IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LB 203 MLME comment resolution | | | | |
| Date: 2014-07-29 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Yongho Seok | Self |  |  | [yongho.seok@lge.com](mailto:yongho.seok@lge.com) |

Abstract

This submission proposes comment resolutions of MAC comments from TGah Draft 2.0.

* CIDs: 3971, 4031, 3126, 3127, 3921, 3223, 4019, 3454, 3083, 3871, 4161, 4033, 3226, 4164, 3084, 3513, 4030, 4162, 3872, 4017, 3520, 3519, 3214, 3217, 3218, 3220, 3926, 3221 (28 CIDs)

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGah Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGah Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGah Editor: Editing instructions preceded by “TGah Editor” are instructions to the TGah editor to modify existing material in the TGah draft. As a result of adopting the changes, the TGah editor will execute the instructions rather than copy them to the TGah Draft.***

| **CID** | **Commenter** | **Page** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| --- | --- | --- | --- | --- | --- | --- |
| 3971 | Mitsuru Iwaoka |  | 6.3.29.3 | As the Originator Parameter field is added to ADDBA Response frame, it is necessary to add the Originator Parameter to the primitive parameters of MLME-ADDBA.confirm and MLME-ADDBA.response. | Add the Originator Parameter to the primitive parameters of MLME-ADDBA.confirm and MLME-ADDBA.response as follows.---Name = Originator ParameterType = IntegerValid range = 0 - 15Description = Indicates preferred MCS used for eliciting A-MPDUs. This parameter is optionally present if dot11S1GOptionImplemented is true and the Asymmetric Block Ack Supported field in the most recently received S1G Capabilities element from the peer S1G STA is true. | Revised-  Agree in principle.  Because the editing instruction of the proposed change is unclear, refer the proposed change shown in 11-14/995r1.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3971. |
| 4031 | Rojan Chitrakar | 14.00 | 6.3.2.2 | The relationship between the ReceiveTIMs parameter and dot11NonTIMModeActivated is unclear especially when the two contradicts each other. | Clarify how the S1G STA should behave for different combinations of the ReceiveTIMs parameter and dot11NonTIMModeActivated. | Revised-  The ReceiveTIMs parameter is same with the dot11NonTIMModeActivated MIB variable.  In order to clarify the relationship, add a condition of dot11NonTIMModeActivated MIB variable as shown in 11-14/995r1.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 4031. |
| 3126 | Alfred Asterjadhi | 15.00 | 6.3 | The contents of the "Type" column when it relates to an element sometimes contains "As defined in xxx", sometimes "as defined in frame format", and sometimes the " element" For consistency use one way of describing the type., e.g., in one particular case replace "As defined in 8.4.2.170q(Relay Discovery element)" with "Relay Discovery element". Similar observation for the "Name" column. Sometimes the words are separated by a space, and sometimes they are not. Keep consistency in this case as well. | Replace the content of the cell's under the "Type" column with " element" where is the element name (see Name column). Excecute this instruction for each row that refers to an element located in subclause 6.3. Remove the spaces between the words in the cell's contents under the "Name" column. Also keep consistency with the corresponding primitive paramers when possible throughout subclause 6.3. | Accepted-  When the parameter is defined in the element, “Type” column indicates the element name.  But, when the parameter is a field of the frame, “Type” column just indicate the reference of the corresponding sub-clause.  But, for the constancy of the “Type” column, I agree to replace the content of the cell's under the "Type" column with "element" where is the element name.  TGah editor to make changes of the proposed change. |
