IEEE P802.11
Wireless LANs

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| Proposed changes to SR clause |
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Abstract

This submission contains proposed changes to 802.11ax D0.1 as outlined in document 11-16/578r0.

**Revision History**

R0 – first revision

# Discussion

As discussed in 802.11ax D0.1, section 25.9 on page 63, the objective of the HE spatial reuse operation is to improve the system level performance.

The concept of transmission power control (TPC) used together with adaptive CCA has been presented in IEEE 802.11ax D0.1, section 25.9.3, page 63. Our studies, as outlined in 11-16/578r0 show that the inclusion of TPC in dynamic CCA adjustments reduces performance.

# Proposal

***Modify Clause 25.9.3 on page 63 of IEEE P802.11ax/D0.1 as follows:***

**25.9.3 Adaptive CCA and transmit power control**
An HE STA that has dot11HESpatialReuseEnhancementsInUse equal to true ~~When the color code based CCA rule is used, as described in Error! Reference source not found., an HE STA is allowed to~~ may adjust the OBSS\_PD threshold in conjunction with transmit power control to improve the system level performance and the utilization of the spectrum resources. To further improve the possibilities of spatial reuse, the HE STA ~~is allowed to~~ may adjust the setting of one or more following parameters, CCA ED level, 802.11 signal detect CCA or TXPWR threshold values. The constraints on selecting threshold values are TBD.

An HE STA that has dot11HESpatialReuseEnhancementsInUse equal to true shall not adjust TXPWR if the STA accesses emergency services or obtains a TXOP by AC\_VO or AC\_VI.

***Comment: Define dot11HESpatialReuseEnhancementsInUse as MIB variable indicating the use of the 802.11ax feature set improving Spatial Reuse.***