IEEE P802.11  
Wireless LANs

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| Clarification of NUC applicability | | | | |
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Abstract

This document proposes draft text to clarifiy non-uniform constellation application.

**Discussion**

Background

* From what is in the spec today, it’s not clear when NUC modulation may be used
* This document proposes draft text to clarify

Proposal

* Apply π/2-64-NUC non-uniform constellation for all 64-QAM MCS (i.e. MCS 17 to 20) when ‘NUC Applied’ signalling is set.

*TGay Editor: Please insert the following text in section 30.5.8 Modulation and coding scheme (MCS)*

**30.5.8 Modulation and coding scheme (MCS)**

The MCS is a value that determines the modulation and coding. For an EDMG PPDU, the MCS value is carried in the EDMG-Header-A field and in the EDMG-Header-B field. The data rate provided by an MCS depends on the guard internal length, the number of spatial streams, NSS (1 ≤ NSS ≤ 8), and the number of contiguous 2.16 GHz channels, NCB (1 ≤ NCB ≤ 4), that make up the signal bandwidth of an EDMG PPDU.

The set of MCSs for an EDMG SC mode PPDU are defined in Table 56, where NCB is as defined above. If the π/2-8-PSK Applied field in the EDMG-Header-A of an SU PPDU is 1, then MCS 12 and 13 shall use π/2-8-PSK modulation as defined in Table 57. If the NUC Applied field in the EDMG-Header-A of an SU PPDU or EDMG-Header-B of an MU PPDU is set to 1, then MCS 17, 18, 19, and 20 shall be transmitted with π/2-64-NUC as defined in 30.5.9.5.5. Otherwise MCS 17, 18, 19, and 20 shall be transmitted with uniform constellation as defined in 20.6.3.2.4.5.

SP/M

Do you agree to include the proposed draft text in 11-17/1688r0 to the IEEE 802.11ay Draft Specification?