IEEE P802.11  
Wireless LANs

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| WLAN Sensing SG – April and May 2020 Teleconference Meeting Minutes | | | | |
| Date: 2020-05-28 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Claudio da Silva | Intel |  |  | claudio.da.silva@intel.com |
| Tony Xiao Han | Huawei Technologies Co., Ltd |  |  | tony.hanxiao@huawei.com |

Abstract

This document contains the meeting minutes of the IEEE 802.11 Study Group on WLAN Sensing (SENS SG) teleconferences held in April and May 2020.

**Teleconference on April 14, 2020**

1. The IEEE 802.11 SENS SG teleconference was called to order at 10:00am ET by the Chair (Tony Xiao Han, Huawei).
   1. Attendance log can be found in Appendix 1.
2. The agenda for the meeting can be found in IEEE 802.11-20/0532r1.
3. Guidelines on “Meeting Protocol, Attendance, Voting & Document Status” (slide 4) were reviewed. No items noted.
4. Patent policy guidelines (slides 6-9) were reviewed. No items noted.
5. Guidelines on the IEEE Codes of Ethics & Conduct, "individual process," and "fair & equitable consideration" (slides 10-12) were reviewed. Required notices (slide 13) were also reviewed. No items noted.
6. The proposed agenda (slide 23) was reviewed and approved without objection.
7. Chair reviewed the call for contributions (slide 24), SENS SG timeline (slides 25 and 26), and future teleconference times (slide 27) slides.
8. Presentation of “Discussion on WLAN sensing draft amendment development process,” docs. IEEE 11-20/0602r0, by Rui Du (Huawei).
   1. Comments made were mostly in favour of developing a usage model and functional requirements documents. Discussion on the scope and content of the evaluation methodology and channel model documents.
   2. SPs at the end of document IEEE 11-20/0602r0 were not run. Discussion will continue in a future teleconference or meeting.
9. Meeting adjourned at 10:53am ET.

**Teleconference on April 28, 2020**

1. The IEEE 802.11 SENS SG teleconference was called to order at 10:00am ET by the Chair (Tony Xiao Han, Huawei).
   1. Attendance log can be found in Appendix 2.

2. The agenda for the meeting can be found in IEEE 802.11-20/0532r2.

3. Guidelines on “Meeting Protocol, Attendance, Voting & Document Status” (slide 4) were reviewed. No items noted.

4. Patent policy guidelines (slides 6-9) were reviewed. No items noted.

5. Guidelines on the IEEE Codes of Ethics & Conduct, "individual process," and "fair & equitable consideration" (slides 10-12) were reviewed. Required notices (slide 13) were also reviewed. No items noted.

6. The proposed agenda (slide 28) was reviewed and approved without objection.

1. Chair reviewed the call for contributions (slide 29), SENS SG timeline (slides 30 and 31), and future teleconference times (slide 32) slides.

8. Presentation by Claudio da Silva (Intel), Discussion of comments submitted during the SENS PAR WG ballot, Doc. IEEE 11-20/0626r0.

* 1. Presenter went over recommended resolutions to each comment submitted. Changes were proposed by the group during the review.
  2. Presenter will update the document to incorporate suggestions/changes proposed in the call, and review the revised document with the group in a future teleconference.

9. Meeting adjourned at 11:00am ET.

**Teleconference on May 12, 2020**

1. The IEEE 802.11 SENS SG teleconference was called to order at 10:00am ET by the Chair (Tony Xiao Han, Huawei).
   1. Attendance log can be found in Appendix 3.
2. The agenda for the meeting can be found in IEEE 802.11-20/0719r0.
3. Guidelines on “Meeting Protocol, Attendance, Voting & Document Status” (slide 4) were reviewed. No items noted.
4. Patent policy guidelines (slides 6-9) were reviewed. No items noted.
5. Guidelines on the IEEE Codes of Ethics & Conduct, "individual process," and "fair & equitable consideration" (slides 10-12) were reviewed. Required notices (slide 13) were also reviewed. No items noted.
6. The proposed agenda (slide 14) was reviewed and approved without objection.
7. Chair reviewed the call for contributions (slide 15), SENS SG timeline (slides 16 and 17), and future teleconference times (slide 18) slides.
8. Presentation by Claudio da Silva (Intel), Discussion of comments submitted during the SENS PAR WG ballot, Doc. IEEE 11-20/0626r1.
   1. Presenter went over changes made to the resolution of comments 1, 3/9, 7, and 15 to incorporate suggestions given by the group in its last conference call (April 28).
   2. No further suggestions were made by the group.
   3. Modifications will be incorporated into the PAR after receiving and reviewing 802EC comments.
9. Presentation by Claudio da Silva (Intel), Discussion of comments submitted during the SENS CSD WG ballot, Doc. IEEE 11-20/0726r0.
10. Presenter went over recommended resolutions to each comment submitted. Changes were proposed by the group during the review and on-line edits were made to the document.
11. Presenter uploaded the revised document (20/0726r1) to Mentor.
12. Modifications will be incorporated into the CSD after receiving and reviewing 802EC comments.
13. Meeting adjourned at 11:08am ET.

