IEEE P802.11  
Wireless LANs

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| CID 1190 – mandating QOS Data frames in OCB | | | | |
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Abstract

This document contains proposed changes to 11md for CID 1190.

# Background

Two Data Frame subtypes exist: Data frames and QOS Data frames. Coexistence of the two does work, but is not ideal – the Data frames are effectively a 5th class of priority that isn’t intentionally sorted with the four explicit priorties designed in QOS Data. All known implementations of OCB utilize QOS Data, though the commenter welcomes any examples to dispute this, as I have not surveyed each and every region and user of 802.11 OCB. For example, IEEE 1609.4-2016 requires all transmissions to use one of the 4 QOS classes. It would be beneficial to mandate QOS Data and QOS Null in order to prevent users from unintentionally sending non-QOS frames and upsetting the balance in the OCB channels. As far as I know there is no need for legacy non-QOS Data or Null frames.

# Proposed Change

**11.19 STAs communicating Data frames outside the context of a BSS**

When dot11OCBActivated is true in a STA:

a) Synchronization, authentication, association, and frame classes as defined in 11.1 (Synchronization) and 11.3 (STA authentication and association) are not used. Data confidentiality as defined in Clause 12 (Security) is not used. The STA may send Action frames and, if the STA maintains a TSF Timer, Timing Advertisement frames.

b) The STA may send Control frames, except those of subtype PS-Poll, CF-End, and CF-End +CFAck.

c) The STA may send Data frames of subtype ~~Data, Null,~~ QoS Data, and QoS Null.

d) The STA shall set the BSSID field in all Management and Data frames to the wildcard BSSID value.

A STA with dot11OCBActivated equal to true shall not join or start a BSS.

Whenever MAC sublayer and PHY parameters are changed in a STA in which dot11OCBActivated is true,

MAC sublayer and PHY operation shall resume with the appropriate MIB attributes in less than 2 TU.