IEEE P802.11  
Wireless LANs

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| IEEE 802.11 TGax  July 2017 Berlin PHY Ad Hoc Meeting Minutes | | | | |
| Date: 2017-07-11 | | | | |
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Abstract

TGax meeting minutes for the IEEE 802.11 Berlin PHY ad hoc session, July, 2017.

**Monday, July 10th, 2017, PM2 Session**

1. **Meeting called to order by Bo Sun (ZTE)** 
   1. The agenda is contained in 11-17/1099r1 which is on the server.

**1.1**

**11-17-0650-02-00ax-lb-225-cluase-18-2-comment-resolution**, **Osama Aboul-Magd (Huawei)**

**Discussions:**

**SP1: Do you agree with the proposed resolutions in doc 650r2?**

**No objection**

**1.2**

**11-17-0902-00-00ax-he-phy-misc-cids-part-1, Lochan Verma (Qualcomm)**

**Discussions:**

**SP1: Do you agree with the proposed resolutions in doc 902r0?**

**No objection**

**1.3**

**11-17-0945-00-00ax-crs-on-28-3-3-8**, **Yujin Noh (Newracom)**

**Discussions:**

8821 resolution deferred, question on “may”.

**1.4**

**11-17-0946-00-00ax-text-modification-on-he-sig-b-28-3-10-8-4-5**, **Yujin Noh (Newracom)**

**Discussions:** second part CIDs deferred.

**SP1: Do you agree with the proposed resolutions on CID 3095 in doc 946r0?**

**No objection**

**Tuesday, July 11th, 2017, AM2 Session**

1. **Meeting called to order by Bo Sun (ZTE)** 
   1. The agenda is contained in 11-17/1099r1 which is on the server.

**2.1**

**11-17-0961-01-00ax-miscellaneous-clarifications-on-he-phy-part-1, Lochan Verma (Qualcomm)**

**Discussions:**

CIDs already closed, treat as modification of draft.

Will modify the text and revisit later.

**2.2**

**11-17-0973-00-00ax-cr-on-28-3-3-10-and-28-3-3-2, Jinsoo Choi (LG)**

**Discussions:**

Online editorial modifications on r1, will revisit.

**2.3**

**11-17-0985-01-00ax-cr-on-ndp-feedback-phy, Xiaogang Chen (Intel)**

**Discussions:**

Need to update the naming on single stream pilot and masked pilot according to 0973r1.

**2.4**

**11-17-0973-01-00ax-cr-on-28-3-3-10-and-28-3-3-2, Jinsoo Choi (LG)**

**Discussions:**

**SP1: Do you agree with the proposed resolutions in doc 973r1?**

**No objection**

**2.5**

**11-17-0986-01-00ax-cr-on-introduction, Xiaogang Chen (Intel)**

**Discussions:**

need to revise 5040 resolution, reject this CID and update to r2

**SP1: Do you agree with the proposed resolutions of 28 CIDs in doc 986r2?**

**No objection**

**2.6**

**11-17-1109-00-00ax-text-modification-on-he-sig-b-part-2, Yujin Noh (Newracom)**

**Discussions:**

**SP1: Do you agree with the proposed text changes in doc 1109r0?**

**No objection**

**Tuesday, July 11th, 2017, PM3 Session**

1. **Meeting called to order by Bo Sun (ZTE)** 
   1. The agenda is contained in 11-17/1099r1 which is on the server.

**3.1**

**11-17-0945-01-00ax-crs-on-28-3-3-8, Yujin Noh (Newracom)**

**Discussions:** some editorial updates in r2

**SP1: Do you agree with the proposed comment solutions in doc 0945r2?**

**No objection**

**3.2**

**11-17-0902-01-00ax-he-phy-misc-cids-part-1, Lochan Verma (Qualcomm)**

**Discussions:**

**SP1: Do you agree with the proposed comment solution in doc 0902r1?**

**No objection**

**3.3**

**11-17-0961-03-00ax-miscellaneous-clarifications-on-he-phy-part-1, Lochan Verma (Qualcomm)**

**Discussions:** confusions on channel width field changes, defer the discussion

**3.4**

**11-17-0985-02-00ax-cr-on-ndp-feedback-phy, Xiaogang Chen (Intel)**

**Discussions:** confusions on channel width field changes, defer the discussion

**SP1: Do you agree with the proposed comment solution in doc 0985r2?**

**No objection**

**3.5**

**11-17-1006-00-00ax-miscellaneous-he-sig-b-related-cids, Sigurd Schelstraete (Quantenna)**

**Discussions:** need to merge with Yujin’s text changes to define user

**SP1: Do you agree with the proposed comment solution in doc 1006r0?**

**No objection**

**3.6**

**11-17-0993-00-00ax-comment-resolutions-for-data-field, Hongyuan Zhang (Marvell)**

**Discussions:**

**SP1: Do you agree with the proposed text changes in doc 0993r0?**

**No objection**

**Wednesday, July 12th, 2017, PM1 Session**

1. **Meeting called to order by Bo Sun (ZTE)** 
   1. The agenda is contained in 11-17/1099r1 which is on the server.

