IEEE P802.11
Wireless LANs

|  |
| --- |
| 11bi D1.0 CID 757  |
| Date: 2025-07-28 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Jerome Henry | Cisco Systems |  |  | jerhenry@cisco.com |
| Antonio de la Oliva | Interdigital Ltd, UC3M |  |  | aoliva@it.uc3m.es |
| Domenico Ficara | Cisco Systems |  |  | dficara@cisco.com |
| Ugo Campiglio | Cisco Systems |  |  | ucampigl@cisco.com |
| Javier Contreras | Cisco Systems |  |  | jacontre@cisco.com |

Abstract

This submission proposes resolutions for the following CID:

757

Revisions:

* Rev 0: Initial version of the document.

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 TGbi D1.0 Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbi D1.0 Draft. (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents). TGbi Editor: Editing instructions preceded by “TGbi Editor” are instructions to the TGbi editor to modify existing material in the TGbi draft. As a result of adopting the changes, the TGbi editor will execute the instructions rather than copy them to the TGbi Draft.***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CID** | **Clause** | **P.L** | **Comment** | **Proposed Change** | **Resolution** |
| 757 | 10.71.2.2 | 78.65 | The STA is assigned to the default group if it does not express a group preference, but the STA has no way to discover the groups before (re)assoc, which is an issue especially for fast roaming. | Design a mechanism for the associated STA to learn about the neighboring APs and their groups to faciliate roaming | Revised |

**Discussion**

11k neighbor reports are an easy mechanism to convey to individual STAs information about neighboring BSSs. They can be unicast and robust.

**9.6.6.6 Neighbor Report Request frame format**

*Instructions to the Editor: Please make the following changes to Figure 9-1189.*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Category | Radio Measurement Action | Dialog Token | SSID (Optional) | LCI Measurement Request (optional) | Location Civic Measurement Request (optional) | Neighbor DMG Request (optional) | BPE AP MLD Discovery Request (optional) | CPE AP MLD Request (optional) |
| 1 | 1 | 1 | variable | variable | variable | variable | variable | variable |

**Figure 9-1189—Neighbor Report Request frame Action field format**

*Instructions to the Editor: Please insert at the end of clause 9.6.6.6.*

The CPE AP MLD Discovery Request field is optionally present. If present, it contains a Measurement Request element with Measurement Type field equal to CPE AP MLD Discovery (see Table 9-136(Measurement type definitions for measurement requests)). The element indicates a request for the CPE element for each Neighbor report element ((see 11.10.10.2(Requesting a neighbor report)). The Parallel, Enable, Request, Report and Duration Mandatory subfield of the Measurement Request Mode field of the Measurement Request element are reserved (see 9.4.2.19.1(General)). The Measurement Request field is not present in the Measurement Request element. (#756)

*Insert the following paragraphs after the 65th paragraph (“Note 3 -The AP follows the rules…****):***

The EDP subelement has the same format as the EDP element (see 9.4.2.349, EDP element).

**11.10.10.2. Requesting a neighbor report**

*Instructions to the Editor: Insert the following paragraphs at the end of the clause:*

To request the CPE parameters of neighboring AP MLDs, the STA shall transmit an encrypted Neighbor Report Request frame that includes a CPE AP MLD request field with a Measurement Request element with the value of its Measurement type field equal to Neighboring CPE APs. (#756)

**11.10.10.3 Responding to a neighbor report request**

*Insert the following paragraphs at the end of the clause:*

An AP that has set the Group EDP Epoch Supported to 1 in the RSNXE field that receives an encrypted Neighbor Report Request frame that includes a Measurement Request element with the value of its Measurement Type field equal to CPE AP EDP, shall respond with an encrypted Neighbor Report Measurement frame with a list of Neighbor Report elements of neighboring APs supporting CPE and their individual EDP elements.

