IEEE P802.11
Wireless LANs

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| LB272 Resolutions for Sensing Capabilities discovery |
| Date: March 24, 2023 |
| Author(s): |
| Name | Affiliation | Address | Phone | Email |
| Pei Zhou | OPPO |  |  | zhoupei1@oppo.com |
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Abstract

This submission proposes resolutions to the following LB272 CIDs.

* 1004, 1005, 1028, 1079, 1080, 1332, 1430, 1446, 1860, 1912, 1995, 2231.

The text used as reference is 802.11bf D1.0.

Revisions:

* Rev 0: Initial version of the document.

**Comments:**

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| **CID** | **Commenter** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 1004 | John Wullert | 11.55.1.3 | 170.43 | There is a problem with the sentence "To accelerate the sensing capability discovery between APs and STAs, an AP transmits a Beacon or Probe Response frame carrying one or more of its neighboring APs' sensing capabilities shall include in the frame a Neighbor Report element'" | Add "that" as shown: "To accelerate the sensing capability discovery between APs and STAs, an AP that transmits a Beacon or Probe Response frame carrying one or more of its neighboring APs' sensing capabilities shall include in the frame a Neighbor Report element." | **Revised.**Agree in principal with the commenter. There are several similar comments, changes are made to avoid grammar issues.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1005 | John Wullert | 11.55.1.3 | 170.46 | The prior sentence allows for multiple neighboring APs but this one suggests that only one neighboring AP is supported | Rephrase as "The sensing capabilities of the Neighboring APs are indicated in the BSSID Information field (see Figure 9-398 (BSSID Information field format)) in the Neighbor Report element." | **Revised.**Agree with the commenter.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1028 | Massinissa Lalam | 11.55.1.3 | 170.43 | Paragraph "To accelerate the sensing capability discovery between APs and STAs, an AP transmits a Beacon or Probe Response frame carrying one or more of its neighboring APs' sensing capabilities shall include in the frame a Neighbor Report element. Neighboring AP's sensing capability is indicated in the BSSID Information field (see Figure 9-398 (BSSID Information field format)) in the Neighbor Report element." is unclear and in my view not really necessary. But if kept, please consider revision, e.g.:"To accelerate the sensing capability discovery between APs and STAs, an AP which wants to advertise one or more of its neighbouring AP's sensing capabilities shall include a Neighbor Report element in its Beacon and/or Probe Response frame. Neighboring AP's sensing capability is indicated in the BSSID Informationfield (see Figure 9-398 (BSSID Information field format)) in the Neighbor Report element." | As in comment | **Revised.** “wants to” is not a normative description in the 802.11 baseline standard. But the mentioned text was revised based on CID 1028 and 1080.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1079 | Claudio da Silva | 11.55.1.3 | 170.43 | "... between APs and non-AP STAs, an..." | As suggested - add "non-AP". | **Revised.**Agree with the commenter.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1080 | Claudio da Silva | 11.55.1.3 | 170.43 | Suggestion to improve writing | "... an AP shall include one or more of its neighboring APs' sensing capabilities within the Neighbor Report element within Beacon and Probe Response frames it sends. | **Revised.**Agree with the commenter.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1332 | Tomoko Adachi | 11.55.1.3 | 170.43 | "To accelerate the sensing capability discovery between APs and STAs, an AP transmits a Beacon or Probe Response frame carrying one or more of its neighboring APs' sensing capabilities shall include in the frame a Neighbor Report element. Neighboring AP's sensing capability is indicated in the BSSID Information field (see Figure 9-398 (BSSID Information field format)) in the Neighbor Report element." This paragraph needs to be revisited. What is required as a "shall"?Rewording as follows seems to be what is intended:"When an AP with dot11WLANSensingImplemented equal to true transmits a Beacon or Probe Response frame carrying one or more reported APs having WLAN sensing capability in the Neighbor Report element, the Sensing subfield in the corresponding Neighbor Report element shall be set to 1 for such reported APs. This helps STAs to accelerate discovering other neighboring APs that can perform WLAN sensing." | As in comment. | **Revised.**Agree in principal with the commenter. There are similar comments, changes are made as a whole.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1430 | Oscar Au | 11.55.1.3 | 170.43 | Grammatical mistake. A sentence with two verbs. | To accelerate the sensing capability discovery between APs and STAs, an AP transmits a Beacon or Probe Response frame carrying one or more of its neighboring APs' sensing capabilities <in> a Neighbor Report element. | **Revised.**Agree in principal with the commenter.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1446 | Sheetal Pandey | 11.55.1.3 | 170.43 | Rephrase the statementTo accelerate the sensing capability discovery between APs and STAs, an AP transmits a Beacon or ProbeResponse frame carrying one or more of its neighboring APs' sensing capabilities shall include in the framea Neighbor Report element | To accelerate the sensing capability discovery between APs and STAs, an AP transmits a Beacon or ProbeResponse frame carrying one or more of its neighboring APs' sensing capabilities, which shall include in the framea Neighbor Report element | **Revised.**Agree in principal with the commenter.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1860 | Hassan Omar | 11.55.1.3 | 170.43 | Incorrect senstence | Change: " ..., an AP transmits ..." to become "..., an AP that tramsits ..." | **Revised.**Agree in principal with the commenter. There are several similar comments, changes are made to avoid grammar issues.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1912 | Leif Wilhelmsson | 11.55.1.3 | 170.43 | the sentence reads a bit strange I think | As it is not clear what is to be said, I can't propose a specific change, but it reads stange. Maybe it shoudl be "an AP THAT transmits a Beacon..." | **Revised.**Agree in principal with the commenter. There are several similar comments, changes are made to avoid grammar issues.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 1995 | Stephan Sand | 11.55.1.3 | 170.43 | The sentence reads "an AP transmits a Beacon or Probe Response frame carrying one or more of its neighboring APs' sensing capabilities shall include in the frame a Neighbor Report element." The part of the sentence between "transmits" and "capabilities" is a subclause. Please add "that" between "an AP" and "transmits". | As in comment | **Revised.**Agree in principal with the commenter. There are several similar comments, changes are made to avoid grammar issues.TGbf Editor make changes as in doc.: 11-23/0525r0 |
| 2231 | Zinan Lin | 11.55.1.3 | 170.44 | "an AP transmits a Beacon or Probe Response frame carrying one or more of its neighboring APs' sensing capabilities shall include in the frame a Neighbor Report element." In this sentence, What shall be included in the frame? | Change to "an AP transmits a Beacon or Probe Response frame carrying one or more of its neighboring APs' sensing capabilities which shall be included a Neighbor Report element? | **Revised.**Agree in principal with the commenter. There are several similar comments, changes are made to avoid grammar issues.TGbf Editor make changes as in doc.: 11-23/0525r0 |

**11.55.1.3 Sensing session setup**

***TGbf Editor: Please revise clause 11.55.1.3 (Sensing session setup) as below.***

To accelerate the sensing capability discovery between APs and non-AP STAs, an AP shall include one or more of its neighboring APs’ sensing capabilities within the Neighbor Report element(s) within Beacon or Probe Response frame it transmits. The sensing capabilities of neighboring APs are indicated in the BSSID Information field (see Figure 9-398 (BSSID Information field format)) in the Neighbor Report element. (#1004, #1005, #1028, #1079, #1080, #1332, #1430, #1446, #1860, #1912, #1995, #2331)

**SP: Move to approve resolutions to CIDs 1004, 1005, 1028, 1079, 1080, 1332, 1430, 1446, 1860, 1912, 1995, 2331,**

**as specified in doc.: 11-23/0525r0 and incorporate the text changes into the latest TGbf draft.**