IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EBCS UL frame transmission | | | | |
| Date: Jan 10th, 2025 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Abhishek Patil | Qualcomm Technologies Inc. |  |  | appatil@qti.qualcomm.com |
| George Cherian |  |  |  |
| Jouni Malinen |  |  |  |
| Youhan Kim |  |  |  |

Abstract

The EBCS relaying service is intended for low-power, low capability non-AP STAs. The service is best effort and does not require a non-AP STA to determine if there is an AP in the neighborhood that can relay the HLP payload carried in its EBCS UL frame. This contribution provides guidance to increase the likelihood that a non-AP STA’s EBCS UL frame is received by an EBCS AP that can provide relaying service.

**Revisions:**

* Rev 0: Initial version of the document.
* Rev 1: Minor updates based on offline feedback
* Rev 2: Updates made based on feedback received whe the document was presented (1/13/25 PM2 REVmf session)

***TGm editor: Baseline for this document is REVme D7.0.***

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

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

**3.2 Definitions specific to IEEE 802.11**

*TGm editor, please insert the following definition (maintaining alphabetical order):*

Preferred Scanning Channels: [PSCs] A set of 20 MHz channels that are recommended as candidates to be used as a primary 20 MHz channel by a 6 GHz-only AP.

**34.4.3 EBCS UL procedure at an EBCS non-AP STA**

*TGm editor, please update (including splitting) the 1st paragraph in this section as shown below:*

An EBCS non-AP STA may transmit an EBCS UL frame without receiving a Beacon frame, S1G Beacon frame, PV1 Probe Response frame, or a Probe Response frame with the EBCS Relaying Supported field of the Extended Capabilities element set to 1.

NOTE 1 – An EBCS non-AP STA that transmits the EBCS UL frame can be a transmit-only device.

An EBCS non-AP STA may transmit an EBCS UL frame in a non-HT duplicate PPDU. An EBCS non-AP STA 6G should transmit a PPDU containing an EBCS UL frame on a PSC if the PPDU is not a non-HT duplicate PPDU; otherwise, an EBCS non-AP STA 6G should include at least one PSC within the PPDU BW if the PPDU format is non-HT duplicate PPDU.

NOTE 2 – Transmitting an EBCS UL frame in a PSC increases the likelihood that the frame is received by at least one 6 GHz EBCS AP.

NOTE 3 – Transmitting an EBCS UL frame in a non-HT duplicate PPDU can enable EBCS APs having their primary channel within the PPDU’s BW to receive the frame.

The address fields are defined in 9.3.3.1 (Format of (PV0) Management frames) where the Address 1 field of the frame shall be set to a group address. The EBCS content MAC address is formatted as described in 34.2 (EBCS addressing).