IEEE P802.11
Wireless LANs

|  |
| --- |
| 802.11bc LB257 – Resolution for CIDs 2017, 2030, 2029, 2022 |
| Date: January 17, 2022 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Antonio de la Oliva | Interdigital Ltd, UC3M |  |  | aoliva@it.uc3m.es |

 Abstract

This submission proposes resolutions for the following CIDs submitted during LB257 for 11bc D2.0:

2017, 2030, 2029, 2022

#####

#### 23 9.4 Management and Extension frame body components

24

##### 25 9.4.1 Fields that are not elements

26

##### *Editor: Please add the following clause after 9.4.1.69 (EBCS Response field) [CID2017, CID2022]*

#####  9.4.1.X EBCS Info Frame Tx Countdown field

1. The EBCS Info Frame Tx Countdown field is shown in Figure 9-XX (EBCS Info Frame Tx Countdown field).

|  |  |
| --- | --- |
|  | EBCS Info Frame Tx Countdown |
| Octets | 2 |

##### Figure 9-XX—EBCS Info frame Tx Countdown

1. The EBCS Info Frame Tx Countdown field indicates the number of TBTTs until the transmission of the next EBCS Info frame. The value 1 indicates that the frame is transmitted following the next TBTT. The value 0 is reserved.

9

1

##### 11 9.4.2.296 EBCS Parameters element

12

13 An EBCS AP advertises its EBCS operational parameters in the EBCS Parameters element.

14

15 The format of the EBCS Parameters element is shown in [Figure 9-788ee (EBCS Parameters element](#_bookmark80)

16

17 [format](#_bookmark80)).

18

19

|  |  |  |  |
| --- | --- | --- | --- |
| Element ID | Length | Element ID Extension | EBCS Info frame Tx Countdown |

20

21

22 Octets: 1 1 1 2

23

##### 24 Figure 9-788ee—EBCS Parameters element format

25

26

27 The Element ID, Length, and Element ID Extension fields are defined in 9.4.2.1 (General).

28

29 The EBCS Info frame Tx Countdown field ~~indicates the number of TBTTs until the transmission of the next~~

30

1. ~~EBCS Info frame. The value 1 indicates that the frame is transmitted following the next TBTT. The value 0~~
2. ~~is reserved.~~  is defined in 9.4.1.X (EBCS Info frame Tx Countdown). [CID2017]

33

##### 34

35

65

##### 1 9.4.5.30 Enhanced Broadcast Services ANQP-element

2

3 The Enhanced Broadcast Services ANQP-element provides a list of one or more enhanced broadcast

4

1. services that are available from the STA transmitting this element. The format of the Enhanced Broadcast
2. Services ANQP-element is defined in [Figure 9-839a (Enhanced Broadcast Services ANQP-element format](#_bookmark90)).

|  |  |  |  |
| --- | --- | --- | --- |
| Info ID | Length | ~~Next EBCS Info Frame Tx Time~~EBCS Info frame Tx Countdown [CID 2017, 2022] | Enhanced Broadcast Services Tuples |

7

8

9

10

11

12 Octets: 2 2 2 variable

13

##### 14 Figure 9-839a—Enhanced Broadcast Services ANQP-element format

15

16 The Info ID and Length fields are defined in 9.4.5.1 (General).

17

18

1. The ~~Next EBCS Info Frame Tx Time field indicates the number of TBTTs until the beacon interval in which~~
2. ~~the next Info frame is transmitted.~~  EBCs Info frame Tx Countdown is defined in 9.4.1.X (EBCS Info frame Tx Countdown). [CID2017, 2022]

21

1. The Enhanced Broadcast Services Tuples field contains one or more Enhanced Broadcast Services Tuple

fields as defined in [Figure 9-839b (Enhanced Broadcast Services Tuple field format](#_bookmark91)).

24

16

##### 9.4.5.31 Enhanced Broadcast Services Request ANQP-element

30

1. The Enhanced Broadcast Services Request ANQP-element transmits a register (or unregister) request from a
2. STA to a peer STA to receive (or stop receiving) enhanced broadcast services that are available from the

33

1. peer STA. The format of the Enhanced Broadcast Services Request ANQP-element is defined in [Figure 9-](#_bookmark127)
2. [839y (Enhanced Broadcast Services Request ANQP-element format](#_bookmark127)).

