IEEE P802.11
Wireless LANs

|  |
| --- |
|  PDT MAC UHR Acknowledgement Procedure |
| 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 Acknolwedgement Procedure 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).***

***TGbe 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.x UHR Acknolwedgement Procedure in 802.11bn D0.1:***

37.x UHR Acknowledgement Procedure

37.x.1 Overview

The UHR acknowledgment procedure builds on the features defined for HT-immediate block ack (see 10.25.6 (HT-immediate block ack extensions)), HE acknowledgement (see 26.4 (HE acknowledgment procedure)) and EHT acknowledgement (see 35.4 (EHT acknowledgment procedure)).

An UHR STA that receives a Multi-STA BlockAck frame that is a response to frames requiring acknowledgment shall examine Per AID TID Info field received in the Multi-STA BlockAck frame, and shall process each Per AID TID Info field using the procedure defined in 26.4.2 (Acknowledgment context in a Multi-STA BlockAck frame) and 37.x.2 (Dynamic Unavailability Operation (DUO) mode) when non-acknowledgement context is carried in the same Multi-STA BlockAck frame.

An UHR STA that responds to an UHR MU PPDU with an UHR TB PPDU follows the same rules as an HE STA that responds to an HE SU PPDU or HE ER SU PPDU with a TB PPDU as defined in 26.4.4.4 (Responding to an HE MU PPDU, HE SU PPDU, or HE ER SU PPDU with an HE TB PPDU) with the following changes:

—Replacing HE MU PPDU, HE SU PPDU or HE ER SU PPDU by UHR MU PPDU

—Replacing HE TB PPDU by UHR TB PPDU

—Replacing HE STA by UHR STA.

TBD procedure is for UHR ELR PPDU.

An UHR STA that responds to an UHR MU PPDU with a PPDU carrying a frame addressed to a single STA follows the same rules as an HE STA that responds to an HE MU PPDU with an SU PPDU as defined in 26.4.4.3 (Responding to an HE MU PPDU with an SU PPDU) with the following changes:

—Replacing HE MU PPDU by UHR MU PPDU

—Replacing SU PPDU by a PPDU carrying a frame addressed to a single STA

—Replacing HE STA by UHR STA.

An UHR AP that responds to an UHR TB PPDU with a PPDU other than UHR MU PPDU addressed to multiple STAs follows the same rules as an HE AP that responds to an HE TB PPDU with an SU PPDU as defined in 26.4.4.5 (Responding to an HE TB PPDU with an SU PPDU) with the following changes:

—Replacing HE TB PPDU by UHR TB PPDU

—Replacing SU PPDU by a PPDU carrying a frame addressed to a single STA

—Replacing HE STA by UHR STA.

An UHR AP that responds to an UHR TB PPDU with an UHR MU PPDU follows the same rules as an HE AP that responds to an HE TB PPDU with an HE MU PPDU as defined in 26.4.4.6 (Responding to an HE TB PPDU with an HE MU PPDU) with the following changes:

—Replacing HE TB PPDU by UHR TB PPDU

—Replacing HE MU PPDU by UHR MU PPDU

—Replacing HE STA by UHR STA.