IEEE P802.11
Wireless LANs

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |
| --- |
| LB 272 CR for CIDs on Sensing Measurement Setup – Part 1 |
| Date: 2023-03-31 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Mahmoud Kamel | InterDigital |  |  | mahmoud.kamel@interdigital.com |
| Rui Yang | InterDigital |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

 |

Abstract

This submission proposes resolutions for19 CIDs (1009, 1534, 1996, 2239, 1101, 1282, 1496, 1560, 1103, 1548, 1549, 2109, 1105, 1106, 1428, 1429,1550, 1551, 1863) in subclause 11.55.1.4 in P802.11bf D1.0:

NOTE – Set the Track Changes Viewing Option in the MS Word to “All Markup” to clearly see the proposed text edits.

**Revision History:**

R0: Initial version

R2: Updated resolutions to CIDs: 1101, 1282, 1496, 1560, included CID 1429, and added some editorial changes.

## CIDs: 1009, 1534, 1996, 2239

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 1534 | 11.55.1.4 | 172.56 | The text is referring to a single setup | Change the text to "... shall not attempt to initiate sensing measurement setups more than the value of ..." | **Accept** |
| 1009 | 11.55.1.4 | 172.55 | Singular-plural conflict | Change "setup" to "setups" in "A sensing initiator shall not attempt to initiate more sensing measurement setups than..." | **Revise**Agree in principle with the comment and the changes are applied according to CID 1534. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 2239 | 11.5.1.4 | 172.56 | it should be plural form of "setup" | A sensing initiator shall not attempt to initiate more sensing measurement setups than the value of the Max number of Supported Setups subfield... | **Revise**Agree in principle with the comment and the changes are applied according to CID 1534. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 1996 | 11.55.1.4 | 172.57 | Sentence reads "A sensing initiator shall not attempt to initiate more sensing measurement setup". Please change setup to plural "setups". | As in comment | **Revise**Agree in principle with the comment and the changes are applied according to CID 1534. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |

***TGbf editor: please make the following change in subclause 11.55.1.4, P172L56.***

A sensing initiator shall transmit a Sensing Measurement Setup Request frame to a sensing responder with

which it intends to initiate a sensing measurement setup. A sensing initiator shall not attempt to initiate sensing measurement setups more (#1009, #1534, #1996, #2239) than the value of the Max number of Supported Setups subfield in the last Sensing element received from the sensing responder.

## CIDs: 1101, 1282, 1496, 1560

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 1101 | 11.55.1.4 | 172.60 | The Sensing Measurement Setup Request frame is, by definition, always sent by a sensing initiator. | Replace text with: "... if any of the following is true: - the frame is sent by a non-AP STA - the frame is sent by an AP and the frame is addressed to a non-AP STA that is associated with the sender. | **Revise**Agree in principle with the comment, some editorial changes are added. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 1560 | 11.55.1.4 | 172.60 | There should be a third case where The Comeback subfield of the Sensing Comeback Info field within the Sensing Measurement Setup Request frame shall be set to 0. This case is when the non-AP STA is unassociated with the AP, is a sensing responder, and the Sensing Measurement SetupRequest frame is solicited by a Sensing Measurement Setup Query frame | Add a third bullet with the text " the AP is a sensing initiator and transmits the frame to a sensing responder unassociated with the AP and the Sensing Measurement SetupRequest frame is solicited by a Sensing Measurement Setup Query frame" | **Revise**Agree in principle with the comment, some editorial changes are added. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 1282 | 11.55.1.4 | 172.63 | If the Comeback subfield of the Sensing Comeback Info field is set to 0, the other subfields of the sensing comeback Info field should be reserved, please add it somewhere in the subclause. | as in the comment | **Reject**How the other subfields of the Sensing Comeback Info field will be set in this case is already specified in 11bf D1.0 P145L3 and P145L14 |
| 1496 | 11.55.1.4 | 172.65 | Clarify sensing responder | Change "sensing responder" to "sensing responder non-AP STA" | **Revise**Agree in principle with the comment and the changes are applied according to CID 1101.TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |

***TGbf editor: please make the following change in subclause 11.55.1.4, P172L60.***

The Comeback field of the Sensing Comeback Info field within the Sensing Measurement Setup Request

frame shall be reserved if any of the following is true:

— the frame is sent by a non-AP STA (#1101),

— the frame is sent by an AP and is addressed to a non-AP STA that is associated with this AP (#1101)..

The Comeback field of the Sensing Comeback Info field within the Sensing Measurement Setup Request

frame shall be set to 0 if the frame is sent by an AP and is addressed to an unassociated non-AP STA and includes the Sensing Measurement Parameters element (#1560).

The Comeback field of the Sensing Comeback Info field within the Sensing Measurement Setup Request

frame shall be set to 1 if the frame is sent by an AP and is addressed to an unassociated non-AP STA and does not include the Sensing Measurement Parameters element (#1560).

**NOTE – The Comeback field is only applicable for sensing measurement setups with unassociated non-AP STAs**

## CID: 1103

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 1103 | 11.55.1.4 | 173.31 | ... the measurement setup of the granted Measurement Setup ID shall not..." Granted doesn't follow since the text refers to an unsuccessful SM Setup Request. | Delete "of the granted Measurement Setup ID". | **Accept** |

***TGbf editor: please make the following change in subclause 11.55.1.4, P173L31.***

If no Sensing Measurement Setup Response frame is received within this time period, or if a Sensing Measurement Setup Response frame is received with a status code other than SUCCESS, the measurement setup (#1103) shall not be resumed and is considered unsuccessful.

