---

| *Cl* **00** | *SC* | | *P* **139** | *L* **40** | # | 7010 |

Bajko, Gabor — Nokia

*Comment Type* **TR** — *