IEEE P802.11
Wireless LANs

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| CIDs 2004 & 2007 |
| Date: June 10, 2019 |
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 Abstract

This submission proposes resolutions for CIDs 2004 and 2007 received for TGm LB236

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: Resolutions updated based on feedback received when the doc was presented 5/16/19 (AM2) and offline via email
	+ CID 2004: Change the subfield name to ‘Common Antenna BSSID List’
	+ CID 2007: Clarify that the Measurement Report sub-element in Neighbor Report element carries the Common Antenna BSSID List sub-element

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGm Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGm Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGm Editor: Editing instructions preceded by “TGm Editor” are instructions to the TGm editor to modify existing material in the TGm draft. As a result of adopting the changes, the TGm editor will execute the instructions rather than copy them to the TGm Draft.***

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| **CID** | **Commenter** | **Pg** | **Line** | **Section** | **Comment** | **Proposed Change** | **Resolution** |
| 2004 | Abhishek Patil | 1061 | 29 | 9.4.2.21.10 | Co-Located BSSID List subelement was added by REVmc to cover the case when more than one BSSID shares the same antenna connectors [see doc 11-14/1024r1]. In such case, a non-AP STA may perform FTM with only one of the BSSIDs in the list. However, the term co-located in the subelement name is misleading and creates an ambiguity - i.e., co-located in the physical location sense or co-located from FTM result point of view. It is possible to have BSSIDs on different bands (e.g., 5GHz and 60GHz) operating from the same physical device and using different antenna connectors. In such case, the BSSIDs are at the same physical location (co-located) but FTM procedure may yield a different result since the antenna connectors are different. Change the subelement name to use a term other than co-located so that the purpose of the subelement is clear. | Change the name to 'Common Antenna-Connector BSSID List' or 'Co-Antenna BSSID List' so that it is self-explanatory and clearly captures the intended meaning from FTM point of view. | **Revised**Agree with the comment. The subelement name is misleading and should reflect the intended meaning. Based on feedback, the subelement name is changed to ‘Common Antenna BSSID List’ and spec text in relevant sub-clauses is updated to clarify that the list contains BSSIDs that share antenna connector(s) with the reporting BSS.**TGm editor, please apply the changes as described in doc 11-19/0405r1 tagged with CID 2004** |
| 2007 | Abhishek Patil | 1460 | 63 | 9.4.5.19 | It is not clear who carries the Co-located BSSID list sub-element - is it Neighbor Report IE (9.4.2.36)? If it so, then it should be listed in Table 9-173. Also, what does co-located mean (see my other comment for clause 9.4.2.21.10) - is it physically co-located or co-located from FTM result point of view? | As in comment. | **Revised**Agree with the comment. It is not clear that the Measurement Report element carries the Co-Located BSSID List subelement (or whatever new name the standard decided to call it). The text in clause 9.4.5.19 is updated to clarify that the subelement is carried in measurement Report (sub)element of the Neighbor Report element.**TGm editor, please apply the changes as described in doc 11-19/0405r1 tagged with CID 2004. Also see resolution for CID 2007** |

Please note, the proposed changes below are with respect to REVmd D2.1

**[CID 2004]**

***TGm Editor: Please replace all occurrences of “Co-Located BSSID List” subelement with “Common Antenna BSSID List” subelement throughout the spec***

* **Neighbor Report ANQP-element**

***TGm Editor: Please make the following change to the paragraph shown below in this sub-clause:***

The format of the Neighbor Report element is shown in Figure 9-333 (Neighbor Report element format) defined in 9.4.2.36 (Neighbor Report element). The Co-Located BSSID List subelement is present in the Measurement Report subelement[CID 2007] when there is at least one other BSS which [CID 2004]shares the same antenna connector(s) with the reporting BSS.

* **AP Civic Location ANQP-element**

***TGm Editor: Please make the following change to the paragraph shown below in this sub-clause:***

The Location Civic Report is a variable length field and the format is provided in 9.4.2.21.13 (Location Civic report). This information is taken from dot11APCivicLocationTable. The Co-Located BSSID List subelement is present when there is at least one other BSS which [CID 2004]shares the same antenna connector(s) with the reporting BSS and the Co-Located BSSID List subelement is not present in the Geospatial Location ANQP-element; this subelement is not present otherwise.

* **AP Geospatial Location ANQP-element**

***TGm Editor: Please make the following change to the paragraph shown below in this sub-clause:***

The AP Geospatial Location ANQP-element provides the AP’s location in LCI format; see 9.4.2.21.10 (LCI report (Location configuration information report)). This information is taken from dot11APLCITable. [#Ed]

***TGm Editor: Please make the following change to the paragraph shown below in this sub-clause:***

The Location Configuration Report field is of variable length and defined in 9.4.2.21.10 (LCI report (Location configuration information report)). The Z and Usage Rules/Policy subelements are optionally present in the Location Configuration Report field, when it is used in the AP Geospatial Location ANQP element. The Co-Located BSSID List subelement is present when there is at least one other BSS which shares the same antenna connector(s)[CID 2004] with the reporting BSS.

