IEEE P802.11
Wireless LANs

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| May 2010 S1G Meeting Minutes |
| Date: 2010-05-25 |
| Author(s): |
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Abstract

This document contains meeting minutes of S1G Study Group meetings during the May 2010 Interim meeting in Beijing.

Minutes for 5-17 S1G Meeting Wednesday 7:30 pm – 9:30 pm local

1. Attendees:
	1. David Halasz Aclara
	2. Garth Hillman Oaktree Consulting
	3. Kiyoshi Fukui OKI
	4. Noriyasu Fulcalse Mitsubishi Electric Automation Inc
	5. Edward Au Huawei
	6. Tim Godfrey EPRI
	7. Bruce Kraemer Marvell
	8. Jerry Li Huawei
	9. Roberto Aiello Itron
	10. John Buffington Itron
	11. Peter Ecclesine Cisco Systems
	12. Reinhard Gloger Nokia Siemens Networks
	13. Junho Jo LGE
	14. Byoung-Hoon Kim LGE
	15. Jae-Hyung Song LGE
	16. Paul Lambert Marvell
2. Agenda proposed:
* Secretary
* Attendance
* Review policy and procedures
* Approve teleconference minutes
	+ 10/456r0 April 5
	+ 10/486r0 April 26
* Summary of activity to date
	+ 09/1313 Presentation in WNG
	+ 10/0001 PAR & 5c submission
	+ 10/204 Comments on the PAR & 5c
* Approve agenda
* SG officer election
* Summary presentation on 10/0001 PAR & 5c
* Summary presentation on 10/204 Comments on PAR
* Prep for joint 802.15.4g & 802.11 S1G meeting
	+ Tuesday 5-6 in 802.15.4g, e.g.,
		- Coexistance document will be created in 10/0001 PAR & 5C
		- How does 802.15.4g envision coexistance with it’s various PHYs?
		- Specify Energy detect thresholds?
* Baseline PAR & 5c discussion Motion for PAR & 5c
1. Garth Hillman volunteered to be secretary for the meeting
2. Chair reviewed the patent policies
3. Since there will be a joint meeting with .15.4g on Tues 5-6 PM we will not hold a vote on the PAR and 5C today
4. **Motion to approve the minutes to the April 5 and April 26 teleconferences (11-10-0456r0 and 11-10-0486 r0)**

**6.1 Moved by: Bruce Kraemer (Marvell) Seconded by: Garth Hillman (OakTree)**

**6.2 No discussion**

**6.3 Passed with unanimous consent**

1. Chair reviewed history of SG to date
2. **Motion to approve Dave Halasz as Chair of the S1G SG**

**8.1 Moved by: Bruce Kraemer (Marvell) Seconded by: Garth Hillman (Oaktree)**

**8.2 No discussion**

**8.3 Motion passes 11 yes, 0 no, 0 abstain**

1. Reviewed Doc 11-10-0204 r4, comments on proposed PAR and 5C
	1. Confusion with TVWS issue was related to the fact that the TVWS will be constrained and S1G should be complimentary
	2. 802.11af was added to the para asking if there are similar standards being created
	3. Issues with I&J will be handled by .11mb and the S1G PAR was not changed
	4. Comparison with .15.4g resulted in 802.11 noting that .15.4g is limited to 1 Mbps and this standard will be limited to use of the .11 MAC
	5. Topics for discussion tomorrow:
		1. The group suggested that S1G needs to state a lower data rate limit in the PAR
		2. Interoperability – matching modulation and data rate might be possible but what about MAC issues. The issue here is that the two standards operate in the same market space. In .15.4g the common signaling mode (CSM) for interoperability was believed to be FSK. If a CSM between .11 900 MHz and .15.4g it could be OFDM based. Interoperability and mandated data rates are mutually exclusive.
		3. Coexistence - .11 with any .15.4g Phy not just the OFDM phy. Channel sense and energy detection definition and thresholds should be considered on both sides
		4. These (data rate, interoperability, coexistence) are good topics for tomorrows joint meeting.
	6. Chair walked through the PAR in doc 11-10-0001r6
	7. Chair asked for any other topics for discussion at this meeting
	8. Meeting was recessed at 8:49 PM

Minutes for 5-18 Joint 802.11 S1G and 802.15.4g Meeting Tuesdayday 5 pm – 6 pm local

1. S1G Attendees:
	1. David Halasz Aclara
	2. Garth Hillman Oaktree Consulting
	3. Dorothy Stanley Aruba Networks
2. Note: The meeting was held during an 802.15.4g time slot which did not conflict with an 802.11 S1G meeting. The meeting was announced at the opening 802.11 plenary meeting.
3. Coexistance straw poll
	1. Usefull to work on joint coexistence? Y:21, N:1, A:17
4. 802.15 member generally not happy with 802.11 PARs. They are not specific enough.
5. For interoperability, discussion on definition of interoperability.
	1. Was receiving comments in 802.11 S1G expressing desire for interoperability. This would imply a common signalling mode between 802.15.4g and 802.11 S1G. The implications for data rate would be that this would force overlap. Also this would be relatively complicated. Work intended by S1G is a rebanding and extending clocking. Hence the original intent was relatively simple.
6. Interoperability straw poll? Wait for 802.15.4g members to have a chance to read S1G PAR. Will provide results prior to S1G closing meeting.