## CIDs: 1548, 1549, 2109

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 1548 | 11.55.1.4 | 173.55 | The Poll Assigned is not a subfield | Change the text to " ... by setting the Poll Assigned field ..." | **Accept** |
| 1549 | 11.55.1.4 | 173.56 | The Poll Assigned field is not in the Sensing Measurement Parameters field. | Change the text to " ... by setting the Poll Assigned field in theTB Sensing Specific subelement in the Sensing Measurement Setup Request frame to 1." | **Revise**Agree in principle with the comment, some editorial changes are added. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 2109 | 11.55.1.4 | 173.56 | Poll assigned is not in Sensing Measurement Parameters field, it's in Sensing Measurement Parameters element ->subelement field | change to "Sensing Measurement Parameters element" | **Revise**Agree in principle with the comment, some editorial changes are added. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |

***TGbf editor: please make the following change in subclause 11.55.1.4, P173L55***

If the sensing responder is an unassociated non-AP STA, the sensing initiator shall assign the sensing responder to be polled in the TB sensing measurement instance by setting the (#1548) Poll Assigned (#1548) field in the TB Sensing Specific subelement (#1549) of the Sensing Measurement Parameters element (#2109) in the Sensing Measurement Setup Request frame to 1.

## CIDs: 1105, 1106, 1428, 1429, 1550, 1551, 1863

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page.Line** | **Comment** | **Proposed Change** | **Resolution** |
| 1105 | 11.55.1.4 | 174.11 | Paragraph must be completed by adding normative text that specifies that SM Report frames shall not be sent if reporting is not requested. | As suggested. | **Reject**There is no need to specify the case where the SM Report is not requested for TB case since the initiator will not trigger the the non-AP STA to collect the report if the report is not needed . TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 1106 | 11.55.1.4 | 174.20 | If I'm not missing anything, I believe the normative behavior defined in this paragraph is also valid for the TB case. If so, extend the paragraph in 174.6-11 to include normative text that specifies that SM Report frames shall not be sent if reporting is not requested. | As suggested. | **Revise**Agree in principle with the comment. Since this behavior is the expected behavior for both TB and non-TB cases, the paragraphs at P174L7-L11 and P174L21-24 are merged to cover both cases whether the SM reports are requested or not requested. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 1428 | 11.55.1.4 | 174.14 | The whole purpose of doing WLAN sensing is to obtain sensing measurements based on WLAN signals. It sounds unreasonable that y there is an option of setting the Sensing Measurement Report Requested subfield to 0 such that Sensing Measurement Report frames are not sent. | Add a explanatory note in either the element section (P.110) or the overview section (P.174) or both that, whether the Sensing Measurement Report Requested subfield is set to 0 or 1, the sensing measurements are available locally to SME in the sensing receiver for WLAN sensing. And sensing measurements reported to sensing initiator are available to SME in the sensing initiator for WLAN sensing. | **Revise**Agree in principle with the comment. A text is added to clarify this. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 1429 | 9.4.2.319 | 110.19 | The whole purpose of doing WLAN sensing is to obtain sensing measurements based on WLAN signals. It sounds unreasonable that there is an option of setting the Sensing Measurement Report Requested subfield to 0 such that Sensing Measurement Report frames are not sent. | Add a explanatory note in either the element section (P.110) or the overview section (P.174) or both that, whether the Sensing Measurement Report Requested subfield is set to 0 or 1, the sensing measurements are available locally to SME in the sensing receiver for WLAN sensing. And sensing measurements reported to sensing initiator are available to SME in the sensing initiator for WLAN sensing. | **Revise**Agree in principle with the comment. A text is added to clarify this. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 1550 | 11.55.1.4 | 174.17 | The Poll Assigned field is not in the Sensing Measurement Parameters field. | Change the text to " ... by setting the Poll Assigned field in theTB Sensing Specific subelement in the Sensing Measurement Setup Request frame to 1." | **Revise**Agree in principle with the comment, some editorial changes are added. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |
| 1551 | 11.55.1.4 | 174.17 | The Poll Assigned is not a subfield | Change the text to " ... by setting the Poll Assigned field ..." | **Accept** |
| 1863 | 11.55.1.4 | 174.13 | The paragraph is related only to TB sensing measurement instances | Add: "In TB sensing measurement instances, " at the beginning of the paragraph | **Revise**Agree in principle with the comment. The text specifying the behavior for non-TB is merged with this paragraph and made general. TGbf editor: please incorporate changes shown in 11-23/0474r1 below. |

***TGbf editor: please make the following change in subclause 11.55.1.4, P174L11***

In both TB and non-TB sensing measurement instances, if a sensing initiator assigns in a Sensing Measurement Setup Request frame the role of sensing receiver to the sensing responder and sets the Sensing Measurement Report Requested field to 1, the sensing responder shall send Sensing Measurement Report frames in sensing measurement instances that result from the sensing measurement setup( #1106, #1863).

In non-TB sensing measurement instances, if a sensing initiator assigns in a Sensing Measurement Setup

Request frame the role of sensing receiver to the sensing responder and sets the Sensing Measurement

Report Requested field to 0, the sensing responder shall not send Sensing Measurement Report frames in

sensing measurement instances that result from the sensing measurement setup.

Whether the sensing measurement report is requested or not, the sensing measurements are available locally to the SME of the sensing receiver (see (6.3.136.11 MLME-SENSTBREPORT.indication) and (6.3.136.16 MLME-SENSNTBREPORT.indication)) (#1428, #1429).

If a sensing initiator assigns in a Sensing Measurement Setup Request frame only the role of sensing receiver to the sensing responder and sets the Sensing Measurement Report Requested subfield to 0, the sensing initiator shall also assign the sensing responder to be polled in the TB sensing measurement instance by setting the Poll Assigned field in the TB Sensing Specific subelement of the Sensing Measurement Parameters element in the Sensing Measurement

Setup Request frame to 1 (#1550, #1551).