FCC NPRM 60GHz Reply Comments Ad Hoc

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| FCC NPRM 60GHz Reply Comments Minutes |
| Date: 27-29sep21 |
| Name | Affiliation | Address | Email |
|  |  |  |  |
| Author  |
| Jay Holcomb | Itron | Liberty Lake, (Spokane) WA | jholcomb@ieee.org |

Abstract

Minutes of the Ad Hoc

These are the Minutes of the FCC NPRM 60GHz Reply Comments Ad Hoc, Tuesday, 27-29sep21

Lead calls the meeting to order at 15:02 ET.

1. Lead presents slides 2 – 6 of 802.18-21/0118r01, the call to order and administrative items
	1. Includes IEEE 802 meeting and participant’s guidelines and requirements.
2. Lead presents slides 7, the agenda:
	1. Call to Order
		1. Remember to mute when not speaking, thanks.
		2. Please request Q in chat window.
	2. Administrative items
		1. Someone to take some notes, \_jay\_
		2. Attendance & monitor chat window, \_Stuart K\_
	3. Approve agenda and last minutes
	4. Discussion items
		1. Work on FCC NPRM 60GHz Reply Comments
		2. Next steps, moving forward, etc.
	5. Actions required.
		1. Reply Comments feedback
		2. Anything new today
	6. AOB and Adjourn
	7. Motion: Any objection to approving the agenda as presented?
		1. None heard.
		2. Results: Approved by unanimous consent
	8. Motion: Any objection to approving minutes from the last ad hoc call, in document <https://mentor.ieee.org/802.18/dcn/21/18-21-0114-01-0000-minutes-21-22-sep21-adhoc-fcc-nprm-60ghz-reply-comments.docx> 23-Sep-2021 19:43:38 ET, with editorial privilege for the 802.18 chair.
		1. None heard.
		2. Results: Approved by unanimous consent
3. Lead presents slides 8 - 10, **FCC NPRM on 60GHz on Radar Sensing Technology-background**
	1. Allowing Expanded Flexibility and Opportunities for Radar Operation in the 57-64GHz band ET Docket No. 21-264
		1. Proceeding: [https://www.fcc.gov/ecfs/search/filings?q=((proceedings.name:((21%5C-264\*))%20OR%20proceedings.description:((21%5C-264\*))))&sort=date\_disseminated,DESC](https://www.fcc.gov/ecfs/search/filings?q=((proceedings.name:((21%5C-264*))%20OR%20proceedings.description:((21%5C-264*))))&sort=date_disseminated,DESC)
		2. It is on Mentor: r02 is the July OET versions (r01 is the later Federal Register version). <https://mentor.ieee.org/802.18/dcn/21/18-21-0079-02-0000-fcc-nprm-allowing-expanded-flexibility-for-radar-operation-in-57-64-ghz-band.docx>
	2. From .11 CoEx, July presentation: <https://mentor.ieee.org/802.11/dcn/21/11-21-1089-00-coex-coexistence-between-radars-and-communication-systems-in-the-60ghz-band-u-s-update.pptx>
		1. 802.15.3 might have interest. (sent above to .15)
	3. **Comments due 20Sep21 (did not make it) == Reply comments due 18Oct21.**
	4. **The current draft:**
		1. On mentor: <https://mentor.ieee.org/802.18/dcn/21/18-21-0110-01-0000-reply-comments-of-ieee-802-60-ghz-motion-sensing-fcc-nprm-et-21-264.docx>
	5. **A timeline to work with:**
		1. 21/22, 27-29Sept- ad hoc(s) to review/refine
		2. **30Sept - .18 approves**
		3. 01Oct - get approval to start EC ballot
		4. 12 oct – if EC ballot, now closed and get permission to upload by 18oct.
	6. **Today (Monday): review, update, edit current draft**
	7. **Continuing to make process and planning to have something at tomorrow’s ad hoc.**
	8. **Next steps:**
		1. Continue to review comments that have been published in FCC proceeding.
		2. Update draft Reply Comments from today
		3. after tuesday, .18 chair send out rev \_\_\_ and remind of .18 weekly meeting thursday will be a vote.
4. **Original revision was focused on close loophole in the proposed duty cycle, rev 00.**
	1. This would still be proposed, with relaxed values in lower part of band and LBT will also be consider. (more detail in coming draft).
5. **Looking at 2 cases:**
	1. 1) radar devices does LBT, and then provide same level of performance of IEEE 802 standards and radars would adjust accordingly.
	2. 2) Radar does not use the entire band, maybe uses only 2 GHz (e.g. propose 57-59GHz) and then can relax the duty cycle in that part of the band.
	3. Then the 802 standards can still use entire band, though the upper part of the band would have better coexistence with the radars.
	4. 2b) Also, looking at 4 GHz radars and how to do those.
6. **Note the 802.15.3, along with 802.11 ad/ay, has also been considered with this channelization.**