| 3127 | Alfred Asterjadhi | 15.00 | 6.3 | For many of the parameters it is not specified when they are present or absent. Specify presence and/or absence of each parameter throughout subclause 6.3 using: "This parameter is (optionally) present if dot11MIBSomething is true; otherwise it is not present. Also make sure that the qualification "optional" is appropriately included when necessary. | As in comment. | Rejected-  If the parameter is always present, it is not necessary to specify the condition of the presence.  But, if the parameter is an optional field and the presence condition is not specified, the comment is valid.  In the later case, we encourage that the commenter shall submit a comment having the corresponding parameter in the next LB. |
| 3921 | Mitsuru Iwaoka | 16.00 | 6.3.3.2.3 | 6.3.3.2.3 specifies that this element is optionally present if dot11S1GOptionImplemented is true, which defers from Table 8-33 (Probe Request frame body) that specifies the Short Probe Response Option element is optionally present if dot11ShortProbeResponseOptionImplemented is true. | Replace dot11S1GOptionImplemented by dot11ShortProbeResponseOptionImplemented. | Accepted-  Agree in principle. |
| 3223 | Alfred Asterjadhi | 16.00 | 6.3.3.2.3 | the following description can be improved: "Indicates if the STA wants to start working as a Relay (in request) or if the AP asks or deny Relay operation (in response)". | Replace "the STA wants to start working as a Relay (in request) or if the AP asks or deny Relay operation (in response)" with "the STA requests to operate as a Relay (in a request) and the AP requests/confirms operation as a Relay" throughout the draft (9 occurrences). | Revised-  Agree in principle.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3223, 3520, 4162. |
| 4019 | Rojan Chitrakar | 16.00 | 6.3.3.2.3 | Description of ChangeSequence does not seem right: "Specifies the parameters within the Change Sequence element that are supported by the MAC entity."Also, this field is only relevant for Active Scan and may be ignored for Passive Scan or NDP Probing. | Change the sentence to "Indicates the value of the last saved ChangeSequence in the STA."Add the sentence:"This field is only relevant for Active Scan and ignored for Passive Scan or NDP Probing." | Rejected-  Description of ChangeSequence is not wrong but it may be too broad.  The purpose of the clause 6 describes the parameter of the MLME SAP primitive.  The detail of the parameter is described in clause 8. |
| 3454 | David Hunter | 16.00 | 6.3.3.2.3 | "away for the STA": it is unclear what this means. | Replace "away for the STA" with "unavailable for communications with the STA" here and on page 22 line 32, page 24 line 19, page 25 line 33, page 27 line 51, page 29 line 40, page 31 line 40, page 32 line 55, and page 34 line 47. | Revised-  Agree in principle.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3454, 3519. |
| 3083 | Adrian Stephens | 17.00 | 6.3.3.2 | I don't like adding NDP-PROBING to ScanType for a couple of reasons.Firstly, it is really a variant of ACTIVE scanning. Secondly, it is not clear that this is specific to S1G STAs. | Remove changes to ScanType.Add new parameter "ActiveScanType" with values "FRAME" and "NDP". Indicates active scanning by the transmission of Probe Request frames or using NDP frames. Present when dot11S1GOptionImplemented is true; otherwise absent.Make changes to references to NDP\_PROBING to refer to the ScanType and ActiveScanType parameters. | Revised-  Agree in principle.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3083. |
| 3871 | MARC EMMELMANN | 17.00 | 6.3.3.2.3 | NDP Probing not defined as a scan type | Add defintion for NDP Probing | Revised-  Agree in principle.  On the behalf of modifying the scan type, it is more reasonable to add the new parameter of the active scanning.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3083. |
| 4161 | Yonggang Fang | 19.00 | 6.3.3.3.2 | The relay activation option for IBSS adoption is missing. Need to add. | Add "Do not adopt" in the column of "IBSS adoption" on the "Relay Activation". | Accepted-  Agree in principle |
