IEEE P802.11
Wireless LANs

|  |
| --- |
| EBCS AP Group Text Proposal |
| Date: 2022-03-09 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Hitoshi Morioka | SRC Software | Fukuoka, JAPAN |  | hmorioka@src-soft.com |
|  |  |  |  |  |

Abstract

This document describes the text proposal for EBCS AP group.

**The baseline is D2.2.**

# Proposed text

### 3.1 Definitions specific to IEEE Std 802.11

***Insert the following new definition:***

**enhanced broadcast services (EBCS) access point (AP) (EBCS AP):** An access point that has enabled EBCS.

**enhanced broadcast services (EBCS) access point (AP) group (EBCS AP group):** A group of one or more EBCS AP(s) such that all EBCS AP(s) use common EBCS traffic stream IDs.

**enhanced broadcast services (EBCS) AP group identifier (ID) (EBCS AP group ID):** An identifier of an EBCS AP group.

**enhanced broadcast services (EBCS) certificate group (EBCS certificate group):** A group of one or more EBCS AP(s) such that all EBCS AP(s) use a common certificate for EBCS traffic streams.

**enhanced broadcast services (EBCS) traffic stream (EBCS traffic stream):** A traffic stream that carries a content on EBCS ~~DL~~.

**enhanced broadcast services (EBCS) traffic stream identifier (ID) (EBCS traffic stream ID):** An identifier of an EBCS traffic stream.

***Note to Editor: Baseline for 11.55.1a is 11-22/298r2***

### 11.55.1a EBCS Addressing

EBCS frames shall be addressed using an EBCS Content MAC address or EBCS Info MAC address in the frame header. Both the EBCS Content MAC address and EBCS Info MAC address are multicast addresses with the first three octets set to 01-0F-AC, and the remaining octets generated depending on the type of stream and the content ID.

The EBCS Info MAC address used for EBCS Info frames shall be set to ~~01-0F-AC-00-00-00~~ 01-0F-AC-xx-yy-00, where octets xx-yy are set to the EBCS AP Group ID or 00-00 when the EBCS AP does not belong to any EBCS AP group

The EBCS Content MAC address for EBCS UL or EBCS Data frames shall be set to 01-0F-AC-xx-yy-zz,

For EBCS Data frames,

 – octet zz is set by the EBCS traffic stream mapper to the Content ID

 – octets xx ~~and~~ -yy are set by the EBCS traffic stream mapper to the EBCS AP Group ID or 00-00 when the EBCS AP does not belong to any EBCS AP group ~~configured by the EBCS traffic stream mapper~~

For EBCS UL frames,

 – octets xx, yy and zz are configured by the EBCS non-AP STA

### 11.55.2.2 EBCS DL operation at an EBCS AP

***Add the paragraph at P77L12 as follows:***

An EBCS AP that has enabled DL may use an AP certificate. An EBCS AP using an AP certificate shall belong to an EBCS certificate group, otherwise it shall not belong to an EBCS certificate group. An EBCS AP that has enabled DL should belong to an EBCS AP group. An EBCS AP group is a subgroup of an EBCS certificate group if the EBCS AP belongs to an EBCS certificate group. Each EBCS AP group is identified by 2 octets EBCS AP group ID that is 00-01 to 7F-FF. The EBCS AP group ID is configured in dot11EBCSAPGroupID.

An EBCS AP that ~~is~~ has enabled DL belongs an EBCS certificate group when the EBCS AP uses an AP certificate.

***Modify the paragraph at P77L12 as follows:*** [2221]

EBCS DL operation is enabled in an EBCS AP if the length of the dot11EBCSContentList is greater than 0.

The EBCS traffic streams to be transmitted are specified in dot11EBCSContentList. The EBCS traffic streams

are handled differently than other traffic. An EBCS content ID shall be assigned by the EBCS traffic stream

mapper located at the portal to identify each different traffic stream of content. The EBCS traffic stream

mapper shall be configured according to the EBCS content list. Each content ID shall be unique ~~to the AP~~

~~certificate~~ in the EBCS AP group if the EBCS AP belongs to an EBCS AP group, otherwise each content ID shall be unique in the EBCS certificate group. ~~If all the certificate, the EBCS AP group ID and the content ID are same, the EBCS traffic stream is same.~~ The content ID shall be nonzero.

Each content ID shall be unique in the EBCS AP group if the EBCS AP belongs to an EBCS AP group, otherwise each content ID shall be unique in the EBCS certificate group.

### 11.55.2.3 EBCS DL operation at an EBCS receiver

***Modify the paragraph at P79L1 as follows:*** [2283]

~~If an EBCS receiver receives an EBCS traffic stream that is transmitted from multiple APs with the same AP~~

~~certificate and the same content ID, the EBCS receiver may forward the EBCS traffic stream received from multiple APs to a higher layer.~~

If EBCS traffic streams are transmitted from multiple APs that belong to an EBCS AP group, an EBCS receiver shall not forward an EBCS traffic stream unless it has the same AP certificate, the same EBCS AP group ID and the same content ID. If EBCS traffic streams are transmitted from multiple APs that do not belong to an EBCS AP group, an EBCS receiver shall not forward an EBCS traffic stream unless it has the same AP certificate and the same content ID.

### C.3 MIB detail

***Insert the following entry at P99L19:***

***(Note to editor: comma between the name and the type should be removed. Please see the baseline.)***

dot11EBCSAPGroupID OCTET STRING,

***Insert the following element at P99L47:***

dot11EBCSAPGroupID OBJECT-TYPE

SYNTAX OCTET STRING (SIZE(2))

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This is a control variable.

It is written by an external management entity or the SME. Changes take effect as soon as practical in the implementation. This variable specifies the EBCS AP group ID. The range of value is 00-00 to 7F-FF. The value 00-00 means the AP does not belong to any EBCS AP group."

 DEFVAL {‘0000’H}

::= { dot11StationConfigEntry <ANA> }

***Insert the following line to dot11EBCSComplianceGroup OBJECTS:***

 dot11EBCSAPGroupID,