7. **note: r02 was uploaded after the call.** [**https://mentor.ieee.org/802.18/dcn/21/18-21-0110-02-0000-reply-comments-of-ieee-802-60-ghz-motion-sensing-fcc-nprm-et-21-264.docx**](https://mentor.ieee.org/802.18/dcn/21/18-21-0110-02-0000-reply-comments-of-ieee-802-60-ghz-motion-sensing-fcc-nprm-et-21-264.docx)
8. Lead presents slide 11, Actions required
	* **all - Review comments that have just published in FCC proceeding.**
	* **all - Review and feedback draft Reply Comments (draft r02 was uploaded after the call)**
	* **Authors - Update draft Reply Comments from today’s input**
	1. Any Other Business
		1. none heard.
9. Lead presents slide 12, Recess
	1. Next Ad Hoc – 28sept, 17:00 et
	2. Call-in in back up slide here.
	3. **Overall IEEE 802 schedule:** [**http://ieee802.org/802tele\_calendar.html**](http://ieee802.org/802tele_calendar.html)
	4. Any objection to recess.
		1. None heard, we are recessed at 15:28et
	5. **Thank You**
10. Lead calls the meeting to order at 17:02 ET, 28Sep21.
11. Lead presents slides 2 – 6 of 802.18-21/0118r02, the call to order and administrative items
	1. Includes IEEE 802 meeting and participant’s guidelines and requirements.
12. Lead jumps to slide 13, the agenda:
	1. Call to Order
		1. Remember to mute when not speaking, thanks.
		2. Please request Q in chat window.
	2. Administrative items
		1. Someone to take some notes, \_jay\_
		2. Attendance & monitor chat window, \_Stuart K\_
	3. Approve agenda
	4. Discussion items
		1. Work on FCC NPRM 60GHz Reply Comments
		2. Next steps, moving forward, etc.
	5. Actions required.
		1. Reply Comments and feedback
		2. Anything new today
	6. AOB and Adjourn
	7. Motion: Any objection to approving the agenda as presented?
		1. None heard.
		2. Results: Approved by unanimous consent
13. Lead presents slides 14 - 15, **FCC NPRM on 60GHz on Radar Sensing Technology-background**
	1. Allowing Expanded Flexibility and Opportunities for Radar Operation in the 57-64GHz band ET Docket No. 21-264
		1. Proceeding: [https://www.fcc.gov/ecfs/search/filings?q=((proceedings.name:((21%5C-264\*))%20OR%20proceedings.description:((21%5C-264\*))))&sort=date\_disseminated,DESC](https://www.fcc.gov/ecfs/search/filings?q=((proceedings.name:((21%5C-264*))%20OR%20proceedings.description:((21%5C-264*))))&sort=date_disseminated,DESC)
		2. It is on Mentor: r02 is the July OET versions (r01 is the later Federal Register version). <https://mentor.ieee.org/802.18/dcn/21/18-21-0079-02-0000-fcc-nprm-allowing-expanded-flexibility-for-radar-operation-in-57-64-ghz-band.docx>
	2. From .11 CoEx, July presentation: <https://mentor.ieee.org/802.11/dcn/21/11-21-1089-00-coex-coexistence-between-radars-and-communication-systems-in-the-60ghz-band-u-s-update.pptx>
		1. 802.15.3 might have interest. (sent above to .15)
	3. **Comments due 20Sep21 (did not make it) == Reply comments due 18Oct21.**
	4. **A timeline to work with:**
		1. 21/22, 27-29Sept- ad hoc(s) to review/refine
		2. **30Sept - .18 approves**
		3. 01Oct - get approval to start EC ballot
		4. 12 oct – if EC ballot, now closed and get permission to upload by 18oct.
	5. **Today (Tuesday): review, update, edit current draft, next slide**
	6. <https://mentor.ieee.org/802.18/dcn/21/18-21-0110-03-0000-reply-comments-of-ieee-802-60-ghz-motion-sensing-fcc-nprm-et-21-264.docx>
	7. Remember please use the .18 list server with progress on reply comments, for all to follow the progress and being able to contribute.
	8. **Next steps:**
		1. Continue to review comments that have been published in FCC proceeding.
		2. Update draft Reply Comments from today
		3. after tuesday, .18 chair send out rev \_\_ and remind of .18 weekly meeting thursday will be a quick page through and vote on it. Do not want any content updates, then.
		4. Goal wednesday is final edits and clean up, ready to vote on approval.
14. Lead presents slide 16, **FCC NPRM on 60GHz on Radar Sensing Technology**
	1. **Inputs were captured in r03 of the document, by the prime author.**
	2.
	3. Plan is to take r03, accept all changes for r04, then make the changes brought out at the Tuesday ad hoc meeting. There were not many.
15. Lead presents slide 17, Actions required
	* **all - Review comments that have just published in FCC proceeding.**
	* **all - Review and feedback draft Reply Comments**