**9.4.2.19.1 General**

*Instructions to the Editor: Please make the following changes to the Table 9-136.*

**Table 9-136—Measurement type definitions for measurement requests**

|  |  |
| --- | --- |
| **Name** | **Measurement type** |
| CPE AP MLD EDP (#756) | 19 |
| Reserved  | ~~18~~ 20 - 254 |
| Measurement Pause  | 255 |

**9.4.2.19.1 General**

*Instructions to the Editor: Please change the following paragraphs as follows:*

The Measurement Request Mode field (shown in Figure 9-242 (Measurement Request Mode field format)) is a bitmap with the following bits defined:

The Parallel subfield is used to request that more than one measurement is to be started in parallel. The Parallel subfield is set to 1 to request that the measurement is to start at the same time as the measurement described by the next Measurement Request element in the same Radio Measurement Request frame. The Parallel subfield is set to 0 if the measurements are to be performed in sequence. The Parallel subfield is reserved when the Enable subfield is 1, in the last or only Measurement Request element in the frame, or when the Measurement Type field is 0, 1, 2, ~~or~~ 18 or 19 (#756) (spectrum management measurements). See 11.10.6 (Requesting and reporting of measurements).

The Enable subfield is used to differentiate between a request to make a measurement and a request to control the measurement requests and triggered or autonomous reports generated by the destination STA. The Enable subfield is further described in Table 9-135 (Summary of use of Enable, Request, and Report subfields).

The Request subfield is described in Table 9-135 (Summary of use of Enable, Request, and Report subfields).

The Report subfield is described in Table 9-135 (Summary of use of Enable, Request, and Report subfields).

The Duration Mandatory subfield indicates whether the measurement duration contained within the measurement request is interpreted as mandatory by the STA receiving the request. A 0 indicates that the duration requested is a maximum duration, and the requesting STA accepts measurement results taken over any shorter duration. A 1 indicates that the duration requested is a mandatory duration. The Duration Mandatory subfield is reserved when the Enable subfield is 1, or when the Measurement Type field is 0, 1, 2, 8, 18, 19 (#756) or 255. See 11.10.4 (Measurement duration).

All other bits are reserved.

**9.4.2.35** **Neighbor Report element**

 *Change* [*Figure 9-417 (BSSID Information field format)*](#_bookmark481) *as follows:*

 B0 B1 B2 B3 B4 B9 B10 B11 B12 B13 B14

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| APReachability | Security | Key Scope | Capabilities | Mobility Domain | High Throughput | Very High Throughput | FTM | High Efficiency |

 Bits: 2 1 1 6 1 1 1 1 1

 B15 B16 B17 B18 B19 B20 B21 B22 B23 B24B31

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ER BSS | Colocate d AP | Unsolicited Probe Responses Active | Members Of ESS With2.4/5 GHzColocated AP | OCTSupported With Reporting AP | Colocated With 6 GHz AP | ~~Reserved~~ Extremely High Throughput | DMGPositioning | Enhanced Data Privacy | Reserved |

 Bits: 1 1 1 1 1 1 1 1 9

 **Figure 9-417—BSSID Information field format**

 *Insert the following paragraphs after the 22nd paragraph (“A Basic Multi-Link subelement included …):*

The Enhanced Data Privacy subfield is set to 1 to indicate that the AP represented by this BSSID is an EDP AP that has set the Group EDP Epoch Supported field of the Extended RSN Capabilities field to 1. Otherwise, the Enhanced Data Privacy field is set to 0.

*Change* [*Table 9-212 (Optional subelement IDs for Neighbor Report)*](#_bookmark482) *(not all lines shown) as*

*follows:*

 **Table 9-212—Optional subelement IDs for Neighbor Report**

|  |  |  |
| --- | --- | --- |
| **Subelement ID** | **Name** | **Extensible** |
| … |  |  |
| 202 | EDP Element | Yes |
| 203–220 | Reserved |  |

The Data field of the HE 6 GHz Band Capabilities subelement has the same format as the Information field of the HE 6 GHz Band Capabilities element (see 9.4.2.262).

The Vendor Specific subelement has the same format as the Vendor Specific element (see 9.4.2.24). Zero or more Vendor Specific subelements are included in the list of optional subelements.

***Editor please add the following line right after the above paragraph:***

The EDP subelement includes the EDP Epoch parameters of the default EDP epoch supported by the reported AP. This element is defined in 9.4.2.348 (EDP element).