IEEE P802.11
Wireless LANs

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| **11bk Spec Text on Capability Indication for 320 MHz Positioning** |
| **Date:** 2023-09-25 |
| **Author(s):** |
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Abstract

We propose the draft specification skeleton for the capability of 320 MHz positioning support to help the creation of TGbk draft.

Revisions:

* Rev 0: Initial version of the document.

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 TGbk Draft. This introduction is not part of the adopted material.

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

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

***Discussion:***

*An EHT AP capable of 320 MHz may support 802.11az only (i.e. up to 160 MHz for ranging measurements) or support 802.11az+802.11bk (i.e. up to 160 MHz for ranging measurements). So, it’s important to indicate such capability in the Extended Capabilities field, similar to other 11az features. This capability will help an ISTA determine whether to establish a session with the AP and what parameters to include in the IFTMR frame.*

**Proposed spec text:**

***TGbk editor: Please note Baseline is 11az 2022, REVme\_D4.0, 11be4.0 and 11bk D0.7***

***TGbk editor: Please insert a new line in Table 9-190—Extended Capabilities field in subclause 9.4.2.26 as follows (track change enabled):***

**9.4.2.26 Extended Capabilities element**

**Table 9-153—Extended Capabilities field**

|  |  |  |
| --- | --- | --- |
| Bit | Information | Notes |
| <ANA+1> | 320 MHz Positioning Support | A STA sets the 320 MHz Positioning Support field to 1 if dot11320MHzPositioningImplemented is true. Otherwise the STA sets the 320 MHz Positioning Support field to 0; see 11.21.6 (FTM Procedure).  |

***TGbk editor: Please insert a new paragraph to the end of subclause 11.21.6.2 as follows (track change enabled):***

**11.21.6.2 FTM capabilities**

… …

A STA in which dot11320MHzPositioningImplemented is true shall set the 320 MHz Positioning Support field of the Extended Capabilities element to 1. Otherwise, it shall set the 320 MHz Positioning Support field of the Extended Capabilities element to 0.

***TGbk editor: Please update Annex C as follows (track change enabled):***

**Annex C**

**(normative)**

**ASN.1 encoding of the MAC and PHY MIB**

**C.3 MIB detail**

***Change the item “dot11RMCivicConfigured” at the end of the list in the object definition that begins with “Dot11WirelessMgmtOptionsEntry ::=” in C.3 as follows:***

 dot11PhaseShiftFeedbackImplemented TrueValue,

 dot11320MHzPositioningImplemented TrueValue

***Insert new text after the object definition that begins with “dot11PhaseShiftFeedbackImplemented OBJECT-TYPE in C.3 as follows:***

dot11320MHzPositioningImplemented 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 that support for 320 MHz positioning is implemented. The capability is disabled otherwise.

::= { dot11WirelessMgmtOptionsEntry 66 }

***Change the object definition that begins with “dot11FineTimingMeasurement OBJECT-GROUP” in C.3 as follows:***

 Dot11FineTimineMeasurement OBJECT-GROUP

 OBJECTS {

 dot11PassiveTBRangingAODImplemented,

 dot11320MHzPositioningImplemented