IEEE P802.11
Wireless LANs

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| CIDs for Supported Rates |
| Date: 2021-09-07 |
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| **CID** | **Clause Number** | **Page** | **Line** | **Comment** | **Proposed Change** |
| 24 | 9.3.3.5 | 852 | 19 | Supported Rates and BSS Membership Selectors element should not be mandatory in Association Request if dot11S1GOptionImplemented is true. Having it as mandatory has led to a number of vendors trying to express S1G rates in this element. Making it optional means it can still be used for BSS selection in future. | Add a sentence to the notes as follows: This element is optionally present if dot11S1GOptionImplemented is true. |
| 25 | 9.3.3.5 | 852 | 21 | Extended Supported Rates and BSS Membership Selectors should not be present in Association Request if dot11S1GOptionImplemented is true since it is not used. | Add a sentence to the notes as follows: This element is not present if dot11S1GOptionImplemented is true. |
| 26 | 9.3.3.6 | 854 | 58 | Supported Rates and BSS Membership Selectors element should not be mandatory in Association Response if dot11S1GOptionImplemented is true. Having it as mandatory has led to a number of vendors trying to express S1G rates in this element. Making it optional means it can still be used for BSS selection in future. | Add a sentence to the notes as follows: This element is optionally present if dot11S1GOptionImplemented is true. |
| 27 | 9.3.3.6 | 854 | 61 | Extended Supported Rates and BSS Membership Selectors should not be present in Association Response if dot11S1GOptionImplemented is true since it is not used. | Add a sentence to the notes as follows: This element is not present if dot11S1GOptionImplemented is true. |
| 28 | 9.3.3.7 | 858 | 13 | Supported Rates and BSS Membership Selectors element should not be mandatory in Reassociation Request if dot11S1GOptionImplemented is true. Having it as mandatory has led to a number of vendors trying to express S1G rates in this element. Making it optional means it can still be used for BSS selection in future. | Add a sentence to the notes as follows: This element is optionally present if dot11S1GOptionImplemented is true. |
| 29 | 9.3.3.7 | 858 | 16 | Extended Supported Rates and BSS Membership Selectors should not be present in Reassociation Request if dot11S1GOptionImplemented is true since it is not used. | Add a sentence to the notes as follows: This element is not present if dot11S1GOptionImplemented is true. |
| 30 | 9.3.3.8 | 861 | 19 | Supported Rates and BSS Membership Selectors element should not be mandatory in Reassociation Response if dot11S1GOptionImplemented is true. Having it as mandatory has led to a number of vendors trying to express S1G rates in this element. Making it optional means it can still be used for BSS selection in future. | Add a sentence to the notes as follows: This element is optionally present if dot11S1GOptionImplemented is true. |
| 31 | 9.3.3.8 | 861 | 22 | Extended Supported Rates and BSS Membership Selectors should not be present in Reassociation Response if dot11S1GOptionImplemented is true since it is not used. | Add a sentence to the notes as follows: This element is not present if dot11S1GOptionImplemented is true. |
| 32 | 9.3.3.9 | 865 | 15 | Supported Rates and BSS Membership Selectors element should not be mandatory in Probe Request if dot11S1GOptionImplemented is true. Having it as mandatory has led to a number of vendors trying to express S1G rates in this element. Making it optional means it can still be used for BSS selection in future. | Add a sentence to the notes as follows: This element is optionally present if dot11S1GOptionImplemented is true. |
| 33 | 9.3.3.9 | 865 | 25 | Extended Supported Rates and BSS Membership Selectors should not be present in Probe Request if dot11S1GOptionImplemented is true since it is not used. | Add a sentence to the notes as follows: This element is not present if dot11S1GOptionImplemented is true. |
| 34 | 9.3.3.10 | 867 | 44 | Supported Rates and BSS Membership Selectors element should not be mandatory in Probe Response if dot11S1GOptionImplemented is true. Having it as mandatory has led to a number of vendors trying to express S1G rates in this element. Making it optional means it can still be used for BSS selection in future. | Add a sentence to the notes as follows: This element is optionally present if dot11S1GOptionImplemented is true. |
| 35 | 9.3.3.10 | 868 | 24 | Extended Supported Rates and BSS Membership Selectors should not be present in Probe Response if dot11S1GOptionImplemented is true since it is not used. | Add a sentence to the notes as follows: This element is not present if dot11S1GOptionImplemented is true. |

*Proposed change : for clause 9.3.3.5.*

1. Association Request frame format

The frame body of an Association Request frame contains the information shown in .

