IEEE P802.11
Wireless LANs

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| Minutes of the July 2020 meeting |
| Date: 2020-07-15 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
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Abstract

This document contains the minutes of the electronic meeting of the Coexistence Standing Committee during the July 2020 IEEE 802.11 electronic plenary.

# Tuesday, 2020-07-14 (17:00 EDT until 19:00 EDT)

At 2020-07-14T23:09+02:00 the chair calls the meeting of the IEEE 802.11 Coexistence Standing Committee (SC) to order. Andrew Myles acts as chair of the SC. Guido R. Hiertz acts as secretary of the SC.

The chair presents 11-20/1010r3. The chair reminds all attendees to follow the rules and procedures shown on pages 6 and 7 of his document.

At 2020-07-14T23:12+02:00 the SC approves the proposed contained in page 11 of 11-20/1010r3 by unanimous consent.

At 2020-07-14T23:13+02:00 the chair arrives on page 16 of his document. At 2020-07-14T23:14+02:00 the chair asks the SC for approval of the minutes of the SC’s January 2020 meeting contained in 11-20/334r1. The SC approves 11-20/334r1 by unanimous consent.

At 2020-07-14T23:16+02:00 the chair arrives on page 19 of his document 11-20/1010r3 and asks the SC for unanimous approval of document 11-20/878r2 that contains the meeting minutes of the SC’s 2020-06-04 conference call. Nobody objects to approving 11-20/878r2 by unanimous consent.

At 2020-07-14T23:17+02:00 attendees discuss page 21 of 11-20/1010r3 and the response letter contained in 11-20/861r4. The chair presents 11-20/861r4.

Comment: We should not say that we are uninformed.

Comment: Don’t put any negative statement here.

Comment: Swap the bullet points in this letter.

Comment: Delete initial statements about the difficulties of finding an answer.

Comment: Don’t state that in 802.11 almost nobody looked at this letter.

At 2020-07-14T23:51+02:00 the following motion is brought forward:

Motion

* The IEEE 802.11 Coex SC approves 11-20/861r5 as the IEEE 802.11 WG response to the LS from ETSI ERM TG11 in 11-20/706r0
	+ Moved: Stuart Kerry
	+ Seconded: Dick Roy
* Chair action: make editorial changes, possibly reversing the order of dot points
* Note: if there is no time to consider a complete draft LS in the Coex SC meeting today, it will be taken to the WG plenary as personal motion

Result of the motion:

* 29 attendees approve this motion
* 1 attendee disapproves the motion
* 40 attendees abstain
* 91 attendees do not answer (on request by S. Kerry, this number is recorded here)

At 2020-07-14T23:56+02:00 the chair displays slide 25 of 11-20/1010r3 and continues presenting from there. Attendees discuss slides 25 and 26.

Question: Are these numbers totals?

Comment: Yes, they are totals.

Question: What is a network?

Comment: My understanding is it is mostly public areas.

Comment: I don’t imagine units in a home

Comment: This is not the number of sites

Comment: Yes, this is roughly the number operators deploying LAA LTE.

Comment: Globally, there aren’t that many cellular operators.

Comment: This doesn’t give us a lot of inside of Wi-Fi encountering LAA.

Comment: Yes

Comment: Certainly, the possibility is more than zero because there are more than zero deployments. But maybe there is no impact on Wi-Fi.

At 2020-07-15T00:05+02:00 the chair continues from page 28 of his document.

At 2020-07-15T00:18+02:00 the chair presents 11-20/1034r0.

At 2020-07-15T00:19+02:00 attendees discuss the document.

Comment: The unequal ED thresholds in the 5 GHz HS has caused a lot of controversy that we wanted to avoid in 6 GHz.

Comment: According to Monisha Ghosh—she presented during last year’s Coexistence workshop—you want to have the ED threshold at a level as low as possible.

Comment: And the level needs to be equal for all devices.

At 2020-07-15T00:22+02:00 the chair continues from page 36 of his document 11-20/1010r3.

Comment: For low power or very lower power devices, nothing changes. The −62 dBm ED threshold prevails for such Wi-Fi equipment because of the scaling of ED threshold with the device’s transmit power capability.

Question: How does the 6 GHz ED threshold affect 802.11ax standard?

Comment: Regulatory domain information tells a device where it is.

