IEEE 802.18

Radio Regulatory-TAG

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| Radio Regulatory Technical Advisory Group Minutes | | | | |
| Date: 27 Feb 20 | | | | |
| Name | Affiliation | Address | Phone | Email |
|  |  |  |  |  |
| Author and Officer presiding: | | | | |
| Jay Holcomb,  Chair, RR-TAG | Itron | Liberty Lake, (Spokane) WA | +1(509) 891-3281 | jholcomb@ieee.org |

Abstract

Minutes of the IEEE 802 RR-TAG Teleconference.

These are the Minutes of the IEEE 802 RR-TAG Teleconference, Thursday, 27 Feb 20

**Voters for this meeting:**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** | **Attendance** | | | | | | | | |
| **27feb** | **20feb** | **19feb** | **18feb** | **14feb** | **13feb** | **11feb** | **06feb** | **30jan** |
| Auluck | Vijay | Self Employed | **x** |  |  |  |  |  |  |  |  |
| Boldy | David | Broadcom | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| De Vegt | Rolf | Qualcomm |  | **x** |  |  |  | **x** |  |  | **x** |
| Ecclesine | Peter | Cisco Systems, Inc. | **x** | **x** | **x** |  | **x** | **x** | **x** | **x** | **x** |
| Fang | Yonggang | ZTE TX Inc | **x** |  | **x** |  |  |  |  |  |  |
| Harrington | Tim | Pro ID & UWB Alliance |  |  |  |  |  |  |  |  |  |
| Holcomb | Jay | Itron Inc. | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Jeffries | Tim | FutureWei |  | **x** |  |  |  | **x** |  | **x** | **x** |
| Kain | Carl | Noblis, Inc. | **x** |  |  |  | **x** | **x** | **x** |  | **x** |
| Kenney | John | Toyota ITC | **x** | **x** | **x** | **x** |  |  |  | **x** | **x** |
| Kerry | Stuart | Ruckus/CommScope | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  | **x** |
| Lansford | Jim | Qualcomm |  |  |  |  | **x** |  |  |  |  |
| Lepp | James | BlackBerry | **x** | **x** | **x** |  | **x** | **x** | **x** | **x** |  |
| Lynch | Mike | MJLynch Assoc | **x** |  |  |  |  | **x** |  |  | **x** |
| Nikolich(lmsc) | Paul | Self and others | x | early | early | **x** |  |  |  |  |  |
| Palm | Stephen | Broadcom |  |  |  |  |  |  |  |  | **x** |
| Rolfe | Ben | Blind Creek Assoc. & UWB All. |  |  |  | **x** |  |  | **x** | **x** |  |
| Salaszar | Ruben | Landis & Gyr |  | **x** |  |  |  |  |  |  |  |
| Sand | Stephen | DLR |  | **x** |  |  |  |  |  |  |  |
| Sarris | Ioannis | u-blox | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** |  |
| Shellhammer | Steve | Qualcomm | **x** |  |  |  |  |  |  |  |  |
| Stanley (lmsc) | Dorothy | HPE | **x** |  |  |  | **x** | **x** |  | **x** | **x** |
| Yaghoobi | Hassan | Intel Corporation | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

**Non-Voters for this meeting:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Last Name** | **First Name** | **Affiliation** | **Attendance** | | | | | | | | | |
| **27feb** | **20feb** | **19feb** | **18feb** | **14feb** | **13feb** | **11feb** | **06feb** | **30jan** | |
| Aboul-Magd | Osama | Huawei |  |  | **x** |  |  |  |  |  |  | |
| Au | Edward | Huawei |  |  |  |  |  | **x** |  | **x** | **x** | |
| Hamilton | Mark | Ruckus/CommScope |  |  |  |  |  | **x** |  |  |  | |
| Haskou | Abdullah | Interdigital |  |  |  |  | **x** |  |  |  |  | |
| Hervieu | Lili | Cable TV Labs |  | **x** |  |  |  | **x** |  | **x** |  | |
| Levy | Joseph | Interdigital | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | |
| Lisa | Ward | Rohde&Schwarz |  |  |  | **x** |  |  |  | **x** |  | |
| Roy | Dick | Self | **x** | **x** | **x** | **x** | **x** |  |  |  |  | |
| Schiessl | Sebastian | u-blox | **x** | **x** | **x** | **x** |  | **x** | **x** | **x** | |  |
| Yucek | Tevfik | Qualcomm |  |  |  |  |  |  | **x** |  |  | |