| 4033 | Rojan Chitrakar | 19.00 | 6.3.3.3 | As per the description of the ShortBeaconPeriod field, Short Beacon Interval element may be present in the Probe Response as well but the element is not included in Table 8-34--Probe Response frame body. | Include Short Beacon Interval element in Table 8-34--Probe Response frame body. | Accepted-  Agree in principle. |
| 3226 | Alfred Asterjadhi | 19.00 | 6.3.3.3.2 | S1G Operation and other elements can be present in Short Probe Response as well. | Replace "the Probe Response" with "the (Short) Probe Response" in the Description column of the S1GOperation, ShortBeaconPeriod rows. Repeated instruction for the Description column of the S1GCapabilities in 6.3.4.2.2. | Accepted-  Agree in principle. |
| 4164 | Yonggang Fang | 19.00 | 6.3.3.3.2 | what is the difference between "dot11RelayAPOperation" and "dot11RelaySupport"? Also, the attribute of dot11RelayAPOperation is under control by the attribute of dot11RelaySTAOperation.Suggest to simiply the attributes if they are similar. |  | Rejected-  The difference between "dot11RelayAPOperation" and "dot11RelaySupport" is described in 9.49.2 Relay operation.  After reviewing the 9.49.2 Relay operation, if the current MIB variables for the relay operation are not needed, please submit a comment to the clause 9.49 in the next LB. |
| 3084 | Adrian Stephens | 20.00 | 6.3.4.2.2 | "OperationalS1GMCS\_NSSSet"Please review recent changes by REVmc related to "operatial sets" (see comment 2010 in 11-14/207r8) which remove redundant parameters and simply these concepts. | Please adjust .11ah to match changes in REVmc. | Revised-  Agree in principle.  Remove the OperationalS1GMCS\_NSSSet from 6.3.4.2 MLME-JOIN.request.  Especially,  TGah editor removes the Page 20 Line 17 and Line 41. |
| 3513 | Dorothy Stanley | 20.00 | 6.3.4.2.3 | Use of "desires" is not desired, conflicts with direction of 11mc, see changes as shown in 11-14/207r5 for 11mc CID 2051. | Change frmom "that the STA desires to use" to "that the STA uses" | Revised-  Agree in principle.  But, based on the related comment CID3084, the description for the OperationalS1GMCS\_NSSSet is removed.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3084. |
| 4030 | Rojan Chitrakar | 20.00 | 6.3.4.2.2 | S1GCapabilities is already included in the SelectedBSS field | Remove S1GCapabilities from the primitive parameters list as well as the parameter table. | Accepted-  Agree in principle.  To commenter,  Please see HT Capabilities parameter. It is also duplicated with the SelectedBSS field. It is encouraged to submit a comment to REVmc. |
| 4162 | Yonggang Fang | 21.00 | 6.3.7.2.2 | The RelayActivition element shall be used only by the relay capable station. Suggest to clarify in the text. | change "the STA wants" to "the relay capable STA (i.e. dot11RelaySTACapable is true) wants".Please change in other places as well. | Revised-  Agree in principle.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3223, 3520, 4162. |
| 3872 | MARC EMMELMANN | 21.00 | 6.3.5.2.3 | How is the generation of an association request frame triggered if the corresponding MLME primitive is not invoke. If association is omitted, how does a STA progress through the states defined for 802.11 STAs and eventually becomes associated and authenticated. | Clarify how a STA becomes associated and authenticated if AuthenticationRequestTransmission is false. Modify / annotate the 802.11 state diagram correspondingly | Rejected-  “When dot11S1GCentralizedAuthenticationControlActivated is true, a STA for which the local MAC variable AuthenticationRequestTransmission is false shall not generate this primitive.”  AuthenticationRequestTransmission is not a MIB variable. The value is used in the authentication control (10.3.8.1 Centralized authentication control).  After reviewing the normative behavior, please submit a comment in the next LB if you have a concern about this feature. |
