IEEE P802.11
Wireless LANs

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| EBCS AP Group Text Proposal |
| Date: 2022-03-08 |
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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 is 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 the 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 the common certificate for EBCS.

**enhanced broadcast services (EBCS) downlink (DL) (EBCS DL):** An EBCS rom an EBCS AP to EBCS receivers.

**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.

**enhanced broadcast services (EBCS) uplink (UL) (EBCS UL):** An EBCS from an EBCS non-AP STA to EBCS receivers.

### 5.1.5.2 Non-GLK non-AP role

***Replace the paragraph at P28L12 as follows:***

~~In the context of EBCS, the EBCS filter strips the EBCS content ID.~~

In the context of EBCS DL, the EBCS filter fills the source address and the destination address in MA-UNITDATA.indication according to 11.55.1a (EBCS Addressing).

### 5.1.5.3 Non-GLK AP role

***Modify the paragraph at P28L29 as follows:***

In the context of EBCS, an EBCS traffic stream mapper, located at the entry of the DS, assigns the EBCS

~~content~~ traffic stream ID for frames of EBCS traffic stream according to the configuration. The assigned EBCS traffic stream ID and the configured EBCS AP group ID are encoded into the Address fields in the MAC header according to 11.55.1a (EBCS Addressing).

***Remove amendment for clause 5.2.3 and 5.2.4.3***

### ~~5.2.3 MA-UNITDATA.request~~

### ~~5.2.3.2 Semantics of the service primitive~~

### ~~5.2.4.3 When generated~~

***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.

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 to the Content ID

 – octets xx and yy are set to the EBCS AP Group ID ~~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 is enabled DL shall belong to an EBCS certificate group and an EBCS AP group. An EBCS AP group is a subgroup of an EBCS certificate group. Each EBCS AP group is identified by 2 octets EBCS AP group ID that is “00-00” to “7F-FF”. The EBCS AP group ID is configured in dot11EBCSAPGroupID.

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

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 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 equal to or larger than 1 and equal to or smaller than 255.

### 11.55.2.3 EBCS DL operation at an EBCS receiver

***Modify the paragraph at P79L1 as follows: (Baseline: 11-22/0298r2)***

An MSDU contained in an authenticated EBCS Data frame shall be forwarded to a higher layer via the EBCS filter. The EBCS filter shall be configured by the SME to filter out the undesired MSDUs if they do not have the corresponding EBCS Content MAC address and the corresponding EBCS content ID. An EBCS traffic stream shall pass through the IEEE 802.1X Controlled Port even if the IEEE 802.1X Controlled Port is blocked (e.g. because the STA is not associated), and generate MA-UNITDATA.indication with the SA as the destination address and the TA as the source address.

***Modify the paragraph at P79L1 as follows:***

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

certificate, the same EBCS AP group ID and the same content ID, the EBCS receiver may forward the EBCS traffic stream received from multiple APs to a higher layer. [2283]

### 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"

::= { dot11StationConfigEntry <ANA> }

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

 dot11EBCSAPGroupID,