IEEE P802.11  
Wireless LANs

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| CC08 – Normative Text for CIDs allocated to Lin Cai | | | | |
| Date: 2013-07-17 | | | | |
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Abstract

This submission proposes resolutions to CC8 comments, #1142, 1220, 1446 and 1447. The document is based on the approved 0732r1.

# Introduction

This submission proposes resolutions to CC8 comments, #1142, 1220, 1446 and 1447.

# Conventions

In this contribution, the proposed 802.11ai Specification Document text will be presented as changes to the current TGai draft specification, 11ai/D0.5 [Ref-1]. The following format conventions are used:

1. The new added and modified text is marked as underline text;
2. The deleted text is marked as ~~strikethrough text~~;
3. The unchanged baseline standard text stays in black text in the context of proposed TGai specification text;
4. The editorial instruction is marked as *italic text highlighted by Yellow*; and
5. Any other text, e.g., discussions, proposed motions, etc., is in black text, but not in the context of proposed TGai specification text.

# Proposed Changes to 802.11ai/D0.5 Specification Text

**8.4.2.187** Differentiated Initial Link Setup element

*Instructions to Editor: Modify the Clause 8.4.2.187 with the following text:*

The ILSC Information field contains one ILSC Type bitmap subfield and at least one of the four optional subfields including ILS User Priority, MAC Address Filter, and Vendor Specific Category, as specified in Figure 8-183am.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ILSC Type** | **ILS User Priority** | **MAC Address Filter** | [CIDs #1142, 1220, 1446 1447] | **Vendor Specific Category** |

**Octets:**  1 0 or 1 0 or 1 0 or 1 0 or variable length

**Figure 8-183am — ILSC Information field format**

The ILSC Type subfield is 1 octet in length and it is used to indicate the presence of the optional subfields in the ILSC Information field, as defined in Figure 8-183al. A bit value of 1 in the subfields of ILS User Priority[CID1364], MAC Address Filter, and Vendor Specific Category subfields indicates that the corresponding ILSC subfield is present. At least one of the bits in ILSC Type subfield is set to 1 when Differentiated Initial Link Setup element is present[CID1439].

**Figure 8-183al ILSC Type subfield format[CID1440]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ILS User Priority | MAC Address Filter | [CIDs #1142, 1220, 1446 1447] | Vendor Specific Category | Reserved |

Bit: 1 1 1 1 1



[CIDs #1142, 1220, 1446 1447]

**10.25.10** Differentiated Initial Link Setup

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

**10.25.10.1** AP procedures for differentiated initial link setup

*Instructions to Editor: Modify Clause 10.25.4.1 with the following text:*

An AP with dot11FILSActivated equal to true may limit the number of STAs that are allowed to attempt association concurrently through the setting of the ILS Time and ILSC Information field of the Differentiated Initial Link Setup element.

When an AP detects management frame congestions resulting from excessive initial link setup, the AP may set an ILS Time which is reserved for high priority link setup[CID 1072], and set the ILS User Priority subfield, MAC Address Filter subfield, and/or Vendor Specific Category subfield to allow a smaller subset of STAs to atttempt initial link setup during the reserved ILS Time specified in the element[CIDs 1073, 1144]. . The AP may include the Differentiated Initial Link Setup element with updated ILS Time and ILSC Information field in Beacon and Probe Response frames as long as it detects the association requests congestion.

A STA with HIGH PRIORITY TRAFFIC is a STA carrying traffic having value of UP between 4 and 7. A STA with LOW PRIORITY TRAFFIC is a STA carrying traffic having value of UP between 0 and 3. A STA with NO DATA TRAFFIC is a STA not carrying any traffic. An AP may set the ILS UP bit B0 , B1, and B2 to 1 to indicate high priority link setup for the STAs with HIGH PRIORITY TRAFFIC, LOW PRIORITY TRAFFIC, and NO DATA TRAFFIC respectively. [CIDs1112, 1114, 1115, 1147]. An AP should always allow a STA with HIGH PRIORITY TRAFFIC to attempt initial link setup before STAs with LOW PRIORITY TRAFFIC and STAs with NO DATA TRAFFIC.

**10.25.10.2 Non-AP STA procedures for differentiated initial link setup**

*Instructions to Editor: Modify Clause 10.25.4.2 with the following text:*

[CIDs #1142, 1220, 1446 1447]

# References:

1. IEEE Std 802.11ai/D0.5
2. 11-13-0495-10-00ai-tgai-d0-5-call-for-comments-responses-resolutions-cc08