IEEE P802.11
Wireless LANs

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| Wireless Next Generation (WNG) Standing CommitteeMeeting Minutes for May 2016 MeetingWaikoloa, USA |
| Date: 05-17-2016 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Lei Wang | Marvell | 5488 Marvell Lane Santa Clara, CA, 95054 | +1-858-205-7286 | leileiw@marvell.com |
| Jim Lansford | Qualcomm | 100 Stirrup CircleFlorissant, CO 80816 | +1-719-286-8660 | jim.lansford@ieee.org |

Abstract

Meeing Minutes for the WNG SC meeting held in Waikoloa, USA - May, 2016.

**Tuesday, May 17, 2016, 8:00 AM to 10:00 AM Waikoloa Time**

Chair: Jim Lansford (Qualcomm)

Vice Chair: Lei Wang (Marvell)

**Meeting Agenda:**

The meeting agenda is shown below, and also published in the agenda document:

<https://mentor.ieee.org/802.11/dcn/16/11-16-0514-01-0wng-agenda-for-wng-2016-05.ppt>

* **Call Meeting to Order**
* **Agenda approval**
* **Attendance reminder**
* **Documentation reminder**
* **Approval of Previous meeting minutes**
* <https://mentor.ieee.org/802.11/dcn/16/11-16-0451-01-0wng-wng-2016-march-macao-meeting-minutes.docx>
* **Announcements**
* **Confirmation of Vice-chair**
* **Presentations**
* **Plans for July 2016**
* **Adjournment**

**Meeting Minutes:**

* Meeting called to order at 08:00AM (Waikoloa local time) on Tuesday, May 17th, 2016 by Chair, Jim Lansford.
* Agenda approval: <https://mentor.ieee.org/802.11/dcn/16/11-16-0514-01-0wng-agenda-for-wng-2016-05.ppt>
* The agenda was approved by unanimous consent
* The chair also noted the affiliation FAQ, anti-trust FAQ, ethics code, IEEE 802.11 policies and procedures, and IEEE 802 policies and procedures
* The chair covered the voting rules for WNG SC, being a standing committee
* Approximately 155 people were in attendance.
* Approval of previous meeting minutes
* The minutes for March-2016 Macao meeting:

<https://mentor.ieee.org/802.11/dcn/16/11-16-0451-01-0wng-wng-2016-march-macao-meeting-minutes.docx>

* + The minutes was approved by unanimous consent.
* Confirmation of vice chair: slide 9 on the agenda file
	+ Motion to reconfirm Lei Wang as vice-chair of the 802.11 Wireless Next Generation Standing Committee
	+ Moved: Stuart Kerry
	+ Seconded: Joseph Levy
	+ Motion was passed by unanimous consent
* Presentations:
1. “LiFi – Use of visible light communications for 802.11, Part 2,” Nikola Serafimovski (PureLiFi): <https://mentor.ieee.org/802.11/dcn/16/11-16-0605-01-0wng-proposal-for-lp-wur-study-group.pptx>
	* Q: What about traditional lamp dimmers, that interrupt part of the AC waveform.
	* A: We can coexist with DC based dimmers just fine. In PoE systems, they typically use a pulse width modulation to dim the lighting. We have been doing ongoing testing in a PWM system, and believe we can still function.
	* Q: But if you are operating and LED on AC mains power and using a conventional dimmer that slices the AC waveform (hence using power line communication), it seems like you can only transmit data during the period of time the light is actually on.
	* A: That’s probably true, depending on how the LED is powered from mains.
2. “Low Power Wake Up Receiver,” Minyoung Park (Intel): <https://mentor.ieee.org/802.11/dcn/16/11-16-0605-01-0wng-proposal-for-lp-wur-study-group.pptx>
	* Q: what’re the usage cases?
	* A: Have presented the use cases in previous contributions, e.g., critical message scenario delivery, requiring to wak up the device timely.
	* Comment: timeline, starting SG to PAR, only one meeting cycle, very aggressive.
	* Response: this is a small work, comparing to 11ax or 11ay; we cannot spend a year to discuss PAR.
	* Comment: you need a usage case doc, which takes time too.
	* Response: will try to be more efficient.
	* Q: had a SP in LRLP, will change the direction to more LP; any possibility to combine those two groups?
	* A: there are prons and cons. LRLP group has not formed clear directions; while WUR is already clear about the direction to go. If combined, it will delay WUR. So, we prefer to focus on LP-WUR, not to combine.
	* Comment: it would be difficult to coordinate between two groups.
	* Comment: LRLP group has agreed to focus on LP side; the # of TGs requiring PHY/MAC changes in dot11 is 4, i.e., ax, ay, LRLP, and LP-WUR. Concerned with those parallel groups
	* Response: WUR will not comsume that much resources.
	* Q: for WUR, its target is at very low power, like Bluetooth LE?
	* A: no, not in the same rage of Bluetooth LE?
	* Comment: WiFi should have its own LP mechanism, not to directly compete with BLE.
	* Response: function wise, WUR is very different from BLE.
	* Comment: agree with proposal, focused scope can be done in a short time period.
	* Q: intend to amend dot11, woke-packet will be transmited in dot11 channel?
	* A: yes, the transmitter side can use dot11; while the receiver side needs some work, could be some existing low power receiver.
	* Straw Poll on slide 6: Do you support the formation of a new 802.11 Study Group to develop PAR&CSD for the LP-WUR technique described in [1]?
		+ Yes 79
		+ No 3
		+ Ab 35
3. “802.11 inputs to 5G EC SC,” Joeseph Levy (InterDigital): <https://mentor.ieee.org/802.11/dcn/16/11-16-0651-02-0000-802-11-discussion-of-inputs-to-802-ec-5g-sc.pptx>
	* Comment: based on last night’s ad hoc, on Slide 6, there are 4 different things, IEEE 5G means IEEE invents the whole package of 5G,  including core system, lots of extra work needed to be invented. This makes IEEE 5G very difficult to do. Next 2 options, need IEEE to go to ITU-R to convince; lots of work; last option is work with somebody else who has gone through this process before, e.g., 3GPP. None of those are awesome, while the last one is the most attractive one.
	* Comment: not sure about the view that the definition of 5G is next generation cellular network. IEEE 5G is more generic, a set of technologies to meet the 5G requirements.
	* Comment: anybody can develop 5G technology; it is the matter of who owns the network, phone-co, cable-co; you need core management; you do need license spectrum.
	* Comment: as showen slide 17, there were more SPs straw poll in yesterday evening’s ad hoc meeting. IMT is a regulatory term, not cellular term; ITR writes recommendations.
	* SP# 1: on slide 14, 802.11 believes that 802 should not generate a standard for IEEE 5G which is independent of Cellular/IMT-2020/3GPP.
		+ Yes 49
		+ no 0
		+ abstain36
	* SP # 2: on slide 17,
4. IMT-2020 – single technology; 0
5. IMT-2020 – set of technologies; 8
6. IMT-2020 – external proposal; 49
7. None; 12
	* Joe: two ways to bring this info to EC, one with raw data; another option is to bring in a formal dot11 recommendation
	* Comment: okay with the two options, but prefer to the raw results.
	* Comment: the best way is to bring straw poll results of this SC; trying to get the group to form a position may generate  lots of debats, may be difficult.
* Plans for July meeting:
	+ Call for contributions: the WNG chair will issue a call for contributions before the 2016-July meeting.
	+ Chair: have about 50 student papers done, plan to prepare some presentations
* Adjournment
	+ The meeting adjourned, without objection, at 9:42am Waikoloa Time.