IEEE P802.11
Wireless LANs

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|  CID237 240 NGV 60 GHz STA definition |
| Date: 2020-9-7 |
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Abstract

This submission proposes resolution of comments related to 60 GHz operation from Comment Collection on TGbd Draft 0.4.

2 CIDs: 237, 240

Revision history:

r0 initial

r1 Removed proposed text change related to MAC bahavior from subclause 9.4.1.16, and revised proposed text in 31.3.2; Updated reference to REVmd D4.0[2] and 11ay D6.0[3]

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Proposed Resolution** |
| 237 | 31.3.1 | 23.64 | Clause 32 should be Clause 31 | as in comment | **Revised**Agree with the commenter in principle. It was fixed as CID183. |
| 240 | 31.3.2 | 24.06 | fill TBD | as in comment | **Revised**TGbd editor to make changes in 11-20-1301r0. |

**Discussion**

**The TBD part in subclause 31.3.2 is to define what kind of MAC frames can be transmitted by a DMG STA communicating data frames outside the context of a BSS.**

1. **Unlike 11p, 60 GHz STA needs to perform beamforming training before initiating transmission of data frames. We propose to specify: “STA may send DMG Beacon frames with discovery mode field set to one.”**
2. **As STAs operating outside the context of a BSS don’t expect existence of an AP or PCP, the STAs shall not transmit MAC frames relate to scheduling. We propose to specify: “The STA may send Control frames, except those of subtype CF-End, Poll, SPR, Grant, Grant Ack, Sector Ack, Block Ack Schedule and TDD Beamforming” in subclause 31.3.2 With the same reason, we propose to specify that a DMG STA uses CBAP, not SP (Service Period, in which scheduling is performed) in OCB mode.**

**We also propose changes to text in clause 4, 9, and B to make consistent with the proposed text above.**

**Proposed changes to D0.3**

***TGbd Editor: Add the following to Draft P802.11bd D0.4 as follows:***

4.3.17 STA transmission of Data frames outside the context of a BSS

*Change the text in NOTE after the first paragraph as follows:*

NOTE—The specific frame subtypes that a STA is allowed to send when it has dot11OCBActivated true are specified in 11.18 (STAs communicating Data frames outside the context of a BSS) and 31.3.2 (DMG STAs communicating Data frames outside the context of a BSS).

***TGbd Editor: Add the following to Draft P802.11bd D0.4 as follows:***

9.4.1.46 DMG Parameters field

*Change the text in Table 9-69 as follows:*

**Table 9-69 – The BSS Type subfield when the Discovery mode field is 1**

|  |  |  |
| --- | --- | --- |
| **Subfield value** | **Responding STA role** | **Applicable BSS types** |
| 3 | AP | Infrastructure BSS |
| 2 | PCP | PBSS |
| 1 | Non-AP STA | PBSS, IBSS, OCB |
| 0 | Any | Infrastructure BSS, PBSS, IBSS, OCB |

31.3 Operation in 60 GHz band

31.3.2 DMG STAs communicating Data frames outside the context of a BSS

***TGbd Editor: Change the first paragraph in 31.3.2 of Draft P802.11bd D0.4 as follows:***

**When dot11OCBActivated is true in a DMG STA, the following applies in addition to description in subclause 11.1~~9~~8 (STAs communicating Data frames outside the context of a BSS):**

1. **~~TBD~~STA may send DMG Beacon frames with the Discovery Mode field set to one, and the CBAP Only and CBAP Source subfields in the DMG Parameters field set to 1 and 0 respectively.**
2. **The STA may send Control frames, except those of subtype CF-End, Poll, SPR, Grant, Grant Ack, Sector Ack, Block Ack Schedule and TDD Beamforming.**

## B.4 PICS proforma—IEEE Std 802.11-2016

*TGbd Editor: Change the text on rows for CFDMG and CFEDMG on the table in subclause B.4.3 of Draft P802.11bd D0.4 as follows.*

**B.4.3 IUT Configuration**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **IUT configuration** | **References** | **Status** | **Support** |
| .. | .. | .. | .. | .. |
| \*CFDMG | Directional multi-gigabit (DMG) PHY | 9.4.2.127 (DMG Capabilities element) | O.2CFDMG: MCFEDMG: MCFTDD: MCFNGV60: M | Yes  No  |
| ... |  |  |  |  |
| \*CFEDMG | Enhanced directional multi-gigabit (EDMG) PHY | 9.4.2.265 (EDMG Capabilities element) | CFEDMG: MCFNGV60: O | Yes  No  |
| ... |  |  |  |  |
| \*CFOCB | Operation outside the context of a BSS(OCB) | 11.1~~9~~8 (STAs communicating Data frames outside the context of a BSS) | O.1CF5G9:MCFNGV:M(CID99)CFNGV60: M | Yes  No  |
| ... |  |  |  |  |
| CFNGV60 | Next Generation V2X (NGV) Operation in 60GHz band | 31.3 (Operation in 60 GHz band) | O | Yes  No  N/A  |
| ... |  |  |  |  |

**Straw Poll:**

* **Do you agree to accept the comment resolution for CIDs 237, 240 in 20/1301r1?**

**References**

[1] Draft P802.11bd D0.4

[2] Draft P802.11REVmd D4.0

[3] Draft P802.11ay D6.0

[4] 11-20/0731r2 Comment Resolution D0.3 CID0099