IEEE P802.11
Wireless LANs

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| 2.3.4 EDMG Extended Schedule element |
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Abstract

This document proposes specification text for subcaluse 2.3.4 of the SFD describing EDMG Extended Schedule element.

* + 1. EDMG Extended Schedule element

The EDMG Extended Schedule element defines the channel scheduling for an EDMG BSS, including channel allocation indications if allocations are scheduled over only one secondary 2.16GHz channel or over more than one 2.16GHz channel regardless of whether the primary channel is included or not.

The format of the EDMG Extended Schedule element is shown in Figure 13.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Element ID | Length | Element ID Extension | Number of Allocations | Channel Allocation 1 | … | Channel Allocation N |
| Octets: | 1 | 1 | 1 | 1 | 6 or 18 |  | 6 or 18 |

1. —EDMG Extended Schedule element format

The Element ID field is equal to the value for the Element ID Extension, specified in Table 9-77.

The Length field for this element indicates the length of the Information field.

The Element ID Extension field is equal to the value for the EDMG Extended Schedule, specified in Table T.B.D.

The Number of Allocations field indicates the number, *N*, of Channel Allocation fields following it.

Each Channel Allocation field starts with a Scheduling Type subfield, which defines the format of the remaining of the Channel Allocation field.

If the Scheduling Type subfield is 0, the Channel Allocation field contains incremental signaling to the Extended Schedule element. In this case, the Channel Allocation field is defined in Figure 14 and specifies the allocation and the bandwidth that the allocation occupies.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | B0 | B1-B24 | B25 | B26-B33 | B34 | B35-B43 | B44-B47 |
|  | Scheduling Type | Allocation Key | Channel Aggregation | BW | Asymmetric Beamforming Training | Receive Direction | Reserved |
| Bits: | 1 | 24 | 1 | 8 | 1 | 9 | 4 |

1. —Channel Allocation field format

The contents of the Allocation Key subfield are used to identify the allocation. This is done by matching the contents of this subfield with the information obtained from the Extended Schedule element transmitted in the same DMG Beacon or Announce frame. The Allocation Key subfield is formatted as shown in Figure 15.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | B0-B3 | B4-B11 | B12-19 | B20-23 |
|  | Allocation ID | Source AID | Destination AID | Reserved |
| Bits: | 4 | 8 | 8 | 4 |

1. —Allocation Key field format

The Allocation ID, Source AID and Destination AID subfields are collectively used to identify the allocation included as part of the Extended Schedule element.

The Channel Aggregation and BW subfields are defined in Table 9. These fields specify the properties of the allocation identified by the Allocation Key subfield.

The Asymmetric Beamforming Training subfield is set to 1 to indicate that this allocation is dedicated to performing the procedure specified in 3.2.4. Otherwise, this field is set to 0.

The Receive Direction subfield indicates the receive antenna configuration that the PCP or AP uses during the allocation and is formatted as shown in Figure 16. The Receive Direction subfield is reserved if the Asymmetric Beamforming Training is one.

|  |  |  |  |
| --- | --- | --- | --- |
|  | B0 | B1-B6 | B7-B8 |
|  | IsDirectional | Sector ID | DMG Antenna ID |
| Bits: | 1 | 6 | 2 |

1. —Receive Direction subfield format

The IsDirectional subfield is set to 1 to indicate that the PCP or AP uses a directional, non quasi-omni antenna pattern to receive frames during the allocation, and is set to 0 otherwise.

The Sector ID subfield is reserved if the IsDirectional subfield is 0. Otherwise, the Sector ID subfield indicates the sector that the AP or PCP uses to receive frames during this allocation.

The DMG Antenna ID subfield is reserved if the IsDirectional subfield is 0. Otherwise, the DMG Antenna ID subfield indicates the DMG antenna that the AP or PCP uses to receive frames during this allocation.

If the Scheduling Type subfield is 1, the Channel Allocation field contains the complete allocation scheduling information. In this case, the Channel Allocation field is defined in Figure 17.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | B0 | B1 | B2-B9 | B10 | B11-B19 | B20-B23 | B24-B143 |
|  | Scheduling Type | Channel Aggregation | BW | Asymmetric Beamforming Training | Receive Direction | Reserved | Allocation |
| Bits: | 1 | 1 | 8 | 1 | 9 | 4 | 8×15 |

1. —Channel Allocation field format

The Channel Aggregation and BW subfields are defined in Table 9. These fields specify the properties of the allocation identified by the Allocation subfield.

The Allocation subfield is defined in Figure 9-517.