**4.1**

**11-17-1006-01-00ax-miscellaneous-he-sig-b-related-cids, Sigurd Schelstraete (Quantenna)**

**Discussions:** mainly text alignment with Yujin’s contribution, more editorial changes into r2, will revisit

**4.2**

**11-17-0961-05-00ax-miscellaneous-clarifications-on-he-phy-part-1, Lochan Verma (Qualcomm)**

**Discussions:**

**SP1: Do you agree with the proposed text changes in doc 961r5?**

**No objection**

**4.3**

**11-17-1006-02-00ax-miscellaneous-he-sig-b-related-cids, Sigurd Schelstraete (Quantenna)**

**Discussions:** revised text, “field” to “subfield”

**SP1: Do you agree with the proposed comment resolutions except CID 4917 in doc 1006r2?**

**No objection**

**4.4**

**11-17-1016-01-00ax-phy-cr-28-3-3-4, Junghoon Suh (Huawei)**

**Discussions:**

**SP1: Do you agree with the proposed text changes in doc 1016r1?**

**No objection**

**4.5**

**11-17-0985-04-00ax-cr-on-ndp-feedback-phy, Xiaogang Chen (Intel)**

**Discussions:** further text updates according to other approved CR doc

**SP1: Do you agree with the proposed text changes in doc 0985r4?**

**No objection**

**4.6**

**11-17-0993-00-00ax-comment-resolutions-for-data-field, Hongyuan Zhang (Marvell)**

**Discussions:** CID 5255 deferred

**SP1: Do you agree with the proposed comment solutions except CID 5255 in doc 0993r1?**

**No objection**

**4.7**

**11-17-0996-00-00ax-update-on-timing-related-constants-and-some-equations, Bin Tian (Qualcomm)**

**Discussions:**

**SP1: Do you agree with the proposed text change in doc 0996r0?**

**No objection**

**4.8**

**11-17-1007-00-00ax-proposed-resolution-for-cid-9021, Sigurd Schelstraete (Quantenna)**

**Discussions:**

**SP1: Do you agree with the proposed text change in doc 1007r0?**

**No objection**

**4.9**

**11-17-1050-00-00ax-additional-editorial-update-related-to-cid9769, Youhan Kim (Qualcomm)**

**Discussions:**

**SP1: Do you agree with the proposed text change in doc 1050r0?**

**No objection**

**4.10**

**11-17-0993-02-00ax-comment-resolutions-for-data-field, Hongyuan Zhang (Marvell)**

**Discussions:** revised 5255 resolution

**SP1: Do you agree with the proposed comment solutions in doc 0993r2?**

**No objection**

**4.11**

**11-17-1063-00-00ax-dcm-text-correction, Tianyu Wu (Mideatek)**

**Discussions:**

**SP1: Do you agree with the proposed text change in doc 1063r0?**

**No objection**

**Wednesday, July 12th, 2017, PM2 Session**

1. **Meeting called to order by Bo Sun (ZTE)** 
   1. The agenda is contained in 11-17/1099r1 which is on the server.

**5.1**

**11-17-0960-00-00ax-follow-up-on-doppler-design-in-802-11ax, Lochan Verma (Qualcomm)**

**Discussions:**

**SP1: Do you support mid-amble update interval of 10 and 20 for mid-amble Doppler procedure in 11ax?**

**Y 14**

**N 0**

**A 11**

**SP2: Do you support signaling mid-amble update interval in HE-SIG-A of HE PPDUs?**

* + **HE SU PPDU: Borrow 1 bit from ‘Nsts’ field**
  + **HE MU PPDU: Borrow 1 bit from ‘# of HE-LTF Symbols’ field**
  + **HE TRIG PPDU: Borrow 1 bit from ‘# of HE-LTF Symbols’ field in Trigger frame**

**NOTE: For non-Doppler cases: ‘Nsts’ = 3 bits and ‘# of HE-LTF Symbols’ = 3 bits [as in D1.3]**

**Y 14**

**N 0**

**A 13**

**5.2**

**11-17-0994-00-00ax-midamble-design, Hongyuan Zhang (Marvell)**

**Discussions:**

**SP1: Do you agree that**

* + **Midamble is composed by HE-LTF(s) the same as in the preamble of the same PPDU, and no HE-STF field.**
  + **There is never a midamble inserted after the last Data OFDM symbol?**

**No objection**

**5.3**

**11-17-0998-01-00ax-nsym-and-tpe-at-rx-side-for-midamble-design, Yujin Noh (Newracom)**

**Discussions:** need more offline discussions to harmonize with 0994

**5.4**

**11-17-1021-00-00ax-usage-of-doppler-bit-in-11ax, Tianyu Wu (Mediatek)**

**Discussions:** need more offline discussions

**SP1: Do you agree the dual use of Doppler bit as followings?**

* + **For HE PPDUs with N\_SYM ≤ Midamble periodicity, Doppler subfield of HE-SIG-A field set to 1 indicates that the current channel between the transmitter and the recipient is with high Doppler.**
  + **For HE PPDUs with N\_SYM > Midamble periodicity, Doppler subfield of HE-SIG-A field set to 1 indicates that Midamble is present in the PPDU.**

**Y 14**

**N 6**

**A 6**

**5.5**

**11-17-0995-00-00ax-Doppler-comment-resolutions, Hongyuan Zhang (Marvell)**