IEEE P802.11
Wireless LANs

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| LB276 CR for OST CIDs (11.5.1 Sensing Procedure) – Part 2 |
| Date: 2023-10-13 |
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Abstract

This submission discusses resolutions to the following 15 CIDs from LB276 of TGbf D2.0.

The CID list is: 3002, 3037, 3038, 3046, 3048, 3049, 3050, 3051, 3052, 3053, 3054, 3055, 3073, 3162, 3204

Proposed changes in this document are with reference to TGbf D2.1.

Revisions:

* Rev 0: Intitial version of the document
* Rev 1: Updated resolution of CID 3048
* Rev 2: Updated resolutions of CIDs 3162, 3002, 3052

Proposed comment resolution

Presented and discussed, no open discussion points

Under discussion

G/T must be satisfied comment

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| **CID** | **Commentor** | **Cat** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 3050 | Robert Stacey | T | 134.31 | "Sensing initiator" is used before definition. | Define sensing initiator before first use here. | RejectedSubclause 3.2 (Definitions specific to IEEE Std 802.11) defines the sensing initiator. Hence the term has been defined before using it on P134L31. By not redefining the term, duplication is avoided and the spec text is kept concise.  |
| 3162 | Alireza Raissinia | T | 134.60 | Should the paragraph in P134 L60-65 be moved to section 11.55.1.4.2 which is to include behavior for "sensing measurement session for an unassociated STAs" as it seems relevant | As per comment. This comment can also be considered editorial | RevisedTGbf editor:Please move P134 L60-65 to the end of subclause 11.55.1.4.2 |
| 3002 | Robert Stacey | T | 135.12 | Use the verb "may" to indicate optionality. Also the sensing procedure is conditionally optional; dependent on HE or EHT support. | Replace paragraphs 1-3 with the following: "A STA that is an HE STA or EHT STA may support the sensing procedure. A STA that supports the sensing procedure is referred to a sensing STA. A sensing STA has dot11SensingImplemented equal to true and shall set the Sensing field in the Extended Capabilities element to 1. A sensing STA supports the sensing procedure as both a sensing initiator and sensing responder." | Revised**TGbf Editor:**Please replace paragraphs 1-3 P135L12 to L19 with “A STA that is an HE or EHT STA may support the sensing procedure. A STA that supports the sensing procedure is referred to as a sensing STA. A sensing STA has dot11SensingImplemented equal to true and shall set the Sensing field in the Extended Capabilities element to 1. A sensing STA shall support the sensing procedure as both a sensing initiator and a sensing responder.” |
| 3046 | Robert Stacey | T | 137.01 | The normative "may" identifies an implementation requirement and is thus inappropriate for the receive implementation that has no control over what is being sent. | Change to "A non-AP STA receives an AP's sensing capabilities during the active or passive scanning procedure (see 11.1.4)." | Revised**TGbf Editor:**Please replace paragraph 1 P137L7-L9 with “A non-AP STA receives an AP’s sensing capabilities (see 9.4.2.26 (Extended Capabilities element) and 9.4.2.321 (Sensing Capabilities element)) as part of an active or passive scanning procedure (see 11.1.4 (Acquiring synchronization, scanning)).” |
| 3048 | Robert Stacey | T | 137.27 | Inappropriate shall since it does not identify something that needs to happen in the implmenetation and because it is conditional on intent, which is not testable. A requirement for an exchange is a vague requirement on two different implementions. | Remove this statement. | RevisedThe normative behavior is in Subclause 11.55.1.3 P136L59-L65. **TGbf Editor:**Please remove the sentence starting on P137L32. |
| 3049 | Robert Stacey | T | 137.31 | The first sentence in this paragraph is nonsensical. How can a non-AP STA \*establish\* a sensing measurement session if the session is initiated by the AP? Its completely up to the AP. Is it that the non-AP STA is initiating the session? The second sentence seems unnecessary, since we have already established that the Probe Response frame can be used to send sensing capabilities. Does sending a Probe Request frame with sensing capabilities perform some additional function (other that inform the AP of its capabilities)? The third sentence does not make sense since it is not clear how the non-AP STA suddenly became a sensing responder. | Replace the paragraph with "A non-AP STA that is not associated with an AP initiates a sensing mesaurement session with that AP by sending a Sensing Measurement Query frame that includes a Sensing Capabilities element to that AP." | RevisedThe sentence contains the same information as the one starting on P142L43. A Sensing Measurement Query frame always contains a Sensing Capabilities element. To avoid duplication this sentence should be removed.See also CID 3053.**TGbf Editor:**Please remove the sentence starting on P137L35. |
| 3051 | Robert Stacey | T | 137.54 | A requirement to set a field a certain way to mean a certain thing is redunant since that is precisely what the field definition does in Clause 9. Meaning is assigned in Clause 9. Behavior is defined here. | Remove this paragraph. | Revised**TGbf Editor:**Please remove paragraph starting P137L58 |