* LCI report (Location configuration information report)[CID 2004]

***TGm Editor: Please make the following change to the paragraph shown below in this sub-clause:***

The Co-Located BSSID List subelement is used to report the list of BSSIDs of the BSSs which share the same antenna connector(s) with the reporting STA.

***TGm Editor: Please make the following change to the paragraph shown below in this sub-clause:***

When the MaxBSSID Indicator field is equal to zero, the BSSID fields contain an explicit list of the BSSID values of the BSSs which share the same antenna connector(s) with the reporting STA.

NOTE—For example, if there are 4 BSSs which share the same antenna connector(s) and their BSSIDs end with 16, 24, 30 and 31, and the range of MAC addresses ending with 16-31 inclusive are not assigned to other BSSs using a different antenna connector, then this list of 4 BSSIDs can be indicated with a value of 5 in the MaxBSSID Indicator field. Otherwise, the MaxBSSID Indicator field is set to zero and the BSSIDs are listed separately.

* Location Civic report[CID 2004]

***TGm Editor: Please make the following change to the paragraph shown below in this sub-clause:***

The Co-Located BSSID List subelement is used to report the list of BSSIDs of the BSSs that share the same antenna connector(s) with the reporting STA. The Co-Located BSSID List subelement is described in 9.4.2.21.10 (LCI report (Location configuration information report)).

* Neighbor Report element[CID 2004]

***TGm Editor: Please make the following changes to the paragraphs shown below in this sub-clause:***

A Measurement Report subelement with the Measurement Type field equal to LCI (see Table 9-125 (Measurement Type field definitions for measurement reports)) is optionally present. If present, the subelement has the same format as the Measurement Report element with Measurement Type field equal to LCI.The subelement indicates the LCI of the neighbor STA and further includes the Z subelement, or the subelement indicates an unknown LCI (see 11.22.6.7 (LCI and Location Civic retrieval using FTM procedure)). The Late, Incapable and Refused bits in the Measurement Report Mode field are set to 0. The Co-Located BSSID List subelement is present in the Measurement Report subelement of the Neighbor Report element, when there is at least one other BSS which shares the same antenna connector(s) with the reporting BSS.

A Measurement Report subelement with the Measurement Type field equal to Location Civic (see Table 9-125 (Measurement Type field definitions for measurement reports)) is optionally present. If present, the subelement has the same format as the Measurement Report element with Measurement Type field equal to Location Civic, and the subelement indicates the civic address of the transmitting STA or an unknown civic address (see 11.22.6.7 (LCI and Location Civic retrieval using FTM procedure)). The Late, Incapable and Refused bits in the Measurement Report Mode field are set to 0. The Co-Located BSSID List subelement is present in the Measurement Report subelement of the Neighbor Report element, when there is at least one other BSS which shares the same antenna connector(s) with the reporting BSS. When a Measurement Report subelement with Measurement Type field equal to LCI that includes a Co-Located BSSID List subelement is present, the Co-Located BSSID List subelement is not present in the Measurement Report subelement with Measurement Type field equal to Location Civic.

* Fine Timing Measurement frame format[CID 2004]

***TGm Editor: Please make the following changes to the paragraphs shown below in this sub-clause:***

The LCI Report field is optionally present. If present, it contains a Measurement Report element with Measurement Type field equal to LCI (see Table 9-125 (Measurement Type field definitions for measurement reports)), which either indicates the LCI of the transmitting STA and includes the Z and Usage Rules/Policy subelement or indicates an unknown LCI (see 11.22.6.7 (LCI and Location Civic retrieval using FTM procedure)). The Late, Incapable and Refused bits in the Measurement Report Mode field are set to 0. The Co-Located BSSID List subelement is present in the Measurement Report element with Measurement Type field equal to LCI, when there is at least one other BSS which shares the same antenna connector(s) with the reporting BSS.

The Location Civic Report field is optionally present. If present, it contains a Measurement Report element with Measurement Type field equal to Location Civic (see Table 9-125 (Measurement Type field definitions for measurement reports)), which either indicates the Civic address of the transmitting STA or an unknown Civic address (see 11.22.6.7 (LCI and Location Civic retrieval using FTM procedure)). The Late, Incapable and Refused bits in the Measurement Report Mode field are set to 0. The Co-Located BSSID List subelement is present in the Measurement Report element with Measurement Type field equal to LCI, when there is at least one other BSS which shares the same antenna connector(s) with the reporting BSS. When the LCI Report field contains a Co-Located BSSID List subelement, the Co-Located BSSID List subelement is not present in the Location Civic Report field.