Chair calls the meeting to order at 15:01 ET.

1. Chair presents slides 2 – 6 of 802.18-20/0029r01, the call to order and administrative items
   1. Includes IEEE 802 meeting and participant’s guidelines and requirements.
2. Chair presents slides 7, of 802.18-20/0029r01, the agenda:
   1. Call to Order
   2. Administrative items
      1. Someone to take some notes: Peter Ecclesine (Cisco)
   3. Approve agenda & last minutes
   4. Discussion items
      1. EU Items
      2. ITU-R Items
      3. FCC NPRM on 5.9GHz comments & reply
      4. Ofcom consultation spectrum access -Wi-Fi
      5. ITU-R SM.2352 on THz
      6. General Discussion Items
   5. Actions required
      1. Ofcom consultation on Wi-Fi contributions
      2. FCC NPRM on 5.9 GHz reply comments
      3. ITU-R SM.2352 submission feedback
      4. Anything new today
      5. Later: WRC-xx Agenda Items, interest to IEEE 802
   6. AOB and Adjourn
3. Chair presents slide 8, Administrative – Motions and more
   1. **Motion:** To approve the agenda as presented on previous slide

Moved by: Stuart Kerry (Ruckus/CommScope)

Seconded by: Hassan Yaghoobi (Intel)

Discussion? None

Vote: Approved by unanimous consent

* 1. **Motion:** To approve the minutes from the IEEE 802.18 Teleconference 20 feb 2020 in document <https://mentor.ieee.org/802.18/dcn/20/18-20-0024-00-0000-minutes-20feb20-rrtag-teleconference.docx> 21-Feb-2020 09:13:28 ET

Moved by: Peter Ecclesine (Cisco systems)

Seconded by: Stuart Kerry (Ruckus/CommScope)

Discussion? None

Vote: Approved by unanimous consent

* 1. The Chair noted the RR-TAG is in need of a vice-chair and secretary**, is there anyone that can help?** nothing heard