Minutes for 5-19 S1G Meeting Wednesday 8 am – 10 am local

1. Attendees:
	1. David Halasz Aclara
	2. Reinhard Gloger Nokia Siemens Networks
	3. Dorothy Stanley Aruba Networks
	4. Junho Jo LGE
	5. Andrew Myles Cisco Systems
	6. Hitoshi Morioka Root
	7. Hiroki Nakano Trans New Technology Inc
	8. Hiroshi Mano Root
	9. Shuzo Kato NICT, Japan
	10. Garth Hillman Oaktree Consulting
	11. Roberto Aiello Itron
2. PAR & 5c discussion based on joint 802.15.4g meeting
	1. Two straw polls in 802.15.4g
		1. Usefull to work on joint coexistence with 802.15.4g? y:21, n:1, a:17
		2. Usefull to work on joint interoperability? Not taken to give 802.15.4g time to review S1G PAR & 5c
	2. Comment: Why does 802.15.4g mention data rates? Maybe this came in from LMSC.
	3. Comment: There was a discussion on one solution. Other reasons beyond data rate.
	4. 900 MHz good for things beyond smart grid. Issue is range in outdoor environment.
	5. Distinct identity should reflect running 802.11 MAC (Security, QoS, Management)
	6. Review of 802.15.4g PAR
	7. Anything we should update on S1G PAR?
		1. Outdoor, lower frequency better range
		2. Rebanding and reclocking of an existing phy is intent
	8. Wait on rate until after interoperability straw poll from 802.15.4g
		1. Interoperability implies some common rates
		2. Our intent is rebanding. Rates implied by reclocking. Reclocking parameters should come from task group.
	9. Do we really want to mimic the 802.15.4g PAR style? Find this troubling.
	10. Different philosophy between 802.11 and 802.15
	11. We want to band shift a wildly successful standard
	12. Small channel widths give better range and increased number of channels
	13. We should indicate a rebanding effort and stay away from the 802.15 suggestions
	14. For distinct identity, emphasize common 802.11 MAC, security, qos and support for internet protocol
	15. For now, lets keep it simple and stay away from 802.15.4g interoperability. We can revisit this decision if 802.15.4g straw poll indicates a desire for interoperability.
	16. Purpose is a rebanding effort

Minutes for 5-20 S1G Meeting Thursday 10:30 am – 12:30 local

1. Attendees:
	1. David Halasz Aclara
	2. Yonghong Zeng Institute for Infocomm Research
	3. Meng Wah Chia Institute for Infocomm Research
	4. Junho Jo LGE
	5. Mei Mei CATR
	6. Joe Kwak Interdigital
	7. Jae-Hyung Song LGE
	8. Rich Kennedy Research In Motion
	9. Hui Yang Huawei
	10. Xiangdong Zhong Huawei
	11. Reinhard Gloger Nokia Siemens Networks
	12. Padam Kafle Nokia
	13. Peter Ecclesine Cisco Systems
	14. Dorothy Stanley Aruba Networks
	15. Hirokazu Tanaka Toshiba Corporation
	16. Yasutaka Kawamoto Oki corporation
2. Attendance reminder
3. Review submission 10/0001r7, proposed PAR and 5c
4. Scope gets published on cover. So not a good idea to have clause 17 & clause 18 text in the scope. Group concensus is to remove the two sentences.
5. There was a comment in 802.15.4g. Paraphrasing, “All PARs out of 802.11 are too vague.” This will cause a no vote. 802.15.4g defines themselves by rate and range. There is no reason to define ourselves from the same view. We did add text in distinct identity.
6. In joint meeting, we asked for two straw polls. 1) Coexistance 2) Interoperability. The coexistance was positive. We have coexistance document checked in our 5c. The current draft of the S1G PAR implies no interoperability. 802.15.4g did not provide an interoperability straw poll. Any request for a straw poll? None
7. **PAR & 5c approval motion: Believing that the PAR and Five Criteria contained in the documents referenced below meet IEEE-SA guidelines, request that the PAR and Five Criteria contained in 10/0001r8 be posted to the IEEE 802 Executive Committee (EC) agenda for WG 802 preview and EC approval to submit to NesCom.**
	1. **Moved by: Dorothy Stanley (Aruba Networks) Seconded by: Garth Hillman (Oaktree)**
	2. **No Discussion**
	3. **Yes 9, No 0, Abstain 0**
8. Meeting adjurned