| 3037 | Robert Stacey | T | 138.06 | Is a sensing measurement session the parameter agreement or is it the exchange of frames using the agreed parameters? It is defined as the former, but the statement at 142.32 seems to imply the latter. Define sensing messurement session as the exchange of frames under the agreed paramters and not as the agreed parameters. | Change to "A sensing measurement session is the a set of sensing measurement exchanges that use operational parameters agreed to between a sensing initiator and sensing responder and identified by a measurement session ID." | Revised**TGbf Editor:**Please replace the paragraph starting on P138L10 with “A sensing measurement session is a set of sensing measurement exchanges that use operational parameters agreed to between a sensing initiator and sensing responder and is identified by a measurement session ID.” |
| 3038 | Robert Stacey | T | 138.09 | A shall statement conditional on intent is not testable and thus not useful | Change to "To start a sensing measurement session between a sensing initiator and sensing responder, the sensing initiator sends a Sensing Measurement Request frame to the sensing responder." | Revised**TGbf Editor:**Please replace the sentence starting on P138L14 with “To establish a sensing measurement session, the SME of a sensing initiator shall issue an MLME-SENSMSMTSESSION.request primitive that results in the transmission of a(#3026) Sensing Measurement Request frame from this sensing initiator to a sensing responder.” |
| 3204 | Xiandong Dong | T | 138.45 | what is the the requested sensing measurement session parameters , define it, or change the name as sensing measurement parameters. | as in comment | RejectedThe “requested sensing measurement session parameters in thereceived Sensing Measurement Request frame” are defined in subclause 9.6.7.49 and references therein. To avoid duplication and keep the spec text concise, the “requested sensing measurement session parameters” are not redefined here. |
| 3055 | Robert Stacey | T | 142.06 | A state diagram should have states in the boxes and \*events\* on the arrows. Events being things like timer expiry, frame received. "Sensing measurement exchange(s) are running" is not an event and thus cannot trigger a state change. "SMS not established" is not an event. "SMS established" is not an event. | Fix the diagram so that specific events (something that happens at a point in time) are identified for each arrow. | Revised**TGbf Editor:**Please replace Figure 11-75a on P142L15-L30 with Figure in <https://mentor.ieee.org/802.11/dcn/23/11-23-1773-01-00bf-lb276-cr-for-ost-cids-11-5-1-sensing-procedure-part-2.docx> |
| 3073 | You-Wei Chen | E | 142.18 | add abbreviations (SMS, SMS timer) in Figure 11-75a to 3.4? | add abbreviations (SMS, SMS timer) to 3.4 | RejectedRemoved abbreviations SMS in Figure 11-75a |
| 3052 | Robert Stacey | T | 142.29 | A shall statement conditional on intent is not testable and thus not useful | Replace with "An unassociated STA establishes a sensing measurement session for non-TB sensing measurement exchanges by transmitting a Sensing Measurement Request frame that includes a Non-TB Specfiic element to the AP." | Revised **TGbf Editor:**Please replace the paragraph on P142L38 with “An unassociated STA establishes a sensing measurement session for non-TB sensing measurement exchanges by transmitting a Sensing Measurement Request frame to the AP including a Non-TB specific element to set the parameters of the sensing measurement session.” |
| 3053 | Robert Stacey | T | 142.34 | A shall statement conditional on intent is not testable and thus not useful | Replace with "An unassociated non-AP STA solicits sensing measurement session establishment by sending a Sensing Measrement Query frame to the AP." | RevisedSee also CID 3049**TGbf Editor:**Please replace the sentence starting on P142L43 with “An unassociated non-AP STA solicits sensing measurement session initiation by issuing an MLME-SENSMSMTQUERY.request primitive that results in the transmission of(\*23/1486r1) a Sensing Measurement Query frame to the AP.” |
| 3054 | Robert Stacey | T | 142.59 | A may statement conditional on intent is not testable and thus not useful | Replace with "An AP may request that an unassociated non-AP STA ... by setting the Comback field of the coresponding User Info field in the Sensing Polling Trigger frame to 1." | Revised**TGbf Editor:**Please replace the paragraph on P143L7-L10 with “An AP may request that an unassociated STA in this TB sensing measurement exchange participates in another sensing measurement session as a sensing responder by setting the Comback field of the coresponding User Info field in the Sensing Polling Trigger frame to 1. ” |



**Figure 11-75a—Sensing measurement session state machine diagram**

# Straw Poll

Do you support the resolution of the following 15 CIDs and instruct TGbf editor to incorporate the changes into the latest TGbf draft: 3002, 3037, 3038, 3046, 3048, 3049, 3050, 3051, 3052, 3053, 3054, 3055, 3073, 3162, 3204?

Y/N/A