1. Chair presents slides 9-10, EU items to share
   1. Remember – BRAN documents can be found in the 802.11 private area documents
   2. **ETSI –** [<BRAN>](https://portal.etsi.org/tb.aspx?tbid=287&SubTB=287) **next meetings #105, 23–27Mar20, Sophia-Antipolis**
      1. GoToMeeting 2/27 (today) working on drafting latest TR 103 721 (Mitigation techniques  to enable RLAN sharing with road tolling, transport, fast frequency hopper radars in the 5725-5850MHz band)
      2. Discussions to continue at BRAN#105 (March 23-27) (many on the phone, maybe all?)
      3. Looking for new rapporteur, for this TR 103 721, tbd.
   3. **ETSI - ERM -** [**<TG-11>**](https://portal.etsi.org/tb.aspx?tbid=442&SubTB=442) **next meeting # \_next f2f not scheduled\_; on-line-27Feb20**
      1. GoTo Meeting 2/27 (today) on updating TR 103 665 (SRDoc on Wideband DTS  in the 2.4 GHz band)
      2. TR will be used as basis for Coex studies in CEPT related to a proposal to remove PSD limits in the 2.4GHz Band.
      3. Three G2Ms scheduled in April/May with aim to submit the TR to ERM#71 in June.
2. Chair presents slide 11, ITU-R items to share
   1. 5G: According to the latest [Cisco Annual Internet Report](https://www.cisco.com/c/en/us/solutions/executive-perspectives/annual-internet-report/air-highlights.html), 5G will support [over 10%](https://www.techrepublic.com/article/cisco-predicts-5g-will-support-10-of-global-mobile-connections-by-2023/) of the world’s mobile connections by 2023.
      1. Cisco no longer doing the VNI report, this report replaces it.
3. Chair presents slides 12-13, FCC NPRM on 5.9 GHz reply comments
   1. **FCC NPRM on 5.9 GHz reply comments** 
      1. Mentor: <https://mentor.ieee.org/802.18/dcn/19/18-19-0163-02-0000-fcc19-138-nprm-revisiting-use-of-the-5-850-5-925-ghz-band.docx> **(🡺r**01**/02 Fed. Reg. some updates.)**
   2. **Proceeding 19-138:**
      1. <https://www.fcc.gov/ecfs/search/filings?proceedings_name=19-138&sort=date_disseminated,DESC>
   3. **Comment ballot status:**
      1. Several dependencies to say what we need yet, e.g. due to editorial updates.
      2. The comments are at r16, including 2 sets of updates from 2 LMSC member’s inputs.
         1. <https://mentor.ieee.org/802.18/dcn/20/18-20-0020-16-0000-comments-on-fcc19-138-nprm-revisiting-use-of-the-5-850-5-925-ghz-band.docx>
   4. **Reply comments timeline, with the NPRM published - 06Feb.** 
      1. Reply comments due Monday 06 April
      2. For 10-day LMSC ballot, would need to approve by 19 March, during Atlanta
      3. How do we get there in 3 weeks? And interesting timing with EC close meeting the 20th.
   5. **Reviewed a new list of questions from an EC member this morning, the 27th.**
      1. **Section 1.2**
         1. No need to hyphenate “Coexistence” (Editorial)
         2. == this is copied from other docs, so will leave. were 2 other places updated, however.
      2. **Section 4.1**
         1. **Change** “IEEE 802 believes that the Commission is misinformed and has made a significant error in judgement in its belief that C-V2X is “the technology most capable of …”.  ”
         2. **To** “IEEE 802 disagrees with the Commission statement that C-V2X is “the technology most capable of …”.  ”
         3. === we agree and change made.
         4. **Delete** “To date, we are unaware there have been any field tests of C-V2X at scale with hundreds of units in complex RF environments.”
         5. **See** https://pronto-core-cdn.prontomarketing.com/2/wp-content/uploads/sites/2896/2020/02/CAMP-CV2X\_SAE\_01152020\_v2.pdf
         6. === pdf reviewed and some were aware of it. there were 8 vehicles mostly on a test track, so will be leaving the text as it was.
      3. **Section 4.2**
         1. **Delete this sentence,** “In its waiver request, the 5GAA stated that “C-V2X enables direct, peer-to-peer mode communications […] between vehicles and pedestrians, cyclists and other vulnerable persons (“V2P”) […]”. This statement is false: C-V2X would not “enable” V2P, but instead make V2P vastly more complex compared to existing DSRC technology”
         2. === we agree and changes made.
      4. **Section 5.1**
         1. **Delete** “Despite the name, this is not true.  C-V2X in its current form is only capable of broadcasting packets and is not capable of establishing direct peer-to-peer communications over any network including a 5G network”
         2. This seems to be a misinformed statement. See https://5gaa.org/5g-technology/c-v2x/
         3. === discussion in team again and still saying this is accurate as the NPRM is defining C-V2X as 3GPP LTE release 14, not 5G. Even in the rules sections of the NPRM has this, not 5G. A NPRM reference is being added.
      5. **Section 8.1.1**
         1. Delete, “We believe that the fourth and fifth generations of cellular V2X sidelink technology (i.e. Release 14 and 16) do not have any of these characteristics: same-channel coexistence, backward compatibility, or interoperability.”
         2. === after further discussion we will go back to: We note that the fourth and fifth…… and added a reference to show why this is true.
      6. **Section 9.2**
         1. **Delete,**
         2. “It is now clear that NR V2X PC5 will fail to achieve any of these key evolution characteristics not only with DSRC but also with the previous generation cellular V2X (LTE V2X PC5). To be clear, NR V2X PC5 will not be able to coexist in the same channel, interoperate, or be backward compatible with LTE V2X PC5.”
         3. === the discussion was this is true and we are adding an example to support it (note also ties to section 8 above.)
      7. **Section 9.3**
         1. **Once again another negative unsubstantiated statement about 3GPP,**
         2. “The 3GPP V2X technology evolution model implies a high societal cost, a cost that is completely avoided in the IEEE 802 V2X evolution model. The 3GPP model implies that V2X spectrum must be fragmented into sub-bands associated with every different V2X technology”
         3. === this is copied from IEEE 802 comments from last year on the 5GAA waiver (with 3GPP in place of 5GAA), so has already been approved by IEEE 802. we did change 3GPP to C-V2X for this time per the question here and added a reference to a 5GAA document that talks to the fragmentation.
      8. **Motion:** Move to approve updated text presented and text asked for at the 802.18 teleconference on 27 Feb 2020, starting with <https://mentor.ieee.org/802.18/dcn/20/18-20-0020-16-0000-comments-on-fcc19-138-nprm-revisiting-use-of-the-5-850-5-925-ghz-band.docx> for rev 17; in response to FCC NPRM (ET 19-138) on revisiting use of the 5850-5925 MHz-band. For review and approval by the LMSC (EC) in the LMSC ballot that is in process (21 Feb – 02 Mar), for uploading IEEE 802 comments to the FCC on or before 08 March 2020. The Chair of 802.18 is authorized to make editorial changes as necessary.