Comment: Devices also learn from 2.4 GHz and 5 GHz connections resp. beacon frames where they are. No need to wait for beacons in 6 GHz.

At 2020-07-15T00:36+02:00 the chair continues from slide 41 of 11-20/1010r3.

At 2020-07-15T00:44+02:00 an attendee comments.

Comment: You should consider 802.11be and 6 GHz for rechartering the SC.

At 2020-07-15T00:46+02:00 the chair continues presenting 11-20/1010r3 from page 51.

At 2020-07-15T01:01+02:00 the chair declares the meeting of the IEEE 802.11 Coexistene SC to be adjourned.

# List of attendees

|  |  |
| --- | --- |
| **Surname, Given name** | **Affiliation** |
| Abdelaal, Rana | Broadcom Corporation |
| AbidRabbu, Shaima' | Istanbul Medipol University; Vestel |
| Abouelseoud, Mohamed | Sony Corporation |
| Aboulmagd, Osama | Huawei Technologies Co. Ltd |
| Abushattal, Abdelrahman | Istanbul Medipol University; Vestel |
| Agrawal, abhishek | ON Semiconductor |
| Agrawal, Sandeep | C-DOT/Centre for Development of Telematics |
| Ahn, Woojin | Korea Railroad Research Institute (KRRI) |
| Alayasra, Musab | Medipol University; Vestel |
| An, Song-Haur | INDEPENDENT |
| Andersdotter, Amelia | None - Self-funded |
| Ansley, Carol | CommScope |
| Anwyl, Gary | MediaTek Inc. |
| Arrington, Arthur | Air Network Solutions |
| Asai, Yusuke | NTT |
| Asterjadhi, Alfred | Qualcomm Incorporated |
| Au, Kwok Shum | Huawei Technologies Co.,  Ltd |
| Auluck, Vijay | Self |
| Aygul, Mehmet | Istanbul Medipol University; Vestel |
| Baik, Eugene | Qualcomm Incorporated |
| Bajko, Gabor | MediaTek Inc. |
| Banerjea, Raja | Qualcomm Incorporated |
| baron, stephane | Canon Research Centre France |
| Batra, Anuj | Apple, Inc. |
| Baykas, Tuncer | Vestel |
| BECHADERGUE, Bastien | OLEDCOMM |
| Bei, Jianwei | NXP Semiconductors |
| Bluschke, Andreas | Signify |
| Boldy, David | Broadcom Corporation |
| Bredewoud, Albert | Broadcom Corporation |
| Calcev, George | Futurewei Technologies |
| Cao, Rui | NXP Semiconductors |
| Cariou, Laurent | Intel Corporation |
| Carney, William | Sony Corporation |
| Cavalcanti, Dave | Intel Corporation |
| Cepni, Gurkan | Apple, Inc. |
| Chao, Yi-Ling | NXP Semiconductors |
| Chen, Evelyn | Ericsson AB |
| Chen, Na | MaxLinear Corp |
| Cheng, Paul | MediaTek Inc. |
| Cheng, Xilin | NXP Semiconductors |
| CHERIAN, GEORGE | Qualcomm Incorporated |
| Choo, Seungho | Newracom Inc. |
| Chung, Bruce | Realtek Semiconductor Corp. |
| Cordeiro, Carlos | Intel Corporation |
| Das, Subir | Perspecta Labs Inc |
| Dash, Debashis | Apple |
| da Silva, Claudio | Intel Corporation |
| Dauphinee, Leonard | MaxLinear Corp |
| DeLaOlivaDelgado, Antonio | InterDigital, Inc. |
| Derham, Thomas | Broadcom Corporation |
| de Vegt, Rolf | Qualcomm Incorporated |
| Ding, Baokun | Huawei Technologies Co. Ltd |
| DOAN, DUNG | Qualcomm Incorporated |
| Duan, Ruchen | SAMSUNG |
| Ecclesine, Peter | Cisco Systems, Inc. |
| Edgar, Richard | Imagination Technologies Ltd. |
| Eitan, Alecsander | Qualcomm Incorporated |
| ElSherif, Ahmed | Qualcomm Incorporated |
| Erceg, Vinko | Broadcom Corporation |
