IEEE P802.11
Wireless LANs

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| Comment Resolution for CIDs Related to TB Sensing Measurement Instance |
| Date: 2022-07-12 |
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Abstract

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

R0: Initial resolution proposals.

R1: Feedback from offline discussion with commentators included. Removed CID #169.

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| **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 | RevisedClarifying 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." | RevisedClarifying 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).

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| **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 |

**Notes:**

By accepting CID #866, the text in P70.9-16 will be modified 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).

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| 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." | RevisedAgree 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...". | RevisedAgree 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" | RevisedAgree 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. |

**Notes:**

Document 22-0931-02 details a modification to 70.29-41 to address editorial changes as follows:

The reporting phase is only present if the Sensing Measurement Report subfield within the Sensing Measurement Setup Request frame that resulted in the TB sensing measurement instance is set to 1.  In this case, the ~~The~~ transmission of Sensing Measurement Report frame is initiated by an MLME primitive. The sensing measurement reporting can be either immediate or delayed.

~~When negotiated, the~~In the reporting phase, 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. The sensing receiver which is a sensing responder shall ~~provide~~ send 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

Considering this modification when addressing CID 195/625, a portion of the text requested by CID 625 was already to the first paragraph above. However, a slight modification has been made to make the text normative.

***TGbf Editor: Modify the text in 70.29-41 as follows:***

The reporting phase ~~is only~~ shall be present if the Sensing Measurement Report subfield within the Sensing Measurement Setup Request frame that resulted in the TB sensing measurement instance is set to 1.  In this case, the ~~The~~ transmission of Sensing Measurement Report frame ~~is~~ shall be initiated by an MLME primitive. The sensing measurement reporting ~~can~~ may be either immediate or delayed.

~~When negotiated, the~~In the reporting phase, the sensing ~~transmitter which is a sensing~~ initiator shall send a Sensing Trigger Report frame ~~during the reporting phase and~~ assigning RUs to one or more ~~the~~ sensing ~~receiver which is a sensing~~ responder(s) inorder 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 I2R NDP of the previous measurement instances, when negotiated to deliver delayed feedback reporting. Sensing measurement results obtained in a sensing measurement instance are only reported if the sensing responder assumed the role of sensing receiver in the instance, and if reporting was requested in the measurement setup phase (#92).

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| 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 |

**Notes:**

* Given proposed text in 70.33-41 highlighted above, text in 70.26-27 does not add information.
* Point highlighted by commentator regarding ordering of phases is compensated for in 70.33-41 text, as it simply states“in the reporting phase”.
* Proposal to completely remove 70.26-27.

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

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

**References:**

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

[2] 11-22-0931-02-00bf-resolutions-for-editorial-comments-in-cc40-part-4.docx