Moved by: James Lepp (Blackberry)

Seconded by: John Kenny (Toyota)

Discussion? none

Vote: \_12\_Y / \_\_N / \_2\_A

Voters: Vijay, Carl, David, Dorothy, Hassan Ioannis, James, JohnK, MikeL, Paul, Steve, Stuart, Yonggang, jay,

Motion - Passes

\_17\_ left on the call

1. Time did not allow for slides14-16, Ofcom consultation on Improving spectrum access for Wi-Fi
2. Time did not allow for slides 17-18, ITU-R SM.2352 on THz
3. Time did not allow for slide 19, General discussion items
4. Time did not allow for slide 20, Actions required
   * **Comment contributions for Ofcom consolation on WiFi.**
   * **Reply comment contribution for FCC NPRM on 5.9 GHz.**
   * **ITU-R THz SM.2352 submission (from last July) for approval at March Plenary from 802.15 Terahertz IG.**
   1. Soon (after 5.9 GHz and Ofcom):

* **Start to consider what are IEEE 802 viewpoints are for WRC-23 agenda items.** 
  1. Ongoing:
     1. WPT use of license-exempt bands and UWB in cell phones
     2. Digital Divide, how can we help?

1. Time did not allow for slide 21 Any Other Business
   1. Nothing came up either.
2. Chair presents slide 22, Adjourn
   1. Next teleconference05mar2020 – 15:00 – <15:55 ET
      1. Call in info: <https://mentor.ieee.org/802.18/dcn/16/18-16-0038-14-0000-teleconference-call-in-info.pptx> (or latest)
      2. All late 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 16:01et
   3. Next Plenary:
   4. The next face to face meeting (after next week) of the 802.18 RR-TAG will be at the IEEE 802, 15-20 March 2020 Plenary in Hilton Atlanta, Atlanta, GA, USA
   5. Normal time slots, Tuesday AM2 and Thursday AM1 (8:30 start)–remember no reciprocal from other WGs
   6. (Book rooms soon for Montreal 12-17Jul Plenary)
   7. **Thank You**