| Fang, Yonggang | ZTE TX Inc |
| feng, Shuling | MediaTek Inc. |
| Fischer, Matthew | Broadcom Corporation |
| Fletcher, Paul | Samsung Cambridge Solution Center |
| Ganwani, Vijay | NXP Semiconductors |
| Gardner, James | Qualcomm Incorporated |
| Garg, Lalit | Broadcom Corporation |
| Goto, Fumihide | Self |
| Guntupalli, Lakshmikanth | Ericsson AB |
| Haider, Muhammad Kumail | Facebook |
| Hall, Robert | Johnson Controls Inc |
| Hamilton, Mark | Ruckus/CommScope |
| HAN, Xiao | Huawei Technologies Co. Ltd |
| Han, Zhiqiang | ZTE Corporation |
| Hansen, Christopher | Covariant Corporation |
| Harrison, Edward | Anritsu Company |
| Haskou, Abdullah | InterDigital, Inc. |
| Hervieu, Lili | Cable Television Laboratories Inc. (CableLabs) |
| Hiertz, Guido | Ericsson GmbH |
| Ho, Duncan | Qualcomm Incorporated |
| Hsieh, Hung-Tao | MediaTek Inc. |
| Hu, Mengshi | HUAWEI |
| Huang, Po-Kai | Intel Corporation |
| Huang, Xiaolong | Qualcomm Incorporated |
| Hurtarte, Jeorge | Teradyne, Inc. |
| Ikegami, Tetsushi | Meiji University |
| Inoue, Yasuhiko | Nippon Telegraph and Telephone Corporation (NTT) |
| Ji, Chenhe | Huawei Technologies Co., Ltd |
| Jia, Jia | Huawei Technologies Co.,  Ltd |
| Jones, Steven | Samsung Cambridge Solution Center |
| Jones, Vincent Knowles IV | Qualcomm Incorporated |
| JUNG, MYUNG CHEUL | Pantech Inc. |
| Kain, Carl | Noblis, Inc. |
| Kakani, Naveen | Qualcomm Incorporated |
| Kandala, Srinivas | SAMSUNG |
| Kenney, John | TOYOTA InfoTechnology Center U.S.A. |
| Kerry, Stuart | OK-Brit |
| Khorov, Evgeny | IITP RAS |
| Kim, Jeongki | LG ELECTRONICS |
| Kim, Sang Gook | LG ELECTRONICS |
| Kim, Yongho | Korea National University of Transportation |
| Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| Kitazawa, Shoichi | Muroran IT |
| Ko, Geonjung | WILUS Institute |
| Kwak, Jin-Sam | WILUS Inc. |
| Lalam, Massinissa | SAGEMCOM SAS |
| Lan, Zhou | Broadcom Corporation |
| Lansford, James | Qualcomm Incorporated |
| Lee, Hyeong Ho | Netvision Telecom Inc. |
| Levy, Joseph | InterDigital, Inc. |
| Li, Jialing | Qualcomm Incorporated |
| Li, Qinghua | Intel Corporation |
| Li, Yunbo | Huawei Technologies Co. Ltd |
| Loginov, Vyacheslav | IITP RAS |
| Lou, Hui-Ling | NXP Semiconductors |
| Malinen, Jouni | Qualcomm Incorporated |
| Mano, Hiroshi | Koden Techno Info K.K. |
| Martinez Vazquez, Marcos | MaxLinear Corp |
| Mehrnoush, Morteza | Facebook |
| Merlin, Simone | Qualcomm Incorporated |
| Mirfakhraei, Khashayar | Cisco Systems, Inc. |
| Mohanty, Bibhu | Qualcomm Incorporated |
| Monajemi, Pooya | Cisco Systems, Inc. |
| Montreuil, Leo | Broadcom Corporation |
| Murphy, Rick | vLogic, Inc. |
| Myles, Andrew | Cisco Systems, Inc. |
| NAGATA, KENGO | Nippon Telegraph and Telephone Corporation (NTT) |
| NANDAGOPALAN, SAI SHANKAR | Cypress Semiconductor Corporation |
| Naribole, Sharan | SAMSUNG |
| Nikolich, Paul | self employed/various |
| Nurani Krishnan, Neelakantan | Qualcomm Incorporated |
| Orlik, Philip | Mitsubishi Electric Research Labs (MERL) |
| Pan, Chun | Huawei Technologies Co., Ltd |
| Park, Eunsung | LG ELECTRONICS |
