IEEE P802.11
Wireless LANs

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| Resolutions for Exchange Comments in LB276 – Part 2 |
| Date: 2023-10-03 |
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Abstract

This submission proposes resolutions to the following comments submitted in LB276 under Exchange topic. The CIDs are referring to D2.0. The text used as reference is D2.1.

CIDs: 3057 3221 3363 3411

Revision history:

R0: Original version

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| **CID** | **Commenter** | **Page** | **Comment** | **Proposed change** | **Proposed resolution** |
| 3057 | Robert Stacey | 147.02 | "shall attempt" is useless as a requirement since it does not identify conditions that might preclude it happening. (I attempted to do the scheduling but my scheduler can only handle one STA -- would be compliant). | Reword along the followng lines "shall schedule unless <condition>". If this is not possible the "shall" is likely too strong a requirement and "should" (a recommendation) is more appropriate. | Revised. See proposed resolution below in <DCN1688r0>. |

**Proposed resolution**: Revised.

**Discussion:** The expected behavior is that if an AP assigned a STA to be polled in a sensing availability window and if it cannot poll it in the first Sensing Polling Trigger frame, it is required to schedule another TB sensing measurement exchange and poll it again. Otherwide, it will be a complete waste of time and power for the STA to stay awake and do nothing for the whole availability window. So, “Shall” here is a more appropriate wording.

***TGbf editor, make the following changes in the following paragraph in 11.55.1.5.2.2 in D2.1***

If the AP does not poll all STAs assigned to be polled in the sensing availability window using a single Sensing Polling Trigger frame, the AP shall ~~attempt to~~ schedule one or more extra TB sensing measurement exchanges where each TB sensing measurement exchange begins with a polling phase within the same sensing availability window.

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| **CID** | **Commenter** | **Page** | **Comment** | **Proposed change** | **Proposed resolution** |
| 3221 | Atsushi Shirakawa | 155.37 | Why mention about AC only for Non-TB sensing measurement? Any AC will not be allowed for TB sensing measurment? Please clarify it or need some Note. | As in comment | Rejected. See rejection reasons below in <DCN1688r0>. |

**Proposed resolution**: Rejected.

**Discussion:** The access category for channel access is more from a client/non-AP STA point of view. In contrast, which AC the AP uses to initiate a TB sensing measurement exchange is implicitly understood and we do not need explicitly write it in the spec.

The contributor has talked to the commenter offline and explained to him with the reasoning above. The commenter is fine to reject this CID.

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| **CID** | **Commenter** | **Page** | **Comment** | **Proposed change** | **Proposed resolution** |
| 3363 | Sigurd Schelstraete | 144.28 | The NOTE sounds like a normative requirement. Should it be made normative? Or is it already captured elsewhere? | See comment | Revised. See proposed resolution below in <DCN1688r0>. |

**Proposed resolution**: Revised.

**Discussion:** Part of the behaviors in this note are captured in the following text in the 2nd paragraph in 11.55.1.5.2.2 Polling phase.

Any STA addressed by a User Info field in a Sensing Polling Trigger frame that intends to participate in the TB sensing measurement exchange corresponding to any of the sensing measurement session(s) in the sensing availability window shall respond with a CTS-toself frame in its designated RU allocation as identified in the Sensing Polling Trigger frame; otherwise, the STA shall not send a response to avoid unnecessary resource allocation and the AP shall not include the STA in this TB sensing measurement exchange.

However, the contributor generally agrees with the commenter that the note sounds like a normative statement and should better be put in 11.55.1.5.2.2 since it is about behaviors in the polling phase.

***TGbf editor, delete the referenced note in 11.55.1.5.2.1 in D2.1***

~~NOTE—A TB sensing measurement exchange that starts with polling phase and receives no CTS-to-self frame from any of the non-AP STAs does not proceed with an NDPA sounding phase or a TF sounding phase(#3083) if all STAs are assigned to be polled in the current sensing availability window. In this case, the AP can also start a new back off to access the channel and send another Sensing Polling Trigger frame~~.

***TGbf editor, add the following paragraph in 11.55.1.5.2.2 in D2.1***

Any STA addressed by a User Info field in a Sensing Polling Trigger frame that intends to participate in the TB sensing measurement exchange corresponding to any of the sensing measurement session(s) in the sensing availability window shall respond with a CTS-toself frame in its designated RU allocation as identified in the Sensing Polling Trigger frame; otherwise, the STA shall not send a response to avoid unnecessary resource allocation and the AP shall not include the STA in this TB sensing measurement exchange.

If a~~A~~ TB sensing measurement exchange that starts with polling phase ~~and~~ receives no CTS-to-self frame from any of the non-AP STAs, the AP shall ~~does~~ not proceed with an NDPA sounding phase or a TF sounding phase(#3083) if all STAs are assigned to be polled in the current sensing availability window. In this case, the AP ~~can~~ may also start a new back off to access the channel and send another Sensing Polling Trigger frame.

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| **CID** | **Commenter** | **Page** | **Comment** | **Proposed change** | **Proposed resolution** |
| 3411 | Benedikt Schweizer | 147.01 | While the order of the four phases in a TB sensing measurement exchange is well-defined, it can be bypassed by having two sessions in one availability window. | Define the order of multiple sensing measurement exchanges in one availability window based on the included phases. | Rejected. See rejection reasons below in <DCN1688r0>. |

**Proposed resolution**: Rejected

**Discussion:** Within each measurement exchange corresponding to a particular measurement session, the order of the four phases is determined. If there are multiple sessions in one availability window, as long as it sticks to the well-defined order of the different phases within a measurement exchange corresponding to the same measurement session, we should give the AP the flexibility to choose the order of different phases across different sessions to maximize the usage of the channel time in the availability window. As a result, defining the order of multiple sensing measurement exchanges in one availability window does not work.

## SP

Do you support the proposed resolutions to the CIDs and incorporate the text changes into the latest TGbf draft?

Y/N/A