IEEE P802.11
Wireless LANs

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| CRs on Miscellaneous PHY CIDs |
| Date: 2020-05-20 |
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Abstract

This submission shows

* Resolution for a comment received from TGax comment collection (TGax Draft D6.0)
* The proposed changes are based on 11ax D6.0.

The submission provides resolutions to following

* 24046, 24502, 24560, 24561

Revisions:

* Rev 0: Initial version of the document.

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 24046 | 640.29 | 27.3.15.2 | "Each STA that is scheduled in a triggering frame calculates the UL transmit power..."Tx\_pwr\_sta just represents the UL transmit power on single 20 MHz channel among the channels on which the HE TB PPDU is sent.But, current text can confuse Tx\_pwr\_sta to a whole transmit power of the STA. | Please change as the following:"Each STA that is scheduled in a triggering frame calculates the UL transmit power normalized to 20 MHz bandwidth". | RejectedTx\_pwr\_sta indeed represents the total Tx power of the TB PPDU, not the per 20MHz normalized power. Just like Target RSSI specified in the trigger frame, the power is NOT 20Mhz normalized. The commenter is confused with the DL AP Tx power which is used for compute the path loss. The AP DL Tx power needs to be normalized per 20MHz since the trigger frame may be sent in the dup PPDU so the client may not know the DL BW. There is no such ambiguity in UL. Normalization to 20MHz brings complexity and confusion.  |
| 24502 | 517.46 | 27.3.3.1.2 | CID 22388, 20571. There are still far too many locations where the requirement for an AP that supports >= 4SS to support DL MU-MIMO is stated (search for "4 or more"): 4.3.15a High efficiency (HE) STA, Table 9-321b--Subfields of the HE PHY Capabilities Information field, 26.7.2 Sounding sequences and support, 27.1.1 Introduction to the HE PHY, 27.3.3.1.2 Maximum number of spatial streams in an HE MU PPDU, dot11HESUBeamformerOptionImplemented (but ironically not dot11HEMUBeamformerOptionImplemented!). I would hope that by now we all agree that duplication is a Bad Idea | Delete "An HE AP that is capable of transmitting 4 or more space-time streams shall support DL MU-MIMO trans-missions on full bandwidth." in 27.3.3.1.2 Maximum number of spatial streams in an HE MU PPDU | RevisedAgree with the commenter that the related text in dot11HESUBeamformerOptionImplemented should be removed. In 27.3.3.1.2, all the MU related requirements are summarized together so it is better to keep this information. To TGax editor, please remove the following sentence starting from P760L62 in D6.0 “for an AP implementation, the operation as an SU beamformer is supported when the AP is equipped with 4 or more spatial streams.’ |
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| 24560 | 519.11 | 27.3.4 | HE SU PPDU in the 6 GHz do not need to be backwards compatible and therefore should not waste medium time by transmitting L-STF, L-LTF, L-SIG and RL-SIG. Such fields should be removed from the PPDU format for the 6Ghz band. | Re-design PPDU format for the 6 GHz band to reduce overhead so that no Legacy preamble and RL-SIG field are no longer included. | Rejected.Commenter fails to provide detailed technical proposal.Comparing to new green field design, leveraging existing design has significant benefit of lower complexity. Also the overhead saving from green field may not be significant. For example, some forms of L-STF and L-LTF are still needed even in green field design  |
| 24561 | 519.24 | 27.3.4 | HE MU PPDU in the 6 GHz do not need to be backwards compatible and therefore should not waste medium time by transmitting L-STF, L-LTF, L-SIG and RL-SIG. Such fields should be removed from the PPDU format for the 6Ghz band. | Re-design PPDU format for the 6 GHz band to reduce overhead so that no Legacy preamble and RL-SIG field are no longer included. |  Rejected.Commenter fails to provide detailed technical proposal.Comparing to new green field design, leveraging existing design has significant benefit of lower complexity. Also the overhead saving from green field design may not be significant. For example, some forms of L-STF and L-LTF are still needed even in green field design  |