IEEE P802.11
Wireless LANs

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| Resolutions for SBP Comments in CC40 - Part 3  |
| Date: 2022-11-10 |
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Abstract

This submission proposes resolutions to comments submitted in CC40. The CIDs are referring to D0.1. The text used as reference is D0.4.

CIDs covered in this document include: 300 479 303 319 502 574

Revision history:

R0: Original version

R1: Changed the resolution of CID 574 based on feedback received offline.

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| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 300 | 9.6.7.1 | 57.19 | It would be better to define a new frame types exclusively for SBP procedure Reporting to avoid confusion with sensing measurement reports, e.g.. if the sensing measurement ID used for SBP is also used for other sensing measurement setup between the SBP Initiator and SBP Responder (AP). | Define a new frame types (E.g., SBP Report) and its protected dual, exclusively for SBP procedure Reporting. The format can be based on that of Sensing Measurement Report frame with customization for SBP, if needed. |
| 479 | 11.21.19.3 | 73.36 | Editor's Note: An SBP initiator defines in theSBP Request frame whether sensing receiver(s) in the requested WLAN sensing procedure shall send or not send Sensing Measurement Report frames. | We need to define the Measurement Report frame from the SBP responder to the SBP initiator, as well. |

**Proposed resolution**: CID 300, 479: Revised.

**Discussion**: In D0.4, we already created a dedicated frame, the SBP Report frame, to provide the measurement report from the SBP responder to the SBP initiator. Therefore, no further changes are needed.

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| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 303 | 9.6.7.53 | 60.26 | It is not clear how the STAs/links are selected for the sensing measurement related to SBP procedure. Since the SBP Initiator would have more knowledge of the links that are most suitable for the sensing applications, it should be able to specify conditions to choose the STAs/links to be used for sensing measurements, in the SBP Request frame. | Add signaling to enable the SBP Initiator to specify conditions (e.g., link metrics, STA IDs, STA location/capabilities etc.) to choose the STAs/links to be used for sensing measurements, in the SBP Request frame. |
| 319 | 11.21.19.2 | 73.1 | It is not clear how the STAs/links are selected for the sensing measurement related to SBP procedure. Since the SBP Initiator would have more knowledge of the links that are most suitable for the sensing applications, it should be able to specify conditions to choose the STAs/links to be used for sensing measurements, in the SBP Request frame. | Add signaling to enable the SBP Initiator to specify conditions (e.g., link metrics, STA IDs, STA location/capabilities etc.) to choose the STAs/links to be used for sensing measurements, in the SBP Request frame. Also specify how the SBP Responder selects the STAs/links based on those conditions. |

**Proposed resolution**: CID 303, 319: Revised.

**Discussion**: In DCN1396r5 that is ready for motion, we already designed the SBP Request frame, and the following fields are used to provide information on how to select sensing responders for the WLAN sensing procedure triggered by the SBP request.

* SBP Parameters element
	+ In this element, the SBP initiator can provide its preferences on Number of Sensing Responders, Mandatory Number of Responders, Preferred Responder List, Number of Preferred Responders, and Mandatory Preferred Responder to the SBP responder, which the SBP responder can take into account when determining the set of STAs it would like to choose to satisfy the SBP request.
* Sensing Measurement Parameters element
	+ In this element, the SBP initiator can provide its preferences on a set of parameters that will be used in the triggered WLAN sensing procedure used to satisfy the SBP request, including BW, number of SS, etc. The SBP responder can use these metrics to determine the set of STAs it would like to choose to satisfy the SBP request. One example is that if the SBP initiator indicates it would like the triggered WLAN sensing procedure to use 160 MHz in sensing measurement instances, the SBP responder will likely not choose to involve a STA that is not 160 MHz capable in the triggered WLAN sensing procedure.

Therefore, no further changes are needed.

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| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 502 | 11.21.19.2 | 73.36 | Regarding the Editor's Note, whilst the intention here is understandable, would only SBP initiator be able to decide whether sensing receiver(s) in the requested WLAN sensing procedure shall send or not send Sensing Measurement Report frames, or can the SBP responder override the decision or respond with different decision to the SBP initiator? Need to clarify that and specify how it works accordingly. | As in comment. |

**Proposed resolution**: Revised.

**Discussion**: In DCN1396r5 that is ready for motion, we have the following rule:

The SensingMeasurementParameter parameter within the MLME-SENSMSMTSETUP.request primitive issued to initiate a WLAN sensing procedure used to satisfy a SBP request shall be identical to the SensingMeasurementParameter parameter within the corresponding MLME-SBP.request primitive.

As a result, once the SBP responder accepts the SBP request from the SBP initiator, it is not allowed to override the decision on the value of the Sensing Measurement Report Requested subfield within the Senisng Measurement Parameters element in the SBP request frame. So, no further changes are needed.

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| **CID** | **Clause** | **Page** | **Comment** | **Proposed change** |
| 574 | 11.21.19.2 | 73.21 | It is not clear whether the same procedure(i.e. TB and non-TB) of the WLAN sensing procedure is used for the SBP. Clarify it and if the sensing measurement procedure is not the same, define the sensing measurement procedure for the SBP. | As in Comment. |

**Proposed resolution**: Revised.

**Discussion**: In D0.4, we already have the following rule:

An SBP responder that sends an SBP Response frame with Status Code field set to SUCCESS should initiate a WLAN sensing procedure with one or more non-AP STAs using operational parameters derived from those indicated within the SBP Request frame that requested the SBP procedure. The SBP responder shall be the sensing initiator of the WLAN sensing procedure.

Therefore, the SBP responder, which is an AP, is the sensing initiator of the triggered WLAN sensing procedure. As a result, only TB sensing measurement instances can be used in the triggered WLAN sensing procedure. This should be clear from the fact that the SBP responder AP is the sensing initiator of the triggered WLAN procedure. However, to make this point more explicit, we can add a note.

***TGbf editor, make the following changes in the spec:***

**11.55.2 SBP procedure**

**11.55.2.2 Setup**

***3rd paragraph***

An SBP responder that sends an SBP Response frame with Status Code field set to SUCCESS should initiate a WLAN sensing procedure with one or more non-AP STAs using operational parameters derived from those indicated within the SBP Request frame that requested the SBP procedure. The SBP responder shall be the sensing initiator of the WLAN sensing procedure.

Note: Only TB sensing measurement instances (see 11.55.1.5.2) are used in the WLAN sensing procedure initiated by the SBP responder.

## SP

Do you support the proposed resolutions to the following CIDs and incorporate the text changes into the latest TGbf draft: 300 479 303 319 502 574?

Y/N/A