IEEE P802.11
Wireless LANs

|  |
| --- |
| LB272 Resolutions for DMG Coordinated Monostatic Sensing |
| Date: June 2, 2023 |
| Author(s): |
| Name | Affiliation | Address | Phone | Email |
| Ning Gao | OPPO |  |  | gaoning1@oppo.com |
|  |  |  |  |
|  |  |  |  |

Abstract

This submission proposes resolutions to the following CIDs:

* 1303, 1304, 1305, 1390, 1391, 1392, 1485, 1486.

The text used as reference is 802.11bf D1.0.

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Revise the resolution of CID 1391 and CID 1392.
* Rev 2: Correct typos.
* Rev 3: Revise the resolution of CID 1390.
* Rev 4: Correct the revision number.

**Comments:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 1303 | 11.55.3.6.2.2 | 205.14 | ‘shall start to send one or more DMG monostatic sensing PPDUs' is inappropriate. | change it as 'shall start to send the first DMG monostatic sensing PPDU' | **Accepted.** |
| 1304 | 11.55.3.6.2.3 | 207.63 | The 'DMG Sensing Measurement Setup Response frame' is not correct. | Replace it with the 'DMG Sensing Response frame' | **Accepted.** |
| 1305 | 11.55.3.6.2.3 | 207.64 | The 'DMG Sensing Measurement Setup Request frame' is not correct. | Replace it with the 'DMG Sensing Request frame' | **Accepted.** |
| 1390 | 11.55.3.6.2.1 | 207.20 | "Then, the sensing initiator proceed initiation phase, sounding phase, and reporting phase with STA B" - missing article | replace with "Then,the sensing initiator proceed with the initiation phase, sounding phase, and reporting phase with STA B" | **Revised.**Agree with the commenter in principle.TGbf Editor make changes as in doc.: 11-23/0910r4 under the CID 1390. |

**11.55.3.6.2 Coordinated monostatic DMG sensing instance**

**11.55.3.6.2.3 Parallel coordinated monostatic DMG sensing instance**

***TGbf Editor: Please revise the following paragraph as below.***

…

Then, the sensing initiator proceeds with the initiation phase, sounding phase, and reporting phase with STA B.

…

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1391 | 11.55.3.6.2.3 | 207.60 | "Each sensing responder shall not respond with the DMG Sensing Response frame to the sensing initiator later than a SIFS after the request." - use positive language | replace with "Each sensing responder shall respond with the DMG Sensing Response within SIFS after the request" | **Revised.**Agree with the commenter in principle.TGbf Editor make changes as in doc.: 11-23/0910r4 under the CID 1391. |
| 1392 | 11.55.3.6.2.3 | 207.61 | "If the sensing initiator does not receive a DMG Sensing Measurement Setup Response frame within SIFS after a DMG Sensing Request frame, it shall not send the next DMG Sensing Measurement Setup Request frame until theduration of a DMG Sensing Response frame plus 2 x SIFS after the DMG Sensing Request frame" - wrong frame names | replace with "If the sensing initiator does not receive a DMG Sensing Response frame within SIFS after a DMG Sensing Request frame, it shall not send the next DMG Sensing Request frame until theduration of a DMG Sensing Response frame plus 2 x SIFS after the DMG Sensing Request frame" | **Revised.**Agree with the commenter in principle.TGbf Editor make changes as in doc.: 11-23/0910r4 under the CID 1392. |

**11.55.3.6.2 Coordinated monostatic DMG sensing instance**

**11.55.3.6.2.3 Parallel coordinated monostatic DMG sensing instance**

***TGbf Editor: Please revise the following paragraph as below.***

…

* In the initiation phase, the sensing initiator shall send a DMG Sensing Request frame to each intended sensing responder to request them to participate in the coordinated monostatic DMG sensing instance. The STA ID field of the DMG Setup Request frame shall indicate the order of DMG Sensing Request frames and the Monostatic Sounding Mode field shall be set to 0 to identify the parallel sounding mode. Each sensing responder shall respond with the DMG Sensing Response frame a SIFS after the request. If the sensing initiator does not receive a response within the duration of a DMG Sensing Response frame plus a SIFS after a DMG Sensing Request frame, it shall send the next DMG Sensing Request frame the duration of a DMG Sensing Response frame plus 2 × SIFS after the DMG Sensing Request frame.(#1391, #1392)

…

* In the reporting phase, if the reports are needed (see 9.4.2.325 (DMG Sensing Measurement Setup element)), the sensing initiator shall send a DMG Sensing Poll frame to each sensing responder for the report in order of the STA ID field. Each sensing responder shall respond with a DMG Sensing Measurement Report frame to the sensing initiator a SIFS after the DMG Sensing Poll frame. The sensing initiator shall send the first DMG Sensing Poll frame the largest Sounding Duration plus a SIFS and a BRPIFS after the last DMG Sensing Response frame. (#1391)

…

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1486 | 11.55.3.6.2.1 | 204.52 | "If a report is configured in the DMG sensing instance," It contradicts with the previous rule" "The reporting phase is mandatory if the sensing responder is in the sensing receiver role and in the sensing transmitter and sensing receiver role." | Resolve the contradiction | **Rejected.**In the subclause 11.55.3.7 DMG sensing measurement reporting, it is described that if the sensing initiator requested sensing types 3, 5, 6 or 7 (that is, sensing types that include Doppler), sensing responders provide a report for the whole burst at the end of the burst. Therefore, the reporting phase is not mandatory when the sensing responder is in the sensing receiver role. It also depends on the sensing report type. |
| 1485 | 11.55.3.6.2.1 | 204.30 | It includes"... one or more of the following phases: Initiation phase, sounding phase, and reporting phase." It contradicts with the ruled presented in 11.55.3.6.1 General. | Replace with "It includes the following phases: Initiation phase, sounding phase, and reporting phase." | **Revised.**Agree with the commenter in principle.TGbf Editor make changes as in doc.: 11-23/0910r4. |

**11.55.3.6.2 Coordinated monostatic DMG sensing instance**

**11.55.3.6.2.1 General**

***TGbf Editor: Please revise the following paragraph as below.***

A coordinated monostatic DMG sensing instance is a DMG sensing instance of a DMG sensing procedure of sensing type Coordinated Monostatic. It can be performed in two modes: Sequential and parallel. It includes an initiation phase, a sounding phase, and may include a reporting phase.

SP: Move to approve resolutions to CIDs 1303, 1304, 1305, 1390, 1391, 1392, 1485, 1486 as specified in doc.: 11-23/0910r4 and incorporate the text changes into the latest TGbf draft.