IEEE P802.11
Wireless LANs

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| IEEE 802.11bd November-December 2020 meeting minutes  |
| Date: 2020-11-20 |
| Author(s): |
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Abstract

This document includes minutes of all IEEE 802.11bd teleconferences between November 20th and December 18th.

Version Tracking:

R1: November 20th teleconference session 10:00-11:59 am ET

# Friday 20 November 2020 @ 10:00-11:59 am ET

## Opening (IEEE 802.11-20/1806r1)

* 1. Call to order 10:05 am ET
	2. Chair instructed members to record attendance in IMAT.
	3. Chair introduced the patent policy and meeting rules (slides 2-6).
	4. No response to the call for patents.
	5. Chair reviewed Meeting Guidelines (slides 7-10)
	6. Chair reviewed current Teleconference plan, TGbd Documents Update, and current TGbd Timeline (slides 11-13)
	7. Chair introduced the task group leadership (slide 14)

## Agenda (IEEE 802.11-20/1806r1)

* 1. Chair presented the agenda: https://mentor.ieee.org/802.11/dcn/20/11-20-1561-01-00bd-tgbd-teleconference-agenda-for-oct-2020.pptx. (slide 16):
* Call meeting to order and remind the group to record attendance on imat.ieee.org
* IEEE-SA IPR policies and meeting rules
* Approval of agenda (slide 16)
* WG LB 251 results
* LB 251 comments assignment (TGbd Editor)
	+ 11-20/1887r0, tgbd-lb251-comments
* Presentations and discussion (Call for submission)
	+ SPs for 11-20/1728r3, 802-11bd-NGV-ranging-Status-and-Types, Stephan Sand (DLR)
	+ 11-20/1802, summary of ARC SC discussion on 11-20/1164r4, Joseph Levy (InterDigital)
	+ TBD
* Next teleconference on Nov 24th
* Adjourn

## Chair shared WG LB 251 results

* 1. Total comments received: 846 (Editorial: 347, Technical: 465, General: 34),

## LB251 comments assignment, (TGbd Editor)

* 1. <https://mentor.ieee.org/802.11/dcn/20/11-20-1887-00-00bd-tgbd-lb251-comments.xlsx>
	2. TGbd Editor asked volunteers to take comments in each subclause shown in the Excel sheet, and finished assignments for most of the comments.
	3. TGbd Editor will take all editorial comments, and each assignee will take technical and general comments in each subclause.

## 11-20/1728r3, 802-11bd-NGV-ranging-Status-and-Types, Stephan Sand (DLR)

* 1. The presenter showed the update of 1728r3, 11bd differential distance computation using FTM frames and NTB measurement exchange on slides 11-14.
	2. A question was asked which capability the presenter is referred to regarding the update of Annex P.3. The presenter answered that capability is shown in SP#2. The following comment was made that this is purely receiver design, no capability announcement is needed. A further comment was made that 11ac FTM has no such capability announcement, hence there is no need for 11bd either. But an update for Annex P.3 is needed. The presenter asked if we need to defer SP #2 after comment resolutions for 11bd D1.0 which includes comments related to 11bd ranging. The editor answered that we can do either way and the presenter can take a look at comments related to ranging.
	3. A comment was made that we can SP Annex P.3 text or comment resolutions related to ranging instead, and whether Annex P.3 text update is needed. The presenter answered that we need to add some texts related to ranging in Annex P.3. The editor replied that she will update Annex P.3 to have a whole ranging solution. SP #2 texts are not appropriate since it is only receiver design.
	4. SP #2 Discussions, “Do you agree to update Annex P.3 for 11bd D1.0 including FTM and NTB measurement exchange?” A question was asked whether we need to include FTM. The presenter answered that we do need FTM for NTB measurement. The editor said that we need FTM negotiations and NTB measurement.
	5. SP #2 Discussions, SP #2 is changed to “Do you agree to update Annex P.3 for 11bd D1.0 including NTB measurement exchange?”. A question was asked why 11az does not update Annex P.3. The presenter answered that new protocol is needed for passive NTB ranging for 11bd.
	6. SP #2 is changed to “Do you agree to update Annex P.3 for 11bd D1.0 including NTB measurement exchange?”
		1. Yes/No/Abstain: 11/0/10
	7. SP3 is deferred.

