IEEE 802.18

Radio Regulatory-TAG

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| Radio Regulatory Technical Advisory Group Minutes |
| Date: 28 March 2019 |
| Name | Affiliation | Address | Phone | Email |
|  |
| Author(s):  |
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|  |
| Author and Officer presiding:  |
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Abstract

Minutes of the IEEE 802 RR-TAG Teleconference.

These are the Minutes of the IEEE 802 RR-TAG Teleconference, Thursday, 28 March 2019

**Voters for this meeting:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** | **Attendance** |
| **06Feb** | **07Feb** | **13Feb** | **14Feb** | **21Feb** | **28Feb** | **07Mar** | **21Mar** | **28Mar** |
| Auluck | Vijay | Self Employed |  |  | **X** | **X** |  |  | **X** | **X** | **X** |
| Ecclesine | Peter | Cisco Systems, Inc. |  | **X** | **X** | **X** | **X** | **X** | **X** | **X** |  |
| Holcomb | Jay | Itron Inc. | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |
| Kain | Carl | Noblis Inc. |  | **X** |  |  |  |  |  |  |  |
| Kennedy | Richard | Self |  |  |  |  |  |  |  |  |  |
| Kerry | Stuart | ARRIS/Ruckus |  | **X** | **X** | **X** | **X** |  | **X** |  | **X** |
| Lepp | James | BlackBerry |  | **X** |  | **X** | **X** | **X** | **X** |  |  |
| Lynch | Mike | MJLynch Assoc |  | **X** |  |  | **X** | **X** |  |  | **X** |
| Nejatian | Alireza | Ericsson | **-** | **-** | **-** | **-** | **-** | **-** | **-** |  |  |
| Salazar  | Ruben | Landis Gyr Group WW |  |  |  |  |  |  |  |  | **X** |
| Yaghoobi | Hassan | Intel Corporation |  | **X** |  |  | **X** |  |  |  | **X** |

**Non-Voters for this meeting:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** | **Attendance** |
| **06Feb** | **07Feb** | **13Feb** | **14Feb** | **21Feb** | **28Feb** | **07Mar** | **21Mar** | **28Mar** |
| Fischer | Michael | NXP Semiconductors | **X** | **X** | **X** | **X** |  |  |  |  |  |
| Hamilton | Mark | Ruuckus |  |  |  |  |  |  |  | **X** |  |
| Kenney | John (nv) | Toyota ITC |  |  | **X** | **X** | **X** | **X** |  | **X** |  |
| Levy | Joeseph | Interdigital |  |  |  | **X** | **X** | **X** |  |  | **X** |
| Nejatian | Alireza | Ericsson |  | **X** |  |  | **X** | **X** |  | **-** | **-** |
| Rajkotia | Purva | IEEE Staff |  |  |  |  |  |  |  |  |  |
| Rison | Mark | Samsung |  |  |  | **X** |  |  |  |  |  |
| Rolfe | Ben | Blind Creek Assoc. and UWB Alliance |  | **X** |  |  |  |  |  |  |  |

Chair calls the meeting to order at 15:03 ET.

1. Chair presents slides 2, 3, and 4 of 802.18-19/043r01, the call to order and administrative items
	1. Includes IEEE 802 meeting and participant’s guidelines and requirements.
2. Chair presents slides 5, of 802.18-19/0043r01, the agenda:
	1. Call to Order
	2. Administrative items
		1. Need a recording secretary, the Chair
	3. Approve agenda & last minutes
	4. Discussion items
		1. EU Items
		2. Ofcom Consultation on enabling opportunities for innovation,
		3. NPRM Expanding Broadband to the 896 / 935 MHz PLMR Band
		4. General Discussion Items
	5. Actions required
		1. Ofcom Consultation
		2. FCC NPRM at 895/935
		3. Anything new today
	6. AOB and Adjourn
3. Chair presents slide 6, Administrative – Motions and more
	1. **Motion: To approve the agenda as presented on previous slide**
		1. Moved by: Stuart Kerry (Ruckus)
		2. Seconded by: Hassan Yaghoobi (Intel Corp.)
		3. Discussion? None
		4. Vote: Unanimous consent
	2. **Motion: To approve the minutes from the IEEE 802.18 teleconference 21 March 2019 in document:** <https://mentor.ieee.org/802.18/dcn/19/18-19-0041-00-0000-minutes-21mar19-rrtag-teleconference.docx>  **Posted:** 22-Mar-2019 08:20:21 ET
		1. Moved by: Ruben Salazar Cardozo (Landis Gyr Group Worldwide)
		2. Seconded by: Jay Holcomb (Itron)
		3. Discussion? None
		4. Vote: Unanimous consent
	3. The Chair noted an RR-TAG is in need of a vice-chair and secretary**, is there anyone that can help? no response**
4. Chair presents slides 7-8, EU Items to share
	1. Nothing of note this week
5. Chair presents slide 9, **Ofcom\_Enabling-opportunities-for-innovation\_2.4 GHz**
	1. <https://www.ofcom.org.uk/consultations-and-statements/category-1/enabling-opportunities-for-innovation>
		* 1. <https://mentor.ieee.org/802.18/dcn/19/18-19-0034-00-0000-ofcom-enabling-opportunities-for-innovation-2-4ghz.pdf>
		1. Response was due by March 12th, completed using [consultation responses form (RTF, 1.5 MB)](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.ofcom.org.uk_-5F-5Fdata_assets_rtf-5Ffile_0026_130688_enabling-2Dinnovation-2Dconsultation-2Dform.rtf&d=DwMDaQ&c=pqcuzKEN_84c78MOSc5_fw&r=z8R-nWJ8GIxwjOjNKhEFByb-tZ6XE3GZXWSggNdVo-w&m=3FBZmV-USi1IAJCcWLc_TKEa1D1P2ap2wmW9rVIDII0&s=Xr3ivvSquLAhW7zYeHsx70dkYfyIx3oz9mAK7LT-jww&e=).
			1. <https://mentor.ieee.org/802.18/dcn/19/18-19-0035-00-0000-ofcom-enabling-opportunities-consultation-form-2-4ghz.rtf>
		2. The 2390-2400 MHz discussion starts around page 35
			1. Handsets 23 dBm, base stations to 42 dBm, some other IOT considerations
		3. Annex 6. Interference risk assessment in 2300 MHz shared spectrum, page 103.
		4. **Question 19:** (Section 8)Do you have any other comments on our proposal?

