IEEE P802.11  
Wireless LANs

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| TGaz Meeting Minutes  Oct 10, 2018 Teleconference | | | | |
| Date: 2018-10-10 | | | | |
| Author(s): | | | | |
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Abstract

Minutes for the TGaz teleconference on Oct 10th, 2018.

Revision History:

R0: Initial Version

**IEEE 802.11 Task Group AZ**

**Oct 10, 2018**

1. **Teleconference**
   1. Called to order by TGaz chair, Jonathan Segev (Intel Corporation) at **0910 Hrs. PDT**, Assaf Kasher (Qualcomm), Roy Want (Google) Secretary (Ganesh Venkatesan (Intel) acting Secretary).
   2. Agenda Doc. **IEEE 802.11-18/1732r1**
   3. Review Patent Policy and logistics
      1. Chair reviewed the IEEE-SA Patency Policy, additional guidelines about IEEE-SA meeting and logistics – no clarifications requested.
      2. Chair called for any potentially essential patent -- no response from the audience.
      3. Chair reviewed IEEE 802 WG participation as individual professional – no clarification requested.
      4. Attendance (compiled from e-mails sent by attendees to the TG chair)
         1. Headcount: ~33 present
         2. Qi Wang (Apple)
         3. Amelia Andersdotter (Digital Programme)
         4. Jonathan Segev (Intel Corporation)
         5. Feng Jiang (Intel Corporation)
         6. Ganesh Venkatesan (Intel Corporation)
         7. Christian Berger (Marvell Semiconductors)
         8. Ali Raissania (Qualcomm)
         9. Assaf Kasher (Qualcomm)
         10. Debashis Dash (Quantenna Communications)
   4. Agenda and Minutes
      1. 18-1728r2 CC28-XDMG-Comment-Resolution (Assaf Kasher, Qualcomm).
         1. Comments related to DMG/EDMG ranging protocols. The goal is to not make technical changes to the protocol but fix/clarify and hence address corresponding comments
         2. CID 86: Revise
         3. CIDs 232, 233, 235, 236 Revise – removed eDMG Direction Measurement Parameters sub-element; and updated text correspondingly
         4. C: ‘Mutually Supported’. Can we delete the word “mutually”?

R: Will answer this at a later part of the submission. The submitter sent an offline explanation (since the specific part of the submission that relates to this comment was not covered in the teleconference)

Offline explanation: During the conference call in 10/10/18 I mentioned mutually direction measurement capable DMG STAs.  The question came up as to why we need to define whether device are “**mutually** direction measurement capable”.

The answer is that the capabilities field has 4 capability bits: AOD TX, AOD RX, AOA TX and AOA RX.  In order to have a useful exchange, we need one device to have a TX capability if the other device has an RX capability, and they shall also match in the AOA/AOD sense.  Therefore, it is not enough to have one capability bit set (as the current text has), but it has to be a matching bit in the 2 devices.  This is the reason for defining “mutual” capability.

* + - 1. CID 240: Revise
      2. CID 240: Q: ‘Secure ToF Supported may be set’. Why not ‘shall be set’?

C: Secure ToF supported only implies that the STA supports ToF. Does not mean that the measurement exchanges be protected. The measurement exchanges are protected only if such an exchange is negotiated. Hence ‘may be” and not “shall be”

* + - 1. CID 239: Revise
      2. CIDs 334, 335: Revise
      3. CID 482 – reduce elevation subfield from 11-bits to 10-bits. Leave Azimuth as is.
      4. CID 523
      5. CID 524: Resolved by CID 239
      6. CID 536: the Format and Bandwidth field is expressed in the Ranging Parameters and not in FTM Parameters element
      7. CID 84: Editor instructions and correction to the title
      8. CID 231: Editorial fix to field/sub-field name – although field names do not include field/sub-field, in this case, the reference is to a specific sub-field.
    1. 18-1741r0 CC28-cr-vhtz\_protocol\_rewrite This submission is addresses a set of comments from CC #28 related to VHTz ranging
       1. C: Relationship between maxToAAvailable and maxToAAvailableExp is clearer if depicted as an equation even if this could be a repetition of information from clause 9.

R: the author will address this in the next revision of this submission

* + - 1. This submission just cleans up the description of the VHTz Ranging protocol without changing any technical content. If there are any technical changes, the submitter would like to be notified.
      2. Q: For this comment resolution process, if this submission gets accepted, how would other comments that pertain to this section be handled?

A: Identify comments that overlap with the resolutions addressed by this submission, if this submission resolves the comment, just indicate that this submission addresses the comment; if not, bring a submission addressing the comment (assuming that this submission becomes the baseline)

* + - 1. Q: Could other comments on this topic that are not explicitly addressed by this submission be reviewed by this submitter to see if this submission already addresses it?

A: Offline discussion between this submitter and others (who are assigned related comments) is encouraged.

* + - 1. Need about 20 minutes to complete reviewing/discussing this submission
      2. The chair reminded the attendees to inform the chair via e-mail of their attendance in this teleconference
    1. 18-1742r0 cc28-cr-hez\_protocol\_rewrite-hez\_protocol\_rewrite (Christian Berger, Marvell Semiconductors) – did not get to this item due to time constraints
    2. Meeting Adjourned at 10:31 Hrs PDT.

1. References:
   1. <https://mentor.ieee.org/802.11/dcn/18/11-18-1728-02-00az-cc28-xdmg-comment-resolution.docx>
   2. <https://mentor.ieee.org/802.11/dcn/18/11-18-1732-01-00az-oct-10th-telecon-meeting.pptx>
   3. <https://mentor.ieee.org/802.11/dcn/18/11-18-1742-00-00az-cc28-cr-hez-protocol-rewrite-hez-protocol-rewrite.docx>
   4. <https://mentor.ieee.org/802.11/dcn/18/11-18-1741-00-00az-cc28-cr-vhtz-protocol-rewrite.docx>