**Teleconference on May 26, 2020**

1. The IEEE 802.11 SENS SG teleconference was called to order at 10:00am ET by the Chair (Tony Xiao Han, Huawei).
   1. Attendance log can be found in Appendix 4.
2. The agenda for the meeting can be found in IEEE 802.11-20/0719r1.
3. Guidelines on “Meeting Protocol, Attendance, Voting & Document Status” (slide 4) were reviewed. No items noted.
4. Patent policy guidelines (slides 6-9) were reviewed. No items noted.
5. Guidelines on the IEEE Codes of Ethics & Conduct, "individual process," and "fair & equitable consideration" (slides 10-12) were reviewed. Required notices (slide 13) were also reviewed. No items noted.
6. The proposed agenda (slide 19) was reviewed and approved without objection.
7. Chair reviewed the call for contributions (slide 20), SENS SG timeline (slides 21 and 22), and future teleconference times (slide 23) slides.
8. Presentation by Cheng Chen (Intel), WLAN Sensing Definitions, Doc. IEEE 11-20/0807r0.
   1. Technical discussion on the four proposed definitions (sensing initiator, sensing responder, sensing transmitter, sensing receiver). Questions for clarification of concepts introduced in slides 3 and 7. For the material found in slide 5, the need for negotiation before measurements was discussed.
   2. Modifications were proposed to the SP text found at the end of the document.
   3. Due to time constraints, the discussion had to be cut short. Discussion will continue in a future teleconference. SP will be conducted in a future teleconference.
9. Presentation by Claudio da Silva (Intel), Proposal for the Definition of WLAN Sensing Functional Requirements, Doc. IEEE 11-20/0781r0, and WLAN Sensing Functional Requirements, Doc. 11-20/0780r1.
10. Comments were made in support of the approach disclosed in 20/0781r0.
11. Presenter will prepare a SP to assess SENS SG’s support of the approach described in 20/0781r0 and run it in a future teleconference.
12. Meeting adjourned at 11:15am ET.

**Appendix 1: Attendance log for the April 14, 2020 teleconference**

The list below was recorded from IMAT and may be incomplete.

|  |  |
| --- | --- |
| Aboulmagd, Osama | Huawei Technologies Co. Ltd |
| Au, Kwok Shum | Huawei Technologies Co.,  Ltd |
| Au, Oscar | Origin Wireless |
| Beg, Chris | Cognitive Systems Corp. |
| Choi, Jinsoo | LG ELECTRONICS |
| Costa, D.Nelson | Peraso Technologies Incorporated |
| Dash, Debashis | Apple |
| da Silva, Claudio | Intel Corporation |
| Fang, Yonggang | ZTE TX Inc |
| Haskou, Abdullah | InterDigital, Inc. |
| Jang, Insun | LG ELECTRONICS |
| Kain, Carl | Noblis, Inc. |
| Kasher, Assaf | Qualcomm Incorporated |
| Kim, Jeongki | LG ELECTRONICS |
| Kim, Sang Gook | LG ELECTRONICS |
| Lim, Dong Guk | LG ELECTRONICS |
| LIU, CHENCHEN | Huawei Technologies Co. Ltd |
| Lopez, Miguel | Ericsson AB |
| Merlin, Simone | Qualcomm Incorporated |
| Nikolich, Paul | self employed/various |
| Rantala, Enrico-Henrik | Nokia |
| Rosdahl, Jon | Qualcomm Technologies, Inc. |
| Trainin, Solomon | Qualcomm Incorporated |
| Xin, Yan | Huawei Technologies Co. Ltd |
| YANG, RUI | InterDigital, Inc. |

In addition, the presence of the following members were recorded using WebEx:

1. Tony Xiao Han (Huawei)
2. Carol Ansley (CommScope)
3. Cheng Chen (Intel)
4. Haris Kemo (RWTH Aachen)
5. Pu Wang (MERL)

**Appendix 2: Attendance log for the April 28, 2020 teleconference**

The list below was recorded from IMAT and may be incomplete.

