IEEE P802.11  
Wireless LANs

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| LB271 CR for Subclause 3.2 and 10.8 | | | | |
| Date: 2023-03-08 | | | | |
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Abstract

This submission proposes resolutions of comments received from TGbe comment collection LB271 based on TGbe D3.0.

15286 15944 16582 16577 16578 17321 17322 17323 17351 17352 (10 CIDs)

Revisions:

* Rev 0: Initial version of the document.
* Rev 1: two more CIDs are added

1. **Introduction**

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 TGbe Draft. The introduction and the explanation of the proposed changes are not part of the adopted material.

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

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **Page** | **Comment** | **Proposed Change** | **Resolution** |
| 15286 | 3.2 | 60.14 | It should be "non-MLO" | as comment. | Revised-  Agree. Apply the changes marked as #15286 in this document. |
| 15944 | 3.2 | 60.14 | In the definition, capture the term "non-MLO" since that term is referred in many places in the text. Also reference to 35.3 is not needed since that clause does not describe non-MLO. | Suggest changing to: "non-multi-link operation (non-MLO): Operations that are not related to multi-link operations between two MLDs." | Revised-  Agree in principle. Apply the changes marked as #15944 in this document. |
| 16582 | 10.8 | 347.21 | MLD Capabilities and Operations is a subfield (in the Common Info field of the Basic MLE) and not a field. Please revise as suggested. | Please revise the sentence as follows:"....and the recipient AP affiliated with an AP MLD has set the AAR Support subfield in the MLD Capabilities and Operations \*subfield\* in a Basic Multi-Link element the recipient AP transmits to 1." | Revised-  Agree. Apply the changes marked as #16582 in this document.  To TGbe editor, please change “MLD Capabilities and Operations field” to “MLD Capabilities and Operations subfield” through the TGbe draft 3.0 |
| 16577 | 9.4.2.312.2.3 | 258.65 | MLD Capabilities and Operations is a subfield (in the Common Info field of the Basic MLE) and not a field. Please revise as suggested. | Please revise the sentence as follows:" The subfields of the MLD Capabilities and Operations subfield are defined in Table 9-401i (Subfields of the MLD Capabilities and Operations \*subfield\*)." | Revised-  Agree. Apply the changes marked as #16577 in this document.  To TGbe editor, please change “MLD Capabilities and Operations field” to “MLD Capabilities and Operations subfield” through the TGbe draft 3.0 |
| 16578 | 9.4.2.312.2.3 | 259.01 | MLD Capabilities and Operations is a subfield (in the Common Info field of the Basic MLE) and not a field. Please revise as suggested. | Please revise the sentence as follows:" Table 9-401i -Subfields of the MLD Capabilities and Operations \*subfield\*." | Revised-  Agree. Apply the changes marked as #16578 in this document.  To TGbe editor, please change “MLD Capabilities and Operations field” to “MLD Capabilities and Operations subfield” through the TGbe draft 3.0 |
| 17321 | 10.8 | 346.16 | An EHT AP is an HE AP so no need to call this out again here. Remove "EHT". | As in comment. | Revised-  Agree. Apply the changes marked as #17321 in this document. |
| 17322 | 10.8 | 346.53 | The exclusiveness of the two conditions here is incorrect. A non-AP EHT STA that is associated with an EHT AP and BW is leq 160 MHz still follows baseline (one BQR) operation. Please fix. | As in comment. | Rejected-  According to 35.5.3 Operation of the two BQR Control subfields, it says "An EHT STA may set dot11TwoBQRsOptionImplemented to true if it is associated with an EHT AP that supports 320 MHz." The the suggested change is coevered by the reference of subclause 35.5.3. |
| 17323 | 10.8 | 347.31 | Seems the same reference is cited in both cases. How about just mention TB PPDU as opposed to calling out HE and EHT TB PPDUs and just have the reference once? | As in comment. | Revised-  Agree in principle. Apply the changes marked as #17323 in this document. |
| 17351 | 10.8 | 340.19 | The first row of this table is very long, causing a multi page table. Please abbreviate the terms in the first row and add a note where it cites as references (e.g., title row says DSSS PHY, DMG PHY etc.) and then in the note you can say for DSS PHY see X for DMG PHY see Y. Same abbreviations can be used within the table itself of course. | As in comment. | Rejected-  The commenter fails to identiy the technical issue of the added/changed text of TGbe. The cited part is baseline, please submit the comment to the Revme. |
| 17352 | 10.8 | 348.07 | MIB variable enablement for SRS, AAR etc are missing in this list. Suggest adding them. | As in comment. | Revised-  Agree in principle. Apply the changes marked as #17532 in this document. |

**Discussion:** None.

3.2 Definitions specific to IEEE 802.11

Insert the following definitions (maintaining alphabetical order):

**non-multi-link operation (non-MLO) (#15286):** Operations that do not involve multi-link operation between two MLDs as described in 35.3 (Multi-link operation) (#15944).

