IEEE P802.11
Wireless LANs

|  |
| --- |
| Normative text for Differentiated Initial Link Setup |
| Date: 2013-\*\*-\*\* |
| Author(s): |
| Name | Affiliation | Address | Phone | Email |
| Lin Cai | HuaweiTechnologies Co. Ltd. |  |  | Lin.Cai@huawei.com |
| George Calcev | HuaweiTechnologies Co. Ltd. |  |  | George.Calcev@huawei.com |
| Phillip Barber | HuaweiTechnologies Co. Ltd. |  |  |  |
|  |  |  |  |  |

Abstract

The submission provides normative text for differentiated initial link setup as identified in 6.1.1 of the SFD ([11-12-0151-12-00ai-proposed-specification-framework-for-tgai](https://mentor.ieee.org/802.11/dcn/12/11-12-0151-12-00ai-proposed-specification-framework-for-tgai.docx)) as:

### 6.1.1 Link setup

FILS devices shall support differentiated initial link setup (11-12/0909r10).

**3.1 Definitions**

*Instructions to Editor: Append the Clause 3.1 with the following text:*

**association category (ASC):** A label used by associating station (STA) to associate with an access point (AP) with certain priorities.

**6.3.3.3.2 Semantics of the service primitive**

*Instructions to Editor: Insert new rows in the corresponding tables as the following:*

Each BSSDescriptionFromFDSet consists of the following information items:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type**  | **Valid range** | **Description** |
| Differentiated initial link setup information | Differentiated initial link setup information includes ASC bitmap field and time duration field | As defined in8.4.2.122 | Differentiated initial link setup information includes ASC bitmap field and time duration field; This parameter is optional |

**8.3.3.2 Beacon frame body**

*Instructions to Editor: Insert new rows in the corresponding tables as the following:*

**Table 8-20 Beacon frame body**

|  |  |  |
| --- | --- | --- |
| ANA | Differentiated Initial Link Setup element  | The Differentiated Initial Link Setup element should be present when dot11FILSActiveated is true. |

**Table 8-27 Probe response frame body**

|  |  |  |
| --- | --- | --- |
| ANA | Differentiated Initial Link Setup element  | The Differentiated Initial Link Setup element should be present when dot11FILSActiveated is true. |

**8.4.2.1 General**

*Instructions to Editor: Insert new rows in the corresponding tables as the following:*

**Table 8-54—Element IDs**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element**  | **Element ID** | **Length of indicated element (in octets)**  | **Extensible** |
| Differentiated Initial Link Setup Element ( see 8.4.2.122) | ANA | 4 | **Yes** |

**8.4.2.122** Differentiated Initial Link Setup element

The Differentiated Initial Link Setup element contains a number of fields that are used to advertise which category of STAs that can associate with the AP in the following time duration. The Differentiated Initial Link Setup element should be present in Beacon frames, probe response frames, and FILS Discovery (FD) frames. The Differentiated Initial Link Setup element is defined in Fig. 8-\*\*01.

 **Figure 8-\*\*01**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element ID** | **Length** | **Association category bitmap** | **Time Duration** |

 **Octets: 1 1 1 1**

The Element ID field is equal to the Differentiated Initial Link Setup element value in Table 8-54.

The Length field is 1 octet long and set to value 2.

The association category bitmap field is one octet in length and is used to indicate one or more classes of STAs that can associate with the AP in the following time duration. If the bit position n of the bitmap equal to 1, STAs of association category n can associate with the AP before the following time duration expires. The bitmap value of zero indicates that no STA of that corresponding ASC should attempt to associate with the AP.

The Time Duration filed is one octet in length and is used by the AP to indicate the time duration during which the STAs with ASC bit 0 should not associate with the AP; all classes can associate with the AP after the time expires.

The association categories are defined as in Table 8-\*02.

 **Table 8-\*\*02**

|  |  |
| --- | --- |
| **Association Category (ASC)** | **ASC description** |
| **0** | **Realtime traffic including AC\_VO and AC\_VI** |
| **1** | **Non-realtime traffic including AC\_BK and AC\_BE** |
| **2** | **No traffic** |
| **3-7** | **Reserved** |
|  |  |
|  |  |

**10.25.4** Differentiated Initial Link Setup

*Instructions to Editor: Append the Clause 10.25.4 with the following text:*

In Beacon, Probe Response, and FD frames, a Differentiated Initial Link Setup element is optionally sent by an AP with dot11FILSActivated set to true.

The Differentiated Initial Link Setup element contains an ASC bitmap field and a Time Duration field. After receiving the differentiated Initial link Setup element, a STA checks its corresponding ASC bitmap. The STA shall defer its association if its corresponding ASC bit is 0 until the time duration expires.

**Motion-1:** To authorize the Editor to incorporate the text changes proposed in contribution 11-13-0033-00-00ai-normative-text-for-differentiated-initial-link-setup to the draft TGai Specification Document.

Yes: \_\_\_\_\_\_\_\_\_\_\_\_;  No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;  Abstain: \_\_\_\_\_\_\_\_\_\_\_\_\_

[Result of Motion]