	* **Authors - Update draft Reply Comments from today’s input**
	1. Any Other Business
		1. none heard.
16. Lead presents slide 18, Recess
	1. Next Ad Hoc – 29sept21, 15:00et
		1. Call-in in back up agenda slides
	2. **Overall IEEE 802 schedule:** [**http://ieee802.org/802tele\_calendar.html**](http://ieee802.org/802tele_calendar.html)
	3. **Any objection to Recess**
		1. **None heard, we are recessed at 16:05et**
17. Lead calls the meeting to order at 17:02 ET, 29Sep21.
18. Lead presents slides 19 – 6 of 802.18-21/0118r03, the call to order and administrative items
	1. Includes IEEE 802 meeting and participant’s guidelines and requirements.
19. Lead jumps to slide 13, the agenda:
	1. Call to Order
		1. Remember to mute when not speaking, thanks.
		2. Please request Q in chat window.
	2. Administrative items
		1. Someone to take some notes, \_jay\_
		2. Attendance & monitor chat window, \_Stuart K\_
	3. Approve agenda
	4. Discussion items
		1. Work on FCC NPRM 60GHz Reply Comments
		2. Next steps, moving forward, etc.
	5. Actions required.
		1. Reply Comments and feedback
		2. Anything new today
	6. AOB and Adjourn
	7. Motion: Any objection to approving the agenda as presented?
		1. None heard.
		2. Results: Approved by unanimous consent
20. Lead presents slides 20 - 21, **FCC NPRM on 60GHz on Radar Sensing Technology-background**
	1. Allowing Expanded Flexibility and Opportunities for Radar Operation in the 57-64GHz band ET Docket No. 21-264
		1. Proceeding: [https://www.fcc.gov/ecfs/search/filings?q=((proceedings.name:((21%5C-264\*))%20OR%20proceedings.description:((21%5C-264\*))))&sort=date\_disseminated,DESC](https://www.fcc.gov/ecfs/search/filings?q=((proceedings.name:((21%5C-264*))%20OR%20proceedings.description:((21%5C-264*))))&sort=date_disseminated,DESC)
		2. It is on Mentor: r02 is the July OET versions (r01 is the later Federal Register version). <https://mentor.ieee.org/802.18/dcn/21/18-21-0079-02-0000-fcc-nprm-allowing-expanded-flexibility-for-radar-operation-in-57-64-ghz-band.docx>
	2. From .11 CoEx, July presentation: <https://mentor.ieee.org/802.11/dcn/21/11-21-1089-00-coex-coexistence-between-radars-and-communication-systems-in-the-60ghz-band-u-s-update.pptx>
		1. 802.15.3 might have interest. (sent above to .15)
	3. **Comments due 20Sep21 (did not make it) == Reply comments due 18Oct21.**
	4. **A timeline to work with:**
		1. 21/22, 27-29Sept- ad hoc(s) to review/refine
		2. **30Sept - .18 approves**
		3. 01Oct - get approval to start EC ballot
		4. 12 oct – if EC ballot, now closed and get permission to upload by 18oct.
	5. **Today (wednesday): review, update, edit current draft, see below**
	6. [https://mentor.ieee.org/802.18/dcn/21/18-21-0110-04-0000-reply-comments-of-ieee-802-60-ghz-motion-sensing-fcc-nprm-et-21-264.docx](https://mentor.ieee.org/802.18/dcn/21/18-21-0110-03-0000-reply-comments-of-ieee-802-60-ghz-motion-sensing-fcc-nprm-et-21-264.docx)
	7. Remember please use the .18 list server with progress on reply comments, for all to follow the progress and being able to contribute.
	8. **Next steps:**
		1. Update draft Reply Comments from today
		2. Goal wednesday is final edits and clean up, ready to vote on approval.
21. Lead presents slide 22, **FCC NPRM on 60GHz on Radar Sensing Technology**
	1. **Inputs were captured in r05 of the document, by the prime author.**
		1. **A r06 will be a clean version for the vote in .18 thursday.**
			1. **It will still have page1, header and footer and draft.**
			2. **Then after the EC approves, those items will be removed and any edits the EC wants.**
22. Lead presents slide 23, Actions required
	* **Authors - Update draft Reply Comments from today’s input and upload today.**
	* **Chair does clean copy and uploads.**
	1. Any Other Business
		1. none heard.
23. Lead presents slide 24, Adjourn
	1. Next Ad Hoc – n/a
	2. **Overall IEEE 802 schedule:** [**http://ieee802.org/802tele\_calendar.html**](http://ieee802.org/802tele_calendar.html)
	3. **Any objection to Adjourn**
		1. **None heard, we are adjourned at 15:59et**
* Adhoc FCC NPRM 60 GHz Meeting Attendance 09/27/21 to 09/29/21:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Attendees | Voters | Non-Voters |
| 27-Sep | 12 | 7 | 5 |
| 28-Sep | 15 | 7 | 8 |
| 29-Sep | 15 | 7 | 8 |