**10.8 HT Control field operation**

***Change the second paragraph as follows:***

A STA in which at least one of dot11RDResponderOptionImplemented, dot11MCSFeedbackOptionImple­mented, and dot11AlternateEDCAActivated is equal to true shall set dot11HTControlFieldSupported or dot11VHTControlFieldOptionImplemented or both equal to true. A STA that has at least one of dot11TR­SOptionImplemented, dot11OMIOptionImplemented, dot11HEBSRControlImplemented, dot11HEBQR­ControlImplemented, dot11RDResponderOptionImplemented, and dot11SRResponderOptionImplemented equal to true or has at least one of dot11HEMCSFeedbackOptionImplemented and dot11EHTMCSFeed­backOptionImplemented greater than zero shall set dot11HEControlFieldOptionImplemented to true. An HE(#17321) AP shall set dot11HEControlFieldOptionImplemented to true.

**Table 10-12—Conditions for including Control subfield variants**

|  |  |
| --- | --- |
| **Control subfield variant** | **Condition** |
| |  | | --- | | BQR | | |  | | --- | | The transmitting non-EHT non-AP HE STA, or non-AP EHT STA that associated with a non-EHT HE AP follows the bandwidth query report procedure, as described in ~~26.5.2 (UL MU operation)~~26.5.6 (Bandwidth query report operation) and the recipient non-EHT HE AP has set the BQR Support subfield in the HE MAC Capabilities Infor­mation field in the HE Capabilities elements it transmits to 1.  The transmitting non-AP EHT STA that associated with an EHT AP follows the band­width query report procedure, as described in 35.5.3 (Operation of the two BQR Con­trol subfields) and the recipient EHT AP has set the Two BQRs Support subfield in the EHT MAC Capabilities Information field in the EHT Capabilities elements it transmits to 1. | |
| AAR | The transmitting non-AP STA affiliated with a non-AP MLD follows the AP assisted medium synchronization recovery procedure as described in 35.3.16.8.3 (AP assisted medium synchronization recovery procedure) and the recipient AP affiliated with an AP MLD has set the AAR Support subfield in the MLD Capabilities and Operations subfield(#16582, 16577, 16578) in a Basic Multi-Link element the recipient AP transmits to 1. |
| |  | | --- | | ONES | | The transmitting STA may include a ONES Control subfield in an MPDU that is not carried in an HE/EHT TB PPDU (see 26.5.2.4 (A-MPDU contents in an HE TB PPDU)) when there is nothing to report in A-Control subfield. (#17323)  NOTE—According to 35.5.2.3.1 (General), a non-AP EHT STA that transmits an EHT TB PPDU follows the same rules defined in 26.5.2.4 (A-MPDU contents in an HE TB PPDU) where rules related to HE TB PPDUs also apply to EHT TB PPDUs. |

35.3.16.8.2 MediumSyncDelay OFDM ED based recovery procedure (***#CID 17532***)

A STA with dot11MSDOFDMEDOptionImplemented that is equal to true while the MediumSyncDelay timer has a nonzero value shall use dot11MSDOFDMEDthreshold instead of dot11OFDMEDThreshold as specified in 36.3.21.6.3 (CCA sensitivity for the primary 20 MHz channel) in order to detect a channel busy condition in the primary 20 MHz channel if the MediumSyncDelay timer has a nonzero value.

While the MediumSyncDelay timer has a nonzero value, a STA with dot11MSDOFDMEDOptionImplemented that is equal to true shall perform the following when the timer has a nonzero value:

**C.3 MIB Detail**

***Change Dot11StationConfigEntry as follows (not all lines shown): (#CID 17352)***

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-- \* dot11StationConfig TABLE

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dot11StationConfigEntry ::= SEQUENCE

{

dot11StationIDMacAddress,

…

dot11BSSMaxIdlePeriodIndicationByNonAPSTA,TruthValue

,

dot11EHTOptionImplemented,TruthValue,

dot11EHTTXOPSharingTFOptionImplementedTruthValue,

dot11EHTNSTRMobileAPMLDImplementedTruthValue,

dot11RestrictedTWTOptionImplementedTruthValue,

dot11TwoBQRsOptionImplementedTruthValue,

dot11SRSOptionImplementedTruthValue,

dot11AAROptionImplementedTruthValue,

dot11MSDOFDMEDOptionImplementedTruthValue

}

***Insert the following after the dot11BSSMaxIdlePeriodIndicationByNonAPSTA OBJECT-TYPE in the dot11StationConfig TABLE: (#CID 17352)***

dot11SRSOptionImplemented OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This is a capability variable.

Its value is determined by device capabilities.

This attribute, when true, indicates the ability of the EHT STA to support the SRS operation. If the attribute is false, the EHT STA does not support the SRS operation."

::= { dot11StationConfigEntry 230 }

dot11AAROptionImplemented OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This is a capability variable.

Its value is determined by device capabilities.

This attribute, when true, indicates the ability of the EHT STA to support the AAR operation. If the attribute is false, the EHT STA does not support the AAR operation."

::= { dot11StationConfigEntry 231 }

dot11MSDOFDMEDOptionImplemented OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This is a capability variable.

Its value is determined by device capabilities.

This attribute, when true, indicates the ability of the EHT STA to support the MSDOFDMED operation. If the attribute is false, the EHT STA does not support the MSDOFDMED operation."

::= { dot11StationConfigEntry 232 }