| 4017 | Rojan Chitrakar | 22.00 | 6.3.5.2 | It is not clear if the "Type" of S1G Capabilities field in MLME-(RE)ASSOCIATE.request, MLME-(RE)ASSOCIATE.confirm, MLME-(RE)ASSOCIATE.indication and MLME-(RE)ASSOCIATE.response refers to just the S1G Capabilities Info field or the entire S1G Capabilities Element. It is stated as "As defined in frame format" | Please clarify | Revised-  Agree in principle.  It is a duplicated comment with CID 3126.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3126. |
| 3520 | Dorothy Stanley | 24.00 | 6.3.7.3 | STAs do not "want", they "request" | Change from "STA wants to start working", for example to "Indicates if the STA requests to start working as a Relay (in request) or if the AP asks or denies Relay operation (in response)" here and throughout the document | Revised-  Agree in principle.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3223, 3520, 4162. |
| 3519 | Dorothy Stanley | 24.00 | 6.3.7.3 | Suggest eliminating use of "may" | Change from "Indicates the maximum duration that AP maybe away for the STA" to "Indicates the maximum duration that AP is away from the STA" here and at 22.31, 16.52,25.31, 27.50, 29.37, 31.39, 32.53, 34.45, | Revised-  Agree in principle.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3454, 3519. |
| 3214 | Alfred Asterjadhi | 36.00 | 6.3.103.2.3 | The frame that carries the AID Request element is called AID Switch Request. Replace "AID Request" with "AID Switch Request". Idem in P37L4, P38L18, and P39L6. Do the same for the "AID Response" counterpart by replacing it with "AID Switch Response" in P39L26. | As in comment. | Accepted-  Agree in principle. |
| 3217 | Alfred Asterjadhi | 42.00 | 6.3.105.3.2 | The received frame is not a Synch Control frame. It is a STA Information Announcement frame for the procedure defined in this subclause. Replace "Synch Control" with STA Information Announcement". The same issue exists for the Activity Specification procedure. Replace "Synch Control" with "Activity Specification" in P45L25. This issue can be found for Control Response negotiation procedure. To solve this replace "AID Request" with "Control Response MCS Negotiation Response" in P63L56. | As in comment. | Accepted-  Agree in principle. |
| 3218 | Alfred Asterjadhi | 52.00 | 6.3.111.2.1 | This procedure is bidirectional (i.e., not limited from non-AP STA to AP). Replace "the AP with which the non-AP STA is associated" with "a peer MAC entity". Perform these changes throughout 6.3.111. | As in comment. | Accepted-  Agree in principle. |
| 3220 | Alfred Asterjadhi | 58.00 | 6.3.113.2 | There is an inconsistent use of two terms to refer to the same "Suspend" and "Suspension" For consistency replace "Suspend" with "Suspension" throughout the draft when this term refers to Flow Suspension procedure (including fields that use this term e.g., Suspend Duration) making sure it is grammatically consistent. Idem for "Resume" and "Resumption" (starting from P59L42). | As in comment. | Revised-  I agree that there is an inconsistent between "Suspend" and "Suspension".  But, the comment of CID 3926 is to remove a sub-clause 6.4.113.  Because a flow control is an internal procedure of the MAC, MLME interface is not needed.  I also agree with the CID 3926.  TGah editor to make changes shown in 11-14/995r1 under the heading for CID 3926. |
| 3926 | Mitsuru Iwaoka | 58.00 | 6.3.113 | The flow control is usually controlled according to available buffer size in the MAC sub layer and the SME cannot know the available buffer size. Thus, the flow control procedure is specified under clause 9 (MAC sublayer functional description), not under clause 10 (MLME). It is not necessary to specify MLME SAP interfaces for the flow control. | Remove subclause 6.3.113 (Flow Suspension operation) and 6.3.114 (Flow Resumption operation), | Accepted-  Agree in principe. |
| 3221 | Alfred Asterjadhi | 60.00 | 6.3.114.3.4 | "On receipt of this primitive, the SME should operate according to the procedure in 9.56.." Actually the SME should stop operating according to that procedure. | Replace "operate" with "stop operating" | Rejected-  This primitive can be used to start the corresponding service (Header Compression procedure). |