| Patil, Abhishek | Qualcomm Incorporated |
| Perahia, Eldad | Hewlett Packard Enterprise |
| Petranovich, James | ViaSat, Inc. |
| Petrick, Albert | Jones-Petrick and Associates, LLC. |
| Pirhonen, Riku | Self Employed |
| Puducheri, Srinath | Broadcom Corporation |
| Pulikkoonattu, Rethnakaran | Broadcom Corporation |
| Qi, Emily | Intel Corporation |
| Rai, Kapil | Qualcomm Incorporated |
| Rantala, Enrico-Henrik | Nokia |
| Rezk, Meriam | Qualcomm Incorporated |
| Riegel, Maximilian | Nokia |
| Robert, Joerg | University of Erlangen-Nuremberg |
| Rolfe, Benjamin | Blind Creek Associates |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Roy, Sayak | NXP Semiconductors |
| Ryan, Mike | Ford Motor Company |
| Salem, Mohamed | Huawei Technologies Co., Ltd |
| Sambasivan, Sam | AT&T |
| Sand, Stephan | German Aerospace Center (DLR) |
| Sandhu, Shivraj | Qualcomm Incorporated |
| Sarris, Ioannis | u-blox |
| Schelstraete, Sigurd | Quantenna Communications, Inc. |
| Schiessl, Sebastian | u-blox |
| Scott, Andy | NCTA |
| Sedin, Jonas | Ericsson AB |
| Serafimovski, Nikola | pureLiFi |
| Sethi, Ankit | NXP Semiconductors |
| Shah, Kunal | Itron Inc. |
| Sherlock, Ian | Texas Instruments Incorporated |
| Sinn, Ulrich | Siemens AG |
| Siyari, Peyman | Qualcomm Incorporated |
| Stacey, Robert | Intel Corporation |
| Stanley, Dorothy | Hewlett Packard Enterprise |
| Startsev, Ivan | IITP |
| Stavridis, Athanasios | Ericsson AB |
| Strauch, Paul | Qualcomm Incorporated |
| Strickland, Stuart | Hewlett Packard Enterprise |
| SUH, JUNG HOON | Huawei Technologies Co. Ltd |
| Sun, Bo | ZTE Corporation |
| Sun, Yanjun | Qualcomm Incorporated |
| Teran, Jesus Gutierrez | IHP GmbH |
| Tian, Tao | Unisoc Comm. |
| Torab Jahromi, Payam | Facebook |
| Varshney, Prabodh | Nokia |
| Verma, Lochan | Apple Inc. |
| Verma, Sindhu | Broadcom Corporation |
| Vermani, Sameer | Qualcomm Incorporated |
| VIGER, Pascal | Canon Research Centre France |
| Wang, Huizhao | Quantenna Communications, Inc. |
| Wang, Lei | Huawei R&D USA |
| Wang, Pu | Mitsubishi Electric Research Labs (MERL) |
| Wang, Qi | Apple, Inc. |
| Wang, Xiaofei | InterDigital, Inc. |
| Wang, Yi-Hsiu | Zeku |
| Ward, Lisa | Rohde & Schwarz |
| Wendt, Matthias | Signify |
| Winser, Paul | Blu Wireless |
| Wu, Kanke | Qualcomm Incorporated |
| Xin, Liangxiao | Sony Corporation |
| Xin, Yan | Huawei Technologies Co. Ltd |
| Xue, Qi | Qualcomm Incorporated |
| YAGHOOBI, HASSAN | Intel Corporation |
| Yan, Aiguo | Oppo |
| Yang, Jay | Nokia |
| Yang, Lin | Qualcomm Incorporated |
| YANG, RUI | InterDigital, Inc. |
| Yang, Steve TS | MediaTek Inc. |
| yi, yongjiang | Futurewei Technologies |
| Yona, Yair | Qualcomm Incorporated |
| Young, Christopher | Broadcom Corporation |
| Yu, Jian | Huawei Technologies Co. Ltd |
| Yu, Mao | NXP Semiconductors |
| ZEGRAR, Salah Eddine | Vestel; Istanbul Medipol University |
| Zeng, Ruochen | NXP Semiconductors |
| ZHANG, JIAYIN | Huawei Technologies Co. Ltd |
| Zhang, Yan | NXP Semiconductors |
| Zheng, Xiayu | NXP Semiconductors |
| Zou, Tristan | Qualcomm Incorporated |