* Attendees Names and Affiliations for the Minutes:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Voting Attendees:** |  | **27-Sep** | **28-Sep** | **29-Sep** |
|  |  |  |  |  |  |  |
| 1 | **Au** | Edward | Huawei Technologies Co., Ltd | **x** | **x** |  |
| 2 | **Auluck** | Vijay | Self | **x** | **x** | **x** |
| 3 | **Holcomb** | Jay | Itron Inc. | **x** | **x** | **x** |
| 4 | **Kerry** | Stuart | OK‐Brit, Self | **x** | **x** | **x** |
| 5 | **Nikolich** | Paul | Self, HPE,  Huawei, Wyebot, UNH BCoE, YAS BBV, Origin Wireless  | **x** |  |  |
| 6 | **Petrick** | Al | Skyworks Solutions Inc. | **x** | **x** | **x** |
| 7 | **Rolfe** | Benjamin | Blind Creek Associates |  | **x** | **x** |
| 8 | **Sherlock** | Ian | Texas Instruments | **x** | **x** | **x** |
| 9 | **Stanley** | Dorothy | Hewlett Packard Enterprise |  |  | **x** |
|  |  |  |  |  |  |  |
|  | **Non-Voting Attendees:** |  |  |  |  |
|  |  |  |  |  |  |  |
| 1 | **Aldana** | Carlos | Facebook |  | **x** | **x** |
| 2 | **Cordeiro** | Carlos | Intel Corporation | **x** |  |  |
| 3 | **da Silva** | Claudio | Facebook | **x** | **x** | **x** |
| 4 | **Eitan** | Alecsander | Qualcomm Incorporated |  |  | **x** |
| 5 | **Fang** | Yonggang | MediaTek |  | **x** | **x** |
| 6 | **Ginsburg** | Brian | Texas Instruments | **x** | **x** | **x** |
| 7 | **Jindal** | Nihar | Google |  | **x** | **x** |
| 8 | **Norman** | Alan | Facebook |  | **x** | **x** |
| 9 | **Tian** | Bin | Qualcomm Incorporated | **x** | **x** | **x** |
| 10 | **Wang** | Perry | Mitsubishi Electric Research Laboratories (MERL) |  | **x** |  |
| 11 | **Ward** | Lisa | Rohde & Schwarz | **x** |  |  |