IEEE P802.11
Wireless LANs

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| CC40 CR for Instance CIDs – Part 1 |
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**Abstract**

This document proposes comment resolutions for CID 153, 154, 127 and 789.

R0: initial version.

R1: revised modifications for CID 153, 154 and 127, and changed resolution for CID 789.

# CID 153, 154

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| **CID** | **Subclause** | **Page** | **Comment** | **Proposed change** | **Proposed resolution** |
| 153 | 11.21.18.6 | 68.16 | "It includes one or more of the following phases: Polling phase, NDPA sounding phase, Trigger frame (TF) sounding phase, and reporting phase.". This sentence is confusing and open for many interpretations some of which may be wrong and not intended by the specification text:1- Would we interpret 'one or more' as one or more of each phase or one and only one of each phase but many phases in the same instance? | Rephrase the sentence to clarify the intended meaning, one suggestion is " It includes one or more of each phase of the following phases ..." | REVISED. Please incorporate the changes in 11/22-1914r1 under “Modification” for CIDs 153, 154. |
| 154 | 11.21.18.6 | 68.16 | "It includes one or more of the following phases:" This sentence reads as if each instance shall have at least one of each phase, which is not true. In some scenarios there may be only the polling phase, but no other phases. When no STAs respond to the polling trigger, there should be no other phases in this TB instance. | Rephrase the sentence to " It includes one or more Polling phase, and zero or more of each phase of the following phases: ..." |

**Discussion:**

I agree with the commenter in principle that this sentence may cause confusion. By “one or more of the following phases”, one interpretation is one or multiple different phases of the following phases. Another interpretation is like the comment that one or more of each phase of the following phases. It might be worthwhile to list all possible scenarios. Based on some of the discussions we had earlier,

* Polling phase:
	1. The polling phase is present if at least one non-AP STA is assigned to be polled.
* Sounding phase:
	1. If the sounding phase is present, there should be only one TF sounding phase or one NDPA sounding phase, or one TF sounding phase and one NDPA sounding phase. One TF sounding phase can consist of multiple sounding trigger frames.
* Reporting phase:
	1. The reporting phase is present if the Sensing Measurement Report Requested subfield within the Sensing Measurement Setup Request frame is set to 1. (D0.4)
	2. The reporting phase shall be coupled with the sounding phase in a TB sensing measurement instance. (Ad-hoc discussion)

Exception cases about the polling phase:

* A TB sensing measurement instance consists of a single polling phase. – If no non-AP STA responds in the polling phase, the AP can choose not to proceed with sounding.
* A TB sensing measurement instance contains multiple polling phases. – If no non-AP STA responds in the first polling phase, the AP can choose to send another Sensing Polling Trigger frame.

It is preferred to exclude those abnormal behaviours/corner cases during a sensing availability window from the normative text. When corner cases occur, the AP has the flexibility to decide what to proceed next. To show all combinations of phases in a TB sensing measurement instance, we can replace the text with a table.

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**Modification (#153, #154):**

## *TGbf Editor: Please modify the text at P104L24 in subclause 11.55.1.5.2.1 in D0.4 as follows.*

**11.55.1.5.2 TB sensing measurement instance**

**11.55.1.5.2.1 General**

TB sensing measurement instance is the trigger-based variant of a sensing measurement instance. It is applicable to scenarios where an AP is the sensing initiator, and one or more non-AP STAs are the sensing responders. A TB sensing measurement instance ~~It~~ includes ~~one or more of the following phases:~~ Polling phase, NDPA sounding phase, Trigger frame (TF) sounding phase, and ~~reporting~~ Reporting phase with relevant combinations as shown in Table 11-xx – Combinations of different phases in a TB sensing measurement instance.

## *TGbf Editor: Please insert the following table after L28 on P104 in subclause 11.55.1.5.2.1 in D0.4.*

**Table 11-xx—Combinations of different phases in a TB sensing measurement instance (#153, #154)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of different phases** | **Polling phase** | **NDPA and/or TF sounding phase** | **Reporting phase** |
| 1 |  |  |  |
| 2 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |

# CID 789

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| **CID** | **Subclause** | **Page** | **Comment** | **Proposed change** | **Proposed resolution** |
| 789 | 11.21.18.6.1 | 69.44 | In order for the AP to unambigously determine presence of a STA in the availability period, the CTS frames need to be sent in a TB PPDU | Reuse the 11az Ranging Poll TF as Sensing Polling TF and clarify that the CTS-t-0-self frames are sent in TB PPDU. | REJECTED.  |

**Discussion:**

Based on the progress so far, the TGbf have agreed to reuse Ranging Poll TF as Sensing Polling TF. And it is clearly defined in the baseline that a non-AP STA shall send an HE TB PPDU in response to a trigger frame sent by the AP. Therefore, there is no need to clarity explicitly that the CTS-to-self is sent in an HE TB PPDU. This is a valid comment but no change is required, and hence the resolution is given as REJECTED.

# CID 127

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| **CID** | **Subclause** | **Page** | **Comment** | **Proposed change** | **Proposed resolution** |
| 127 | 11.21.18.6.4 | 70.43 | "multiple sensing measurement setups of a sensing responder may be included in a single Sensing Measurement Report frame.". What does it mean to include a "measurement setup" in a Measurement Report? | Clarify | REJECTED.The text was describing the behaviour of aggregating measurement reports, which was already removed from the 11bf protocol based on the consensus that this feature is not needed.  |

**Discussion:**



**SP**

Do you support the proposed resolutions for the following CIDs in document 11-22/1914r1 and incorporate the changes into the latest TGbf draft:

153, 154, 789, 127

Y/N/A