## 11-20/1802, summary of ARC SC discussion on 11-20/1802r0, Joseph Levy (InterDigital)

* 1. The presenter presented 5 open issues on slide 4, “questions and comments from ARC SC to TGbd”
	2. A comment was made that first question on slide 4 answered itself, the use is intended to be per MSDU.
	3. A question was asked whether we feel there is no need for channel control/radio environment information assuming per MSDU. A further question was asked about the clarification of channel control information. The presenter answered that there is no need to create specific control SAP for this purpose. A further question was asked whether we allow to access 1609 SAPs and whether a new primitive if needed. The presenter answered that a new primitive is needed since we need to access high layers, and 11bd devices are not self-defined.
	4. The answer to the second question on slide 4 is the MA-UNITDATA.indication is meant to be on the peer device, not on the transmitter, the indication is going out to higher layer or going to the air. A following question was aksed if it is going to the MAC layer. The presenter said it is not necessary going upstack, and the recipient can use this information and send it to the upper layer. It is suggested the presenter to add flow diagram in 11bd spec, and explain it to ARC people. A further comment was made that some clauses in 11bd spec already stated that MA-UNITDATA.indication is recipient primitives.
	5. A comment was made that question 3 on slide 4 is answered by 1609. The presenter will reach out to Michael Fisher who wrote this part for 1609 for a clear answer.
	6. The answer to question 4 on slide 4 is the new Radio Environment control is only for OCB. The editor further commented that there is a comment from LB to make it clear in spec text. A comment was made that OCB is not only for NGV, or non-NGV, and future devices can use it too. The presenter answered that future devices supporting this feature will be NGV devices. A following comment was made that we should relax this requirement.
	7. It was suggested that the chair should organize meetings with ARC SC people to present the solutions if all 5 questions on slide 4 get solved, or if there are any other comments related to the five open issues on slide 4.

## Closing

* 1. Any other business
		1. None
	2. Chair announced the next TGbd teleconference will be cancelled on Nov. 24 9:00 am ET
	3. Chair announced the next TGbd teleconference will be on Dec. 1 9:00 am ET
	4. Chair announced TGbd teleconference on Dec. 29 9:00 am ET will be cancelled
	5. Chair adjourned the teleconference at 12:00 pm ET

**Attendance from IMAT**

| **Name** | **Affiliation** |
| --- | --- |
| An, Song-Haur | INDEPENDENT |
| Sun, Bo | ZTE Corporation |
| Cao, Rui | NXP Semiconductors |
| Coffey, John | Realtek Semiconductor Corp |
| Kenney, John | TOYOTA infoTechnology Center U.S.A |
| Schiessl, Sebastian | u-blox |
| Motozuka, Hiroyuki | Panasonic Corporation |
| Liwen, Chu | NXP |
| Sand, Stephan | German Aerospace Center (DLR) |
| Yujin, Noh | Newracom Inc. |
| Aboulmagd, Osama | Huawei Technologies Co. Ltd |
| Yan, Zhang | NXP |
| Kain, Carl | USDoT |
| Lansford, James | Qualcomm Incorporated |
| Rosdahl, John | Qualcomm Incorporated |
| Lopez, Miguel | Ericsson AB |
| McCann, Stephen | Huawei Technologies Co. Ltd |
| Montemurro, Michael | Huawei Technologies Co. Ltd |
| Sadeghi, Bahareh | Intel Corporation |
| Smely, Di Dieter | Kapsch TrafficCom AG |
| Sosack, Robert | Molex incorporated |
| Yee, Peter | NSA-CSD |
| Joseph, Levy | InterDigital |