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| 1. Association Request frame body
 |
| Order | Information | Notes |
| 4 | Supported Rates and BSS Membership Selectors | ~~This element is not present if dot11DMGOptionImplemented is true~~ (see 11.1.4.6). |
| 5 | Extended Supported Rates and BSS Membership Selectors | ~~The Extended Supported Rates and BSS Membership Selectors element is present if there are more than eight supported rates, and it is optional otherwise. This element is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6). |

*Proposed change : for clause 9.3.3.6*

1. Association Response frame format

The frame body of an Association Response frame contains the information shown in .

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| 1. Association Response frame body
 |
| Order | Information | Notes |
| 4 | Supported Rates and BSS Membership Selectors | ~~This field is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6).  |
|  5 | Extended Supported Rates and BSS Membership Selectors | ~~The Extended Supported Rates and BSS Membership Selectors element is present if there are more than eight supported rates and is optionally present otherwise. This element is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6). |

*Proposed change : for clause 9.3.3.7*

1. Reassociation Request frame format

The frame body of a Reassociation Request frame contains the information shown in .

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| 1. Reassociation Request frame body
 |
| Order | Information | Notes |
| 5 | Supported Rates and BSS Membership Selectors | ~~This field is not present if dot11DMGOptionImplemented is true~~ (see 11.1.4.6).  |
| 6 | Extended Supported Rates and BSS Membership Selectors | ~~The Extended Supported Rates and BSS Membership Selectors element is present if there are more than eight supported rates, and it is optional otherwise. This element is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6). |

*Proposed change :*

1. Reassociation Response frame format

The frame body of a Reassociation Response frame contains the information shown in .

|  |
| --- |
| 1. Reassociation Response frame body
 |
| Order | Information | Notes |
| 4 | Supported Rates and BSS Membership Selectors | ~~This field is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6).  |
| 5 | Extended Supported Rates and BSS Membership Selectors | ~~The Extended Supported Rates and BSS Membership Selectors element is present if there are more than eight supported rates, and it is optional otherwise. This element is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6). |

*Proposed change :*

1. Probe Request frame format

The  frame  body  of a Probe Request frame contains the information shown in .

|  |
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| 1. Probe Request frame body
 |
| Order | Information | Notes |
| 2 | Supported Rates and BSS Membership Selectors | ~~This field is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6).  |
| 4 | Extended Supported Rates and BSS Membership Selectors | ~~The Extended Supported Rates and BSS Membership Selectors element is present if there are more than eight supported rates and is optionally present otherwise. This element is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6). |

*Proposed change :*

1. Probe Response frame format

The  frame  body of a Probe Response frame contains the information shown in . See additional details and procedures in 11.1.4 (Acquiring synchronization, scanning).

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| 1. Probe Response frame body
 |
| Order | **Information** | **Notes** |

|  |  |  |
| --- | --- | --- |
| 5 | Supported Rates and BSS Membership Selectors | ~~This field is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6).  |

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| --- | --- | --- |
| 15 | Extended Supported Rates and BSS Membership Selectors | ~~The Extended Supported Rates and BSS Membership Selectors element is present if there are more than eight supported rates, and it is optionally present otherwise. This element is not present if dot11DMGOptionImplemented is true (s~~ee 11.1.4.6). |

*Proposed change : for clause 11.1.4.6*

***Operation of Supported Rates and BSS Membership Selectors element and Extended Supported Rates and BSS Membership Selectors element***

***The Supported Rates and BSS Membership Selectors element and Extended Supported Rates and BSS Membership Selectors element in Beacon and Probe Response frames is used by STAs in order to avoid associating with a BSS if they do not support all of the data rates in the BSSBasicRateSet parameter or all of the BSS membership requirements in the BSSMembershipSelectorSet parameter.***

***~~A STA shall include the rates from its OperationalRateSet parameter and the rates from the BSSBasicRateSet parameter and the BSS membership selectors from the BSSMembershipSelectorSet parameter in frames it transmits containing Supported Rates and BSS Membership Selectors elements and Extended Supported Rates and BSS Membership Selectors elements according to the rules described in this subclause, except that a non-AP STA may omit the HT and VHT BSS membership selectors, as the (V)HT capabilities are indicated through the presence of a (V)HT Capabilities element.~~***

 ***with the following exceptions:***

1. ***A non-AP STA may omit the HT and VHT BSS membership selectors, as the (V)HT capabilities are indicated through the presence of a (V)HT Capabilities element.***
2. ***An S1G or CMMG STA should not include supported rates in frames it transmits since its MCS capabilities are indicated in its Capabilities element. An S1G or CMMG STA should ignore supported rates in frames it receives since the peer's MCS capabilities are indicated in its Capabilities element.***

***NOTE—Rates are expressed in units of 500 kb/s, up to 63.5 Mb/s (see 9.4.2.3 (Supported Rates and BSS Membership Selectors element)). This might result in duplicate values for an S1G STA, and in values that cannot be expressed for a CMMG STA.***

**References:**