IEEE P802.11
Wireless LANs

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| LB272 comments DMG comments resolution part 1 |
| Date: 2023.05.xx |
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Abstract

This submission contains the proposed comment resolutions for the CIDs 2068, 2122, 2077 and 2081.

R0: initial document

R1: CID 2077 is deferred.

R2: Resolution for CID 2077 has been revised and provided.

R3: further modified based on online discussion.

## CID 2068

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CID | Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 2068 | 69.20 | 8.3.3.4 | Is the first 'Parameter' in Table 8-4 'EDMG\_MS\_SENSING\_STA\_ID' ? Please double check. | As in comment. | Revised TGbf Editor make changes specified in 0702r1.<https://mentor.ieee.org/802.11/dcn/23/11-23-0702-01-00bf-lb272-comments-dmg-comments-resolution-part-1.docx> |

***Instructions to the editor: please make the following changes to Table 8-4 – Vector desceiption in P69L16 in subclause 8.3.4.4 Vector descriptions in D1.0 as follows:***

**Table 8-4—Vector descriptions**

|  |  |  |
| --- | --- | --- |
| Parameter | Assocated vector | Value |
| EDMG\_MS\_SENSING\_STA\_ID | PHYCONFIG\_VECTOR | Sets to a non zero value between 1 and 8 to indicate that the next PPDU to be received is an EDMG multistatic sensing PPDU and that this STA is assigned the $(r-1)^{th}$ STA ID. Set to 0 if the next PPDU is not expected to be an EDMG multistatic sensing PPDU. |
| EDMG\_MS\_SENSING\_NSTA | PHYCONFIG\_VECTOR | Set to the number of STAs that are the intended recipients of the next EDMG multistatic sensing PPDU. |

## CID 2122

|  |  |  |  |  |  |
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| CID | Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 2122 | 199.08 | 11.55.3.3 | In 11bf DMG sensing, the DMG multistatic sensing initiator is only capable of sensing transmitter role and the DMG multistatic sensing responder is only capable of sensing receiver role. | As in comment. | Revised TGbf Editor make changes specified in 0702r1.<https://mentor.ieee.org/802.11/dcn/23/11-23-0702-01-00bf-lb272-comments-dmg-comments-resolution.docx> |

***Instructions to the editor: please make the following changes to the paragraphs from P199L8 to P199L14 in the subclause 11.55.3.3 DMG sensing session setup in D1.0 as follows:***

The sensing initiator of the DMG sensing type multistatic shall be capable of the sensing transmitter role.

The sensing responder of the DMG sensing type multistatic shall be capable of the sensing receiver role.

## CID 2077

|  |  |  |  |  |  |
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| CID | Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 2077 | 202.30 | 11.55.3.5 | Number of STAs in Instance in the DMG sensing instances belong to the same Burst ID can be different to enable different 'PRF' for different DMG sensing stations. | As in comment. | Revised TGbf Editor make changes specified in 0702r1.<https://mentor.ieee.org/802.11/dcn/23/11-23-0702-01-00bf-lb272-comments-dmg-comments-resolution.docx> |

**Discussion**

As the comment states, there is no need to fix the Number of STA in Instance within a DMG burst. The number of sensing responder in different DMG Sensing instance may be different. Based on this, different DMG sensing STAs in a DMG burst may achieve different PRFs to monitor different targets with appropriate computation/report overhead. This will enhance the flexibility of the DMG sensing burst.

**Discussion end**

Discussion 1

DMG sensing session is setup individually with different DMG sensing responder(s). To assign different PRFs to different sensing responders, sensing initiator could assign different sensing parameters for different sensing responders. This is already supported in current spec, so the descriptions of DMG burst shall be revised accordlingly.

For example, for the same DMG burst, DMG sensing intiator could set the intra burst to 2 and Number of Instances per Burst to 3 for STA A, set the set the intra burst to 1 and Number of Instances per Burst to 6 for STA B. In this case, under the same burst, STA A’s PRF is half of the STA B. In this case, the parameters transmitted to STA A in different DMG sensing exchanges are fixed, because all the DMG sensing exchanges STA A participates (i.e. Sensing Exchange ID 1,3 and 5) have 2 sensing responders (i.e. STA A and STA B). However, DMG sensing exchange 2, 4 and 6 only have one participator(STA B). In this case, parameters such as STA ID, Number of STAs in Instance, EDMG TRN Length and EDMG TRN-Unit M cannot be fixed and shall be adjusted accordingly in different DMG sensing exchanges belong to the same DMG sensing burst.

Discussion 1 end

***Instructions to the editor: please make the following changes to the paragraphs from P165L37 to P165L54 in the subclause 11.55.3.5 DMG Sensing Burst in D1.1 as follows:***

— The following parameters defined in the DMG Sensing Request frame transmitted to the same sensing responder shall be the same among all DMG sensing exchanges belonging to the same Measurement Burst ID:

• Sensing Type

• First Beam Index

• Num of PPDUs in Instance

• RX TRN-Units per Each TX TRN-Unit

• EDMG TRN-Unit P

• EDMG TRN-Unit N

• TRN field Sequence Length

• BW

• Num of Absent Instances

* The Number of STAs in Instance may vary among the DMG sensing exhanges belonging to the same Measurement Burst ID. In this case, STA ID, EDMG TRN Length and EDMG TRN-Unit M in different DMG sensing exchanges shall vary accordlingly (# 2077).

## CID 2081

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| CID | Page.Line | Clause Number | Comment | Proposed Change | Resolution |
| 2081 | 212.09 | 11.55.3.6.4 | In coordianted bistatic DMG sensing, it looks like the DMG Sensing Request/Response frames are redundant. All the information can be exchanged by BRP frame. So, why DMG Sensing Request/Response frames are needed for coordinated bistatic DMG sensing? | As in comment. | Rejected. Based on the previous discussions, the exchange of DMG Sensing Request/Response is needed to get a TXOP for the coordinated DMG sensing instance. |

# SP

Do you support resolutions to the following CIDs and incorporate the text changes into the latest TGbf draft: 2068, 2122and 2081 in 11-23/0702r1?

Y/N/A

Do you support resolutions to the following CIDs and incorporate the text changes into the latest TGbf draft: 2077 in 11-23/0702r3?

Y/N/A