IEEE P802.11
Wireless LANs

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| PDT MAC High Priority EDCAs |
| Date: 2024-12-01 |
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Abstract

This document contains Proposed Draft Text (PDT) for the Channel Access – High Priority EDCA feature of the proposed TGbn (UHR, Ultra High Reliability) amendment to the 802.11 standard.

This version of PDT includes the motions passed in IEEE up to November 2024.

# Revision information

The following is a summary of the important changes that occurred within each revision of this document:

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| **Revision** | **Major changes** |
| 0 | Initial revision: motion passed in IEEE November 2024 |
| 1 | Editorial:* Updated authors list
* From multiple individuals: marked last sentence as “Editor’s note”. “Balance the impact mean “that improvements should not come at the expense of legacy devices and if there is an impact – the feature should have reasonable handles to control it. More details will follow once we pass more SPs/motions and that sentence will naturally be gone
* from Alfred – “mechanism” -> channel access protocol”
* Xiaofei Wang – changed tail access delay to worst case access latency; deleted “Details TBD”; “aims at reducing” -. “reduces”
* From Mark Rison: “low latency traffic buffered…” -> low latency AC\_VO traffic
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| 2 | Editorials:* From multiple individuals: Added “TBD rules” to “balance the impact” sentence and removed Editor’s note; removed “expected” and replaced with “should” as not this sentence has “TBD rules”
* Yongho Seok: reverted worst -case to tail access delay latency;
* From Mark Rison: reverted “protocol “ to “mechanism”
* From Minyoung: Moved other cases are TBD into parenthesis to explicitly connect to AC\_VO traffic
* Added SP text
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| 3 | Editorials:* From multiple individuals: modified “tail access delay” to “the access delay distribution tail”
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# 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 abstract, revision information, introduction, explanation of the proposed changes and references sections 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).***

## Explanation of the proposed changes:

The proposed changes to the 802.11 TGbn draft within this document are based on the following motions adopted by the TGbn task group:

### Relevant passed motions:

[Motion 123, [1] doc #11-24/0171r19 ,SP2 – Channel Access, doc 11-24/1667r13]

**Do you agree to improve EDCA to reduce tail access delay of Low Latency traffic in multi-BSS dense scenarios in presence of best effort traffic?**

* The solution to improve EDCA is distributed
* The impact on legacy device has to be balanced
* Low Latency traffic is treated as AC\_VO traffic. Other cases are TBD

# Text to be adopted begins here:

***TGbn editor: please insert the following subclause:***

3.13 Prioritized EDCA[#M123]

Prioritized EDCA (P-EDCA) is an enhancement of the EDCA mechanism (see 10.23.2 (HCF contention based channel access (EDCA)) that reduces the access delay distribution tail for low latency AC\_VO traffic (other cases are TBD). The use of P-EDCA by a UHR STA should balance the impact on STAs that do not use P-EDCA with TBD rules

# Text to be adopted ends here.

**SP: Do you agree** **to incorporate the proposed text changes for P-EDCA in 11-24/2007r3 to the latest TGbn draft?**

**References:**

1. [11-24-0171r21](https://mentor.ieee.org/802.11/dcn/24/11-24-0171-21-00bn-tgbn-motions-list-part-1.pptx): 11-24-0171-21-00bn-tgbn-motions-list-part-1, Alfred Asterjadhi (Qualcomm Inc.)