**Propose:**

Revised for CID 3971, 4031, 3223, 3520, 4162, 3454, 3519, 3083, per discussion and editing instructions in 11-14/995r1.

***TGah editor: Chage this subclause (6.3.29.3 and 6.3.29.5) as follows:*** *(CID 3971)*

**6.3.29.3 MLME-ADDBA.confirm**

**6.3.29.3.1 Function**

The primitive reports the results of initiation (or modification) of the block ack attempt with the specified peer MAC entity.

**6.3.29.3.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-ADDBA.confirm(

...

ADDBA Extension,

OriginatorParameter,

VendorSpecificInfo

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| … | … | … | … |
| ADDBA Extension | ADDBA Extension element | As defined in 8.4.2.138 (ADDBA Extension element) | Specifies additional parameters associated with the Block Ack. |
| OriginatorParameter | Integer | 0 – 65 535 | Indicates preferred MCS used for eliciting A-MPDUs. This parameter is optionally present if dot11S1GOptionImplemented is true. |
| VendorSpecificInfo | A set of elements | As defined in  8.4.2.25 (Vendor  Specific element) | Zero or more elements. |

**6.3.29.5 MLME-ADDBA.response**

**6.3.29.5.1 Function**

The primitive responds to the initiation (or modification) by a specified peer MAC entity.

**6.3.29.5.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-ADDBA.response(

…

ADDBA Extension,

OriginatorParameter,

VendorSpecificInfo

)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| … | … | … | … |
| ADDBA Extension | ADDBA Extension element | As defined in 8.4.2.138 (ADDBA Extension element) | Specifies additional parameters associated with the Block Ack. |
| OriginatorParameter | Integer | 0 – 65 535 | Indicates preferred MCS used for eliciting A-MPDUs. This parameter is optionally present if dot11S1GOptionImplemented is true. |
| VendorSpecificInfo | A set of elements | As defined in  8.4.2.25 (Vendor  Specific element) | Zero or more elements. |

***TGah editor: Chage this subclause (6.3.2.2) as follows:*** *(CID 4031)*

* MLME-POWERMGT.request
* Function
* Semantics of the service primitive

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| PowerManagementMode | Enumeration | ACTIVE,  POWER\_SAVE | An enumerated type that describes the desired power management mode of the STA. |
| ReceiveDTIMs | Boolean | true, false | When true, this parameter causes the STA to awaken to receive all DTIM frames. When false, the STA is not required to awaken for every DTIM Beacon(#1504) frame. |
| ReceiveTIMs | Boolean | true, false | For an S1G STA, this parameter is set to dot11NonTIMModeActivated. W~~w~~hen true, this parameter causes the S1G STA to awaken to receive Beacon frame as determined by the STA’s ListenInterval and the ReceiveDTIMs parameter. When false, this parameter causes the S1G STA to transmit at least one frame every listen interval without receiving a Beacon frame as determined by the STA’s ListenInterval parameter. |

***TGah editor: Chage the below throughout the draft (9 occurrences):*** *(CID 3223, 3520, 4162)*

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| RelayActivation | Relay Activation element | As defined in 8.4.2.170p (Relay Activation element) | Indicates if  the STA with dot11RelaySTACapable equal to true requests to operate as a Relay (in a request) and the AP with dot11RelaySupport equal to true requests/confirms operation as a Relay  ~~the STA wants to start working as a Relay (in request) or if the AP asks or deny Relay operation (in response)~~ |

***TGah editor: Chage the below throughout the draft (9 occurrences):*** *(CID 3454, 3519)*

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| MaxAwayDuration | Integer | 0-65535 inclusive | Indicates the maximum duration that AP is unavailable for communications with the STA. ~~maybe away for the STA~~ |

***TGah editor: Chage this subclause (6.3.3.2) as follows:*** *(CID 3083)*

**6.3.3 Scan**

**6.3.3.1 Introduction**

This mechanism supports the process of determining the characteristics of the available BSSs.

**6.3.3.2 MLME-SCAN.request**

**6.3.3.2.1 Function**

This primitive requests a survey of potential BSSs that the STA can later elect to try to join.

**6.3.3.2.2 Semantics of the service primitive**

The primitive parameters are as follows:

MLME-SCAN.request(

…

ScanType,

ActiveScanType,

ProbeDelay,

…

)

**6.3.3.2.3 When generated**

This primitive is generated by the SME for a STA to determine if there are other BSSs that it can join.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Valid range | Description |
| ScanType | Enumeration | ACTIVE,  PASSIVE~~,~~  ~~NDP PROBING~~ | ***TGah editor: This change means that there is no update from current REVmc base draft.***  Indicates either active, or passive scanning~~, or NDP probing.~~ |
| ActiveScanType | Enumeration | FRAME, NDP | Indicates active scanning type by the transmission of either a Probe Request frames or a NDP Probe Request frame. This parameter is optionally present if dot11S1GOptionImplemented is true and is absent otherwise. |