### IEEE P802.11Wireless LANs

|  |
| --- |
| PDT MAC for Dynamic Subband Operation (DSO) |
| Date: 2024-12-04 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Morteza Mehrnoush | Apple |   |  |  |
| Reza Hedayat | Apple |  |  |  |
| Minyoung Park | Apple |  |  |  |
| Laurent Cariou | Intel |  |  |  |
| Liwen Chu | NXP |  |  |  |
| Matthew Fischer | Broadcom |  |  |  |
| Gaurang Naik | Qualcomm |  |  |  |
| Sengho Byeon | Samsung |  |  |  |
| Vishnu Ratnam | Samsung |  |  |  |
| Aniruddh Kabbinale | Samsung |  |  |  |
| Kerstin Johnsson | Nokia |  |  |  |
| Mark Rison | Samsung |  |  |  |
| Tuncer Baykas | Self |  |  |  |

Abstract

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

Relevent IEEE contributions:

11-22/2204, 11-23/2141, 11-23/2027,

11-23/843, 11-23/1496, 11-24/591,

11-23/1892, 11-23/1913, 11-23/1935,

11-24/1553, 11-24/1564, 11-24/1589,

11-24/1588, 11-24/2141, 11-24/1587

# Revision information

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

|  |  |
| --- | --- |
| **Revision** | **Major changes** |
| 0 | Initial revision |
| 1 | Editorial changes and some minor clarifications  |
| 2 | Some more editorial changes and clarifications (added TBD for DSO STA enablement given it is TBD if the AP can enable DSO for associated STAs) |
| 3 | More clarification updates based on the received comments |
| 4 | Clarification and editorial changes based on new comments |
| 5 | Removed the parts that members need more time to review |
| 6 | Some editorial fixes |

# 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, discussion 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).***

***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.***

# Text to be adopted begins here:

***TGbn editor: Please add the following subclause 37.x Mechanisms for Dynamic Subband Operation (DSO) in 802.11bn D0.1:***

37. Ultra High Reliability (UHR) MAC specification

**37.x Dynamic Subband Operation**

A non-AP STA that supports dynamic subband operation (DSO) is called a DSO non-AP STA and shall set the DSO Supported field of the UHR MAC Capabilities Information field of the UHR Capabilities element to 1. An AP that supports DSO is called a DSO AP and shall set the DSO Supported field of the UHR MAC Capabilities Information field of the UHR Capabilities element to 1.

DSO is a mechanism where a DSO non-AP STA that has an operating bandwidth narrower than the DSO AP can dynamically be allocated frequency resources outside of its current operating bandwidth within the DSO AP’s BSS bandwidth, on a per-TXOP basis.

# Text to be adopted ends here.

**SP: Do you agree** **to incorporate the proposed text changes for DSO in 11-25/0454r0 to the latest TGbn draft?**

**References:**

1. 11-24-0171r21: 11-24-0171-21-00bn-tgbn-motions-list-part-1, Alfred Asterjadhi (Qualcomm Inc.)