36

37

|  |  |  |
| --- | --- | --- |
| Info ID | Length | Enhanced Broadcast Services Request Tuples |

38

39

40

41 Octets: 2 2 variable

42

##### 43 Figure 9-839y—Enhanced Broadcast Services Request ANQP-element format

44

45 The Info ID and Length fields are defined in 9.4.5.1 (General).

46

47

1. The Enhanced Broadcast Services Request Tuples field contains one or more Enhanced Broadcast Services
2. Request Tuple fields as shown in [Figure 9-839z (Enhanced Broadcast Services Request Tuple field format](#_bookmark128)).

50

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Enhanced Broadcast Services Request Control | ~~Broadcast Action~~~~[~~CID2029~~]~~ | Content ID | Broadcaster MAC Address (optional) | Requested Time To Termination (optional) |

51

52

53

54

55 Octets: 1 ~~1~~ 1 0 or 6 0 or 3

56

##### 57 Figure 9-839z—Enhanced Broadcast Services Request Tuple field format

58

59

1. The format of the Enhanced Broadcast Services Request Control subfield is defined in [Figure 9-839aa](#_bookmark129)
2. [(Enhanced Broadcast Services Request Control format](#_bookmark129)).

62

63

64

65

1

2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3 | B0 | B1 | B2 | B3-B7 |
|  | Broadcaster MAC Address Present | Requested Time To Termination Present | Broadcast Action | Reserved |
| Bits | 1 | 1 | 1 | 5 |

##### Figure 9-839aa—Enhanced Broadcast Services Request Control format

10

1. A value of 1 in the Broadcaster MAC Address Present subfield indicates that a Broadcaster MAC Address
2. subfield is present in the Enhanced Broadcast Services Request Tuple field; otherwise, the Broadcaster

13

14 MAC Address subfield is not present.

15

1. A value of 1 in the Requested Time To Termination Present subfield indicates that a Requested Time To
2. Termination subfield is present in the Enhanced Broadcast Services Request Tuple field; otherwise the
3. Requested Time To Termination subfield is not present.

19

1. A value of 1 in the Broadcast Action subfield indicates a request for registration to receive the EBCS identified by the Content ID subfield included in the same Enhanced Broadcast Services Request Tuple field. A value of 0 in the Broadcast Action subfield indicates a request for de-registration to receive the EBCS identified by the Content ID subfield included in the same Enhanced Broadcast Services Request Tuple field. [CID2029]

21 ~~The Broadcast Action subfield values are defined in~~ [~~Table 9-340j (Broadcast Action field values~~](#_bookmark130)~~):~~

~~22~~

~~23~~

##### ~~24 Table 9-340j—Broadcast Action field values~~ [CID2029]

~~25~~

~~26~~

|  |  |
| --- | --- |
| **~~Value~~** | **~~Description~~** |
| ~~0-1~~ | ~~Reserved~~ |
| ~~2~~ | ~~Register to receive broadcast identified by Content ID~~ |
| ~~3~~ | ~~Unregister from receiving broadcast identified by Content ID~~ |
| ~~4-255~~ | ~~Reserved~~ |

~~27~~

~~28~~

~~29~~

~~30~~

~~31~~

~~32~~

~~33~~

~~34~~

~~35~~

~~36~~

~~37~~

~~38~~

~~39~~

40

41

42 The Content ID subfield indicates the identifier of the content.

43

1. ~~The Broadcaster MAC Address subfield includes the MAC address of the AP from which the EBCS traffic~~
2. ~~stream is currently being received.~~

46

~~47~~

1. ~~The Requested Time To Termination subfield, if present, indicates the number of beacon intervals during~~
2. ~~which transmission of the EBCS traffic stream identified in the Content ID subfield is requested. The value~~
3. ~~0 is reserved.~~ [CID2030]
4. The Broadcaster MAC Address subfield contains the MAC address of the AP from which the EBCS traffic
5. stream is currently being received.
6. The Requested Time To Termination subfield indicates the requested period in number of TBTTs after
7. which the EBCS traffic stream identified by the Content ID subfield is terminated. The value 0 is reserved.
8. An EBCS STA does not include the Requested Time To Termination subfield in the Enhanced Broadcast
9. Services Request ANQP-element if it does not request a specific time to termination for the EBCS traffic

34

1. stream identified by the Content ID subfield in the same Enhanced Broadcast Services Request ANQP-
2. element. [CID2030]