IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Comment Resolution for CIDs Related to TB Sensing Measurement Instance | | | | |
| Date: 2022-06-29 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Chris Beg | Cognitive Systems | Waterloo ON, Canada |  | chris.beg@cognitivesystems.com |
|  |  |  |  |  |

Abstract

This document proposes resolutions to the following CC40 CIDs: 125, 863, 866, 167, 92, 169, 195, and 625.

R0: Initial resolution proposals.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 125 | 11.21.18.6.2 | 69.62 | "all the STAs that will use the NDP sent by the AP." is a bit vague. Any STA can "use" the NDP for any purpose it wants, even if it's not included in the STA Info fields of the NDPA. | Clarify | Revised  Clarifying text added. |
| 863 | 11.21.18.6.2 | 69.62 | Unclear intent | Change text to: "The STA Info fields within the Sensing NDP Announcement frame specify all the STAs that will use the NDP sent by the AP to perform sensing measurements." | Revised  Clarifying text added. |

***TGbf Editor: Modify the text in 69.58-62 as follows:***

The AP shall transmit a Sensing NDP Announcement frame to one or more STAs that are sensing receivers

and that have responded in the polling phase of the TB sensing measurement instance, followed by Initiator-to-

Responder (I2R) NDP transmission after a SIFS. The STA Info fields within the Sensing NDP Announcement frame specify ~~all the~~ STAs that will use the NDP sent by the AP to perform sensing measurements (#125, #863).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 866 | 11.21.18.6.3 | 70.13 | Unclear intent | Change text to: "Any STA addressed by a User Info field in a Sensing Sounding Trigger frame shall transmit an NDP one SIFS after receiving the Sensing Sounding Trigger frame." | Accept  Modified as proposed. |

***TGbf Editor: Modify the text in 70.9-16 as follows:***

The AP shall transmit a Sensing Sounding Trigger frame to one ore more STAs that are sensing transmitters

and that have responded in the polling phase of the TB sensing measurement instance to solicit Responderto-

Initiator (R2I) NDP transmission(s). The Sensing Sounding Trigger frame shall allocate uplink resources

for one or more STA’s R2I NDP transmission covering the full bandwidth. Any STA addressed by a User

Info field in a Sensing Sounding Trigger frame shall transmit an NDP one SIFS after receiving the Sensing Sounding Trigger frame (#866).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 167 | 11.21.18.6.4 | 70.26 | There are some scenarios where the reporting phase is not the last phase of a TB sensing measurement instance (See Example 2 and Example 5 in Figure 11-41c). | Change the sentence to "The reporting phase is the last phase of some TB sensing measurement instances." | Revised  Agree with commentor.  Added “in some scenarios” to beginning of sentence. |

***TGbf Editor: Modify the text in 70.26-27 as follows:***

In some scenarios, the ~~The~~ last phase of a TB sensing measurement instance is the reporting phase (#167). In the reporting phase of a TB sensing measurement instance, sensing measurement results are reported.

| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- | --- |
| 92 | 11.21.18.6.4 | 70.33 | The text in this paragraph can be simplified given that the reporting phase only occurs if the AP/sensing initiator acted as a sensing transmitter in the sensing measurmement instance in which measurements were taken. As a result, the constructions "sensing transmitter which is a sensing initiator" and "sensing receiver which is a sensing responder" are not necessary and can be simplified (with "sensing initiator" and "sensing receiver", respectively). Also, although this is implicitly defined, explicitly defining that the reporting phase is only present if the AP/sensing initiator acted as a sensing transmitter in the sensing measurmement instance in which measurements were taken. | Replace the paragraph with: "When negotiated, the sensing initiator shall send a Sensing Trigger Report frame during the reporting phase and assign RUs to the sensing responder to obtain a Sensing Measurement Report frame containing sensing measurement results. The sensing responder shall provide a Sensing Measurement Report frame in the assigned RUs with either results obtained from the I2R NDP of the current measurement instance, when negotiated to deliver immediate feedback reporting, or results obtained from the I2R NDP of the previous measurement instance, when negotiated to deliver delayed feedback reporting. Sensing measurement results obtained in a sensing measurement instance are only reported if the sensing initiator assumed the role of sensing transmitter in the instance, and if reporting was requested in the Sensing Measurement setup phase." | Revised  Agree with commentor. Several comments applicable to the same subclause were combined. |
| 169 | 11.21.18.6.4 | 70.39 | "obtained from the I2R NDP of the previous measurement instance ... ". If we intend to allow for delayed feedback reporting, then we should enable it not only for the immediate previous measurement instance, but probably for earlier measurement instances. | change 'instance' to 'instances' i.e.., rephrase the sentence to be "obtained from the I2R NDP of the previous measurement instances ... " | Revised  Agree with commentor. Several comments applicable to the same subclause were combined. |
| 195 | 11.21.18.6.4 | 70.33 | Regarding "When negotiated, the sensing transmitter which is a sensing initiator shall send a Sensing Trigger Report frame...": This may not be fully correct when there is responder-to-responder sensing in a TB sensing measurement instance, where the sensing initiator, which is an AP, is neither the sensing transmitter nor receiver. Nonetheless, if negotiated, in this scenario the sensing initiator still needs to transmit a Trigger frame to solicit measurement report from the sensing receiver. | Remove the sensing transmitter wording since it may not always be true, particularly when there is respodner-to-responder sensing. That is, change the sentence to "When negotiated, the sensing initiator shall send a Sensing Trigger Report frame...". | Revised  Agree with commentor. Several comments applicable to the same subclause were combined. |
| 625 | 11.21.18.6.4 | 70.33 | It's not clear what has been negotiated, report or not, or need the trigger or not? | Change "When negotiated" to "When 'obtain report' subfield in the corresponding measurement setup parameters is set to 1" | Revised  Agree with commentor. Clarifying text aligned with the action frames as described in 802.11bf D0.1 added. Several comments applicable to the same subclause were combined. |

***TGbf Editor: Modify the text in 70.33-41 as follows:***

When the Sensing Measurement Report subfield in the Sensing Measurement Parameters field of the Sensing Measurement Parameters associated with the relevant Measurement Setup ID is set to 1~~negotiated~~, the sensing ~~transmitter which is a sensing~~ initiator shall send a Sensing Trigger Report frame during the reporting phase and assign RUs to the sensing ~~receiver which is a sensing~~ responder to obtain a Sensing Measurement Report frame containing sensing measurement results (#195, #625). The sensing ~~receiver which is a sensing~~ responder shall provide a Sensing Measurement Report frame in the assigned RUs with either results obtained from the I2R NDP of the current measurement instance, when negotiated to deliver immediate feedback reporting, or results obtained from ~~the~~ one or more I2R NDP of the previous measurement instances, when negotiated to deliver delayed feedback reporting (#169). Sensing measurement results obtained in a sensing measurement instance are only reported if the sensing initiator assumed the role of sensing transmitter in the instance, and if reporting was requested in the Sensing measurement setup phase (#92).

**References:**

[1] Draft P802.11bf\_D0.1