IEEE P802.11
Wireless LANs

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| DMG coexistence with non-IEEE-802.11 systems |
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Abstract

This document proposes text that establishes normative behaviour for DMG STAs necessary to enable their coexistence with non-IEEE-802.11 systems.

*Modify subclause 11.35 of 802.11-2016 as follows*

**11.35 DMG coexistence with non-IEEE-802.11 systems**

This subclause describes the features available in this standard to improve coexistence of DMG systems with ~~other DMG systems~~ others that operate in the 60 GHz band, including IEEE Std 802.15~~.3c™~~ systems.

The same common channelization that is defined in other ~~DMG standards and~~ specifications for systems that operate in the 60 GHz band is adopted by the DMG PHY specification (20.3.1 and 30.3.4) for 2.16 GHz channels. In regulatory domains where 2 or more channels are defined, a DMG STA should support at least 2 channels.

An AP should not start an infrastructure BSS on a channel where the signal level is at or above aDMGDetectionThres or upon detecting a valid IEEE 802.15.3c™ CMS preamble at a receive level greater than or equal to –60 dBm.

If a DMG STA is capable of performing directional channel measurements (11.32) to detect non-IEEE-Std-802.11 transmissions on a channel, it can report the results of the measurements to the STA’s AP or PCP.

If a DMG STA detects a non-IEEE-802.11 transmission on its channel or if the AP or PCP receives a report (11.11) from a DMG STA on a non-IEEE-802.11 transmission, the following mechanisms might be used to mitigate interference:

* Change operating channel (11.9)
* Beamforming (10.38)
* Reduce transmit power (11.8)
* Perform FST (11.33)
* Move the TBTT (11.31.2), and thus the beacon interval, in the case of an AP or PCP
* Change the schedule of SPs and CBAPs in the beacon interval (9.4.2.132) in the case of an AP or PCP
* Defer transmission for a later time
* For periods of time in the beacon interval where the STA experiences poor channel quality, the STA can use the Traffic Scheduling Constraint Set field within the DMG TSPEC element (9.4.2.134) to request its AP or PCP to avoid scheduling an SP for that DMG STA during those periods of time in the beacon interval.
* In an EDMG BSS, when operating over multiple channels, the occupied bandwidth of a PPDU transmitted by a TXOP holder may be smaller than the occupied bandwidth of the last PPDU (10.36.11.2).

**SP/M: Do you agree to include the text proposed in 17/1289r0 (DMG coexistence with non-IEEE-802.11 systems) into the 802.11ay draft spec?**

**References:**