do we have anything concerns? I suggest we send in Dorothy’s editorial comments and leave it at that.

Dorothy – I have already sent my comments.

Mark – then I guess we have no additional comments. So if there is a formal request we will formally reply, otherwise there is no action required.

* + - 802.11n support
			* To be posted… Review in detail, in July

Bruce – should this be specific to 11n or 11ac?

Dorothy – I asked them specifically about this and they are only addressing these items at this time.

**Mark – the way forward is for everyone to review this document for the additional discussions in July.**

**Alternate tunnel encapsulation**

IETF is moving ahead with the alternative tunnel encapsulation.

**802 Overview and Architecture revision**

**Draft 1.9 Sponsor Ballot**

* BALLOT OPEN DATE: 25-Mar-2014
* BALLOT CLOSE DATE: 09-Apr-2014
* BALLOTS RECEIVED: 3
* VOTE CHANGES: 2
* COMMENTS: 9
* MUST BE SATISFIED COMMENTS: 6
* In addition, 17 comments from 802.11 were considered

Comment resolution sheet is here:[**https://mentor.ieee.org/802-ec/dcn/14/ec-14-0027-03-00EC-802-o-a-sb4-comments.xls**](https://mentor.ieee.org/802-ec/dcn/14/ec-14-0027-03-00EC-802-o-a-sb4-comments.xls)

Mark – We believe that this is now done, and is now awaiting RevComm approval.

Andrew – we submitted 1.9 to ISO – May 8 – no response as of today – I don’t expect a response for several months.

Jon – we are probably not going to wait for the response.

The Chair (Mark) thanked everyone for their support in this review.

**Draft 2.0 Sponsor Ballot**

* BALLOT OPEN DATE:       17-Apr-2014
* BALLOT CLOSE DATE:      27-Apr-2014
* BALLOTS RECEIVED:        3
* VOTE CHANGES:               2
* COMMENTS:      1
* No comments from 802.11
* Comment sheet is here: <https://mentor.ieee.org/802-ec/dcn/14/ec-14-0029-00-00EC-802-sb5-comments.ods>
* Lone comment deemed invalid, draft forwarded to RevCom for June

**802.1AC revision:**

Revision includes update to clause 12, in particular (newly numbered) subclause 12.2 “IEEE Std 802.11 (Wireless LAN) convergence functions”

Architectural discussions in Beijing

802.11 Annex R and model of a Portal

802.1AC convergence function possibility of Bridge as a Portal

Presentations for discussion: <https://mentor.ieee.org/802.11/dcn/14/11-14-0497-01-0arc-802-11-portal-and-802-1ac-convergence-function.pptx>

Mark – provided an overview. I did some work with Norm Finn to generate the above document. I am looking for comments from this group on this document.

Proposing that ISO layering is adhered to.

Slide 5 – long discussion – on the DS.

Adrian – there may also be a controller – in this architecture. So it is hard to define a standard DS.

Mark – there are so many ways of implementing these layers. We stopped at a logical point, as it depends on ability. A bit about portals – we need to be careful with portals – we have defined that when we move to a portal we have left the DS. It is different going through the DS and going through a portal.

Andrew – I’ve always struggled with portals and the DS. In .11F was an attempt to specified – do we need a concept of a DS. But we seem to not need a DS at this point.

Paul – what is the box labeled AP in the drawing.

Mark – The box is trying to show the function(s) of an AP that are beyond its embedded STA; that is, the forwarding functions and so forth.  I’ve previously suggested that 802.11 needs a name for this collection of stuff, for help in architectural discussions like this, and propose naming it. [Note we didn’t have the time to come back to this issue and generate a name, due to the protracted discussion on this issue.]

Mark – I’m surprised that you don’t see the value in the DS – devices that are sold, don’t just work with each other, things are not interoperable, I don’t understand how we can remove the DS.

Adrian – You said an ESS is APs connected by a DS. This doesn’t agree with what a Standard should do.

Dorothy – I see the DS as a way to allow creativity in implementations.

David – the DS doesn’t have to be limited to one box

Dorothy – the DS and AP function can be apportioned across multiple “boxes” by a vendor.

Bruce – I think we are converging with some good suggestions now – this is being driven by our discussions with 802.1 - and trying to get an understanding how to represent our common understanding. A comment on the word unspecified: there are many possible ways to do with it. To me it implies that this is unknown.

Mark – that would be an interesting thing to try. What problem are we trying to solve – this is not an implementation or interoperability issue we are trying to solve, but, a way to communicate between things, how things interconnect. As an example the activity in ah on relay – they don’t have the correct understanding of the specification and this is why this effort is useful in my mind. We are trying to define beyond the over the air interface and we are describing behavior.

Mike – 1) The CAPWAP – states CAPWAP relies on the DS. 2) Not only the high level architecture is miss understood, but new features are developed in a vacuum.

Andrew – I’m not arguing against the need for architecture – this architecture designed 17 years ago, we are still having arguments on what it means and how things we are doing relate to ongoing work. I like Bruce’s view of providing multiple examples describing how this works.

Mark – calling for input for possible examples. There were more slides in this deck – so please review them.

Paul – I think this is an excellent Idea – but what is the output. How do we moralize this?

Mark – this will be brought into mc or md to explain –

Paul – some of this should be in the O&A document.

**Review of future activities:**

* ARC SC meets when a specific focused task is requested of the SC for which there is sufficient volunteer interest.
* Continue work on architectural models
* 802 O&A balloting activities - complete
* Comment on 802.1AC revision project changes/proposals
* Will also follow 802.1/802.11 activities on links, bridging, and MAC Service definition
* Monitor/report on IETF/802 activities, as needed
* Monitor/report on IEEE 1588 activities, as needed

If you have ANY other topic that you would like ARC SC to consider, contact the SC chair.

No CC scheduled – but one may be scheduled if needed.

**Recessed @ 10:02**