|  |  |
| --- | --- |
| Aboulmagd, Osama | Huawei Technologies Co. Ltd |
| Allegue Martinez, Michel | Aerial Technologies Inc |
| Au, Kwok Shum | Huawei Technologies Co.,  Ltd |
| Beg, Chris | Cognitive Systems Corp. |
| Bei, Jianwei | NXP Semiconductors |
| Bredewoud, Albert | Broadcom Corporation |
| Choi, Jinsoo | LG ELECTRONICS |
| Costa, D.Nelson | Peraso Technologies Incorporated |
| Dash, Debashis | Apple |
| da Silva, Claudio | Intel Corporation |
| Du, Rui | Huawei Technologies Co., Ltd |
| Eitan, Alecsander | Qualcomm Incorporated |
| Grigat, Michael | Deutsche Telekom AG |
| HAN, Xiao | Huawei Technologies Co. Ltd |
| Handte, Thomas | Sony Corporation |
| Jang, Insun | LG ELECTRONICS |
| Kasher, Assaf | Qualcomm Incorporated |
| Kim, Jeongki | LG ELECTRONICS |
| Kim, Sang Gook | LG ELECTRONICS |
| Kremo, Haris | RWTH Aachen University |
| Lim, Dong Guk | LG ELECTRONICS |
| Montemurro, Michael | BlackBerry |
| Park, Sung-jin | LG ELECTRONICS |
| Rantala, Enrico-Henrik | Nokia |
| Xin, Yan | Huawei Technologies Co. Ltd |
| YANG, RUI | InterDigital, Inc. |

**Appendix 3: Attendance log for the May 12, 2020 teleconference**

The list below was recorded from IMAT and may be incomplete.

|  |  |
| --- | --- |
| Aboulmagd, Osama | Huawei Technologies Co. Ltd |
| Au, Kwok Shum | Huawei Technologies Co.,  Ltd |
| Au, Oscar | Origin Wireless |
| Beg, Chris | Cognitive Systems Corp. |
| Bei, Jianwei | NXP Semiconductors |
| Choi, Jinsoo | LG ELECTRONICS |
| da Silva, Claudio | Intel Corporation |
| Dong, Xiandong | Xiaomi Inc. |
| Du, Rui | Huawei Technologies Co., Ltd |
| Fang, Yonggang | ZTE TX Inc |
| HAN, Xiao | Huawei Technologies Co. Ltd |
| Handte, Thomas | Sony Corporation |
| Jang, Insun | LG ELECTRONICS |
| Kim, Sang Gook | LG ELECTRONICS |
| Kremo, Haris | RWTH Aachen University |
| Levy, Joseph | InterDigital, Inc. |
| Lim, Dong Guk | LG ELECTRONICS |
| LIU, CHENCHEN | Huawei Technologies Co. Ltd |
| Merlin, Simone | Qualcomm Incorporated |
| Park, Sung-jin | LG ELECTRONICS |
| PESIN, ANTHONY | InterDigital, Inc. |
| Rantala, Enrico-Henrik | Nokia |
| RISON, Mark | Samsung Cambridge Solution Centre |
| Yee, James | MediaTek Inc. |

In addition, the following member recorded their presence by sending an email to the Secretary:

1. Jeongki Kim (LG ELECTRONICS)

**Appendix 4: Attendance log for the May 26, 2020 teleconference**

The list below was recorded from IMAT and may be incomplete.

|  |  |
| --- | --- |
| Allegue Martinez, Michel | Aerial Technologies Inc |
| Au, Oscar | Origin Wireless |
| Beg, Chris | Cognitive Systems Corp. |
| Chen, Cheng | Intel Corporation |
| Chitrakar, Rojan | Panasonic Asia Pacific Pte Ltd. |
| Choi, Jinsoo | LG ELECTRONICS |
| Costa, D.Nelson | Peraso Technologies Incorporated |
| Dash, Debashis | Apple |
| da Silva, Claudio | Intel Corporation |
| Dong, Xiandong | Xiaomi Inc. |
| Du, Rui | Huawei Technologies Co., Ltd |
| Eitan, Alecsander | Qualcomm Incorporated |
| Handte, Thomas | Sony Corporation |
| Kasher, Assaf | Qualcomm Incorporated |
| Kim, Sang Gook | LG ELECTRONICS |
| Kremo, Haris | RWTH Aachen University |
| Lim, Dong Guk | LG ELECTRONICS |
| LIU, CHENCHEN | Huawei Technologies Co. Ltd |
| McCann, Stephen | BlackBerry |
| Park, Sung-jin | LG ELECTRONICS |
| PESIN, ANTHONY | InterDigital, Inc. |
| Rantala, Enrico-Henrik | Nokia |
| Sand, Stephan | German Aerospace Center (DLR) |
| Trainin, Solomon | Qualcomm Incorporated |
| Turkmen, Halise | Vestel |
| Varshney, Prabodh | Nokia |
| Wendt, Matthias | Signify |
| YANG, RUI | InterDigital, Inc. |

In addition, the following member recorded their presence by sending an email to the Secretary:

1. Rajat Pushkarna (Panasonic Asia Pacific Pte Ltd)
2. Jeongki Kim (LG ELECTRONICS)