IEEE P802.11
Wireless LANs

|  |
| --- |
|  PDT MAC UHR BSS Operation |
| Date: 2025-01-02 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Ming Gan | Huawei |  |  | ming.gan@huawei.com |
|  |  |  |  |  |

Abstract

This document contains Proposed Draft Text (PDT) for the UHR BSS Operation of the proposed TGbn (UHR, Ultra High Reliability) amendment to the 802.11 standard.

Revisions:

* Rev 0: Initial version of the document.
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 TGbn 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 TGbn Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

1. **Proposed spec text**

***TGbn editor: Please add the following subclause 37.3 UHR BSS operation in 802.11bn D0.1:***

37.3 UHR BSS operation

**37.3.1 Basic UHR BSS operation**

A UHR STA has dot11UHROptionImplemented equal to true.

A STA operating in the 2.4 GHz band that sets dot11UHROptionImplemented to true shall set dot11EHTOptionImplemented, dot11HEOptionImplemented, dot11HighThroughputOptionImplemented to true. A STA operating in the 5 GHz or 6 GHz band that sets dot11UHROptionImplemented to true shall set dot11EHTOptionImplemented, dot11HEOptionImplemented, dot11VHTOptionImplemented and dot11HighThroughputOptionImplemented to true.

A UHR STA operating in the 6 GHz band is a VHT STA except that it is exempt from following VHT and HT functionalities and/or requirements that are not applicable or that are superseded by equivalent HE functionalities and/or requirements (see Clause 26 (High Efficiency (HE) MAC specification) and Clause 27 (High Efficiency (HE) PHY specification)), or equivalent EHT functionalities and/or requirements (see Clause 35 (Extremely high throughput (EHT) MAC specification) and Clause 36 (Extremely high throughput (EHT) PHY specification), or equivalent UHR functionalities and/or requirements (see Clause 37 (Ultra high reliability (UHR) MAC specification) and Clause 38 (Ultra high reliability (UHR) PHY specification), and that it shall use the HE format, EHT format or UHR format instead of the VHT, HT\_GF, or HT\_MF format for PPDUs transmitted in the 6 GHz band. for the 6 GHz band are defined in 26.17.2 (HE BSS operation in the 6 GHz band).

If a UHR BSS operating channel width is announced in the EHT Operation element, then an UHR AP shall announce the BSS operating channel width(s) to non-EHT non-AP STAs with the restrictions as described in 35.15.1 (Basic EHT BSS operation).

**C.3 MIB Detail**

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

Dot11StationConfigEntry ::= SEQUENCE

{

dot11StationID MacAddress,

…

dot11UHROptionImplemented TruthValue,

}

***Insert the following***

dot11UHROptionImplemented 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 indicates whether the entity is UHR capable."

::= { dot11StationConfigEntry xxx }