1) We are in an adjacent channel and we question analysis in Annex 6.

2) e.g. need to consider .11ax is coming

3) The receive performance that Ofcom pushed for is going to be a problem.

4) Should speak to Zigbee and 802.15.4g ….

5) BT is there also.

6) Need to consider economic value of bottom of 2.4 GHz band / channel 1.

7) Added-why tie this 10 MHz to this opportunity?

* + 1. **Timing: let’s get some points together and filing sooner is better than depth.**
		2. **Text of discussions to date:**
			1. <https://mentor.ieee.org/802.18/dcn/19/18-19-0045>
		3. We cleaned up a few areas and added about Zigbee is being used in the UK and needs to be considered. See 18-19/0045r01.
		4. **And now put into official form for finalization:**
			1. <https://mentor.ieee.org/802.18/dcn/>[19/18-19-0035](https://mentor.ieee.org/802.18/dcn/19/18-19-0035-00-0000-ofcom-enabling-opportunities-consultation-form-2-4ghz.rtf)
1. Chair presents slide 10, **FCC NPRM Expanding Broadband to the 896/935 MHz pair**
	1. [Notice of Proposed Rulemaking](https://www.fcc.gov/document/expanding-broadband-900-mhz-band) that proposes to reconfigure the 900 MHz band to create a broadband segment to facilitate technologies and services for a wide variety of businesses, including critical infrastructure, as well as seek comment on various transition mechanisms to achieve this goal. (WT Docket No. 17-200)
	2. Final: <https://mentor.ieee.org/802.18/dcn/19/18-19-0038-00-0000-final-nprm-17-200-expanding-broadband-to-896-935-mhz.pdf> [<18-19-0028r01 is the highlighted draft version)>](https://mentor.ieee.org/802.18/dcn/19/18-19-0028-01-0000-draft-nprm-17-200-expanding-broadband-to-896-935-mhz.docx)
	3. The proceeding: <https://www.fcc.gov/ecfs/search/filings?proceedings_name=17-200&sort=date_disseminated,DESC>
	4. This is for the 896-901/935-940MHz land mobile licenses band today.
		1. Some want the FCC to reorganize spectrum so they can have 3 MHz paired for private LTE, moving existing LMR users elsewhere.
	5. 802.11 & 802.15 both have standards in between this pair, as well as all the road tolling is there.
	6. We may do comments, will review in upcoming teleconferences. No deadlines are set just yet.
	7. Would we need to focus on the ‘use’ of the band in recent years, since the rules have been higher power in this band all along.
	8. To-do: 1. Look at the other filings 2. Compare power levels from today’s rules.
	9. Nothing new this week.
2. Chair present slides 11 General Discussion Items.
	* 1. **FCC NPRM 18-295, 6 GHz**
			1. Comments in: <https://www.fcc.gov/ecfs/search/filings?proceedings_name=18-295&sort=date_disseminated,DESC>
			2. Looks like AFC is on the way.
			3. Anything to share this week? Nothing brought up.
			4. Will plan to pull from General Discussions until new discussion points come up.
3. Chair presents slide 12, Actions required
	1. Review and feedback inputs on Ofcom Consultation comments. Will try to finish up the Ofcom comments
	2. Continue to review FCC NPRM for possible IEEE 802 comments and look at what is in the 17-200 filing and compare power in the rules today and proposed.
4. Chair presents slide 13 Any Other Business
	1. The 24GHz auction is pulling in over $1B so far.
5. Chair presents slide 14, Adjourn
	1. Next teleconference: 04 April 2019 – 15:00 – <15:55 ET
		1. Call in info: <https://mentor.ieee.org/802.18/dcn/16/18-16-0038-11-0000-teleconference-call-in-info.pptx> (or latest)
		2. All changes/cancellations will be sent out to the 802.18 list server.
	2. Adjourn:
		1. Agenda complete, any objection to Adjourn.
		2. None heard, Adjourn at 15:28 ET.
	3. The next face to face meeting of the 802.18 RR-TAG will be at the IEEE 802, 14 – 16 Wireless Interim in Atlanta, GA, USA at the Grand Hyatt in Buckhead
		1. Time slots, Tuesday AM2 and Thursday AM1