IEEE P802.11  
Wireless LANs

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| 802.11ak March 2014 Minutes | | | | |
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| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Yan ZHUANG | Huawei Technologies | Huawei Nanjing R&D Center, 101 Software Avenue, Yuhua District, Nanjing, China |  | [zhuangyan.zhuang@huawei.com](mailto:zhuangyan.zhuang@huawei.com) |
| Yizhou LI | Huawei Technologies | 101 Software Avenue, Nanjing 210012, China | +86-25-56625409 | [liyizhou@huawei.com](mailto:liyizhou@huawei.com) |
| Donald Eastlake | Huawei Technologies | 155 Beaver Street, Milford, MA 01757 USA | +1-508-333-2270 | [d3e3e3@gmail.com](mailto:d3e3e3@gmail.com) |

Abstract

Minutes of the IEEE 802.11 Task Group “ak” meeting, March 2014, at the China World Hotel, Beijing, China, by Secretary Yan Zhuang and temporary Secretaruy Yizhou Li, edited by Chair Donald Eastlake.

# TGak minutes, Monday PM2 (March 17, 2014)

Function Room 12, China World Hotel

Donald Eastlake (Huawei) Chair called the meeting to order.

Minutes by Yan Zhuang and Yizhou Li.

The Chair reviewed Patent policy.

Call for Potentially Essential Patents: No responses.

The Chair reminded attendees to record their attendance.

Approval of Agenda

* Approved by unanimous consent.

Approval of the Minutes of the 802.11ak Meeting in Los Angeles, California:

* Moved, to approve 14/0188r0, “802.11ak January 2014 Minutes”
* Approved by unanimous consent.

Approve Minutes of Teleconferences since Los Angeles

* + “11ak Telecon Minutes 20140210”, 11-14/239r0
  + “11ak Telecon Minutes 20140224”, 11-14/272r0
  + “11ak Telecon Minutes 20140310”, 11-14/338r0
  + Approved by unanimous consent

Vice Chair selection

* + Nominations: Mark Hamilton
  + Approved unanimously

Presentation/Liaison to Wi-Fi Alliance?

* + Present 11ak in June to Wi-Fi Alliance.

What will it take to meet our schedule to go to WG Ballot from the July 2014 meeting?

Suggested schedule:

* + March – Adopt a D0.01 and issue a call for comments
  + Ad hoc before the May meeting – resolve comments
  + May – resolve comments and produce a D0.0n…
  + July – produce a D1.0 and go to WG Ballot

Ad hoc meeting 7-9 May at Kauai Beach Resort

* + <http://pothole.com/~dee3/kauai>
  + <https://www.eventbrite.com/e/80211-tgak-ad-hoc-meeting-registration-10458883803>

Presentation and Discussion of Submissions:

**“Some 11ak EtherType Frame Encoding Text”, 11-14/0004r6, Donald Eastlake (Huawei)**

Achitecture diagram is missing in current 04.

Adds VID to section 5.2.2.2 as augment to current unitdata.

Norm Finn (Cisco): VLAN tag is in MSDU when it comes to 802.11. So you do not want VID in this interface.

There was some clarification and discussion on the implementation and spec of VLAN.

Donald Eastlake: Section 4 relates to reference model. 4.3.21 seems is the best place to insert the general architecture figure.

Better not to talk about VLAN in GLK.

Agreed to remove VLAN text from 4.3.21.

**“Some Subsetting and Addressing Text”, 11-14/0130, Donald Eastlake (Huawei)**

**Straw poll:** Should we simplify CBA-MSDUs now or wait for WG comments?

* **Simplify: 0 Annotate and wait for comments: 3 Wait for comments: 0 Abstain: 2**

**IEEE 802.1AC Draft, Norm Finn (Cisco)**

Debates on if the portal supplies 802.1 MAC service interface.

Norm refers to 802.11 section 4.3.6, sounds like integration service is inside the portal.

That's right.

Norm: need a MAC service interface.

Why?

Because two clients' MAC interfaces talk to each other. The only thing that a bridge can connect to a portal is through a MAC service.

You may put it at the right most part of the figure.

Then it provides a MAC service...

You can do that but don’t necessarily have to.

802.11 does not go that high up.

Then possibly a gap here. Not 802.11's job. Someone has to define it. Out of .11 scope. Certainly needs something to point to …

Required by some dot group to provide the MAC service

Everything you said is right, but it is not what 802.11 did.

Debates on portal, MAC service.

Not necessary every 802.11 provides that.

Question is if 802.11 wants to do that.

Refer to 5.2, do not have to duplicate the text, reference that.

Why do I care? I = 802.11. What is my value in doing that (offer the MAC service)?

Could be a value added.

Go back to the discussion on using vector for port list issue.

Why not tweak 802.1Q a little bit to incorpate vector stuff (bridge port could be an item of vector) in AC?

Clarification and discussion on 802.1Qbz, 802.1AC, 802.11 port to queue mapping etc.

Feeling from 802.11, may not be very happy but ok. It is 802.1 's resposiblity to do it.

The Chair Recessed TGak until 19:30 Tuesday

# TGak minutes, Tuesday Evening (March 18, 2014)

Function Room 1, China World Hotel

Donald Eastlake (Huawei), Chair, called TGak to order.

Li Yizhou (Huawei) was acting as temporary Secretary.

Reviewed Patent policy. Call for Potentially Essential Patents: No responses.

The Chair reminded people to record their attendance.

**“802.11ak Figures”, 11-14/418r0, Phillipe Klein (Broadcom)**

Phillipe Klein: Based on some discussion yesterday. Updated the diagram.

Norm Finn (Cisco): BSS is always compliant to AP?

Philippe: Yes.

Dotted line and red line placement... some mistake.

Some discussion on how to correct it.

In 42, STA is totally inside BSS. BSS is edge of the world.

The data does get out of the BSS.

The bottom of dotted line should be moved inside the red line.

Philippe changes the diagram on spot. Label SAP rather than MAC on diagram. Dotted line rather than solid line for GLK link.

Difference between SAP and port?

A bridge port is a whole stack of sublayers. Bunch of SAPs. e.g. trunk port.

A bridge port is not an interface, it is a stack of protocols. All above the MAC. Between LLC and MAC.

Why two boxes on top? Not one

Will go there.

Move to pic on slide 4 of Philippe's slides. 802.11ak architecutre figure.

Clarification and discussion on relationship of DS and GLK BSS. DS can be bridged LAN, but not necessarily is.

Portal is to give a single entrance....

Discussion on difference between DS and bridge.

DS only knows those directly attached...

Mobility/Roaming issue discussion. definition.... authentication and association? Movement not visible to users?

ESS connecting to GLK BSS...

Connect a blue line with two GLK BSS to get GLK ESS.

Blue line means union of two sets

Logical diagram, so one logical portal.

Change 802.1 "bridge" to “802.1Q bridged LAN”.

Add a non-AP sta in a new GLK BSS box, left most

Can make all three in one GLK ESS.

Small square box in figure indicates the bridge port.

Finish fixing the architecture diagram.

The result was 11-14/0418r1, which was uploaded.

The Chair recessed TGak until 8:00 Wednesday

# TGak minutes, Wednesday AM1 (March 19, 2014)

Function Room 1, China World Hotel

Donald Eastlake (Huawei), Chair, called TGak to order.

IPR and Attendance Recording Reminder. Call for Potentially Essential Patents: No responses.

Planning for Joint 802.11ak / 802.1Qbz meeting Thursday 20 March:

**Moved,** 802.11ak Teleconferences, joint with 802.1Qbz if mutually convenient:

1-hour teleconferences through the May 2014 802.11 meeting on Monday, March 31, April 14, May 5 at 5pm Eastern US time.

* Approved by unanimous consent.

Presentation and discussion of 11-14/429, Mark Hamilton (Spectralink)

Review what have been done in TGak sessions Monday and Tuesday.

Donald: May use one sentence to summarize yesterday's discussion.  
Portal can provide a bridged port as MAC service.

Show the updated 802.11ak BSS and architecture figure. Color missing....

Object to saying two connections?   
Consistent with 802.11 standard.

Briefing on tomorrow, planning joint meeting, teleconferences. What to do in teleconferences?  
Comment resolution if comments have been submitted in the call for comments to be issued. We can call for presentations for the calls.

Adoption of a D0.01? Consensus was to try to schedule another TGak session for Thursday PM1 or PM2 to go over a tentative D0.01. The Chair will try to arrange this. [that session was held, see below]

**Moved,** to direct the Editor to produce a D0.01 based on 14/0004, 14/0130, 14/0418, and the discussions at the Tuesday evening TGak session.

* Approved by unanimous consent.

Link cost material to be determined, needs to be added at some point.

There was continued discussion of bridge port, emulation of bridge prot, vector of bridge ports, GLK BSS, etc.

Clarification on STA of GLK BSS is the air interface of the end station below. Not mesh like connection. STA has no two interface.  
   
Provide text on what the DS/protal/MSDU-bundle does/is

Show 802.11 pic 4-8 to explain mesh sta connection

The Chair recessed TGak until 8:00 Thursday.

# TGak minutes, Thursday AM1 (March 20, 2014)

Ballroom AB, China World Hotel

The Chairs (Donald Eastlake (Huawei), Norm Finn (Cisco)) called joint session of 802.1 IWK and 802.11ak to order.

IPR and Attendance Recording Reminder. Call for Potentially Essential Patents: No responses.

Approval of agenda

802.1Qbz and 802.11ak status was reviewed.

Scheduling:

Joint 802.11ak – 802.1Qbz teleconferences to be 1-hour teleconferences through the May 2014 802.11 meeting on Monday, March 31, April 14, May 5 at 5pm Eastern US time.

* Approved without objection

Most of the meeting was spent on 802.1AC comment resolution chaired by John Messenger.

Recess 802.11ak until 16:00 today.

Recess 802.1-IWK

# TGak minutes, Thursday PM2 (March 20, 2014)

Function Room 5, China World Hotel

Donald Eastlake, Chair, Called Meeting to Order

IPR and Attendance Recording Reminder. Call for Potentially Essential Patents: No responses.

Presentation and Discussion of Submissions:

11-14/0454r0, “Some 11ak Text”, was reviewd bvy Donald Eastlake (Huawei)

That document was edited during discussion producing 11-14/454r1.

**Moved,** to approve 11-14/0454r1 as the content of Draft\_P802.11ak D0.01 and authorize the Editor to covert it to that Draft and cause the result to be posted.

* Moved: Dick Roy Seconded: Joseph Levy
* Vote: Yes: 6 No: 0 Abstain: 0

**Moved,** to request an 802.11 Working Group Comment Collection on D0.01 to run through April 25th.

* Approved by unanimous consent.

**Moved,** To direct the ANA to allocate Bit 13 in the Capability Information field (for both DMG and non-DMG STAs) for use by P802.11ak.

* Moved: Dick Roy Seconded: Joseph Levy
* Vote: Yes: 6 No: 0 Abstain: 0

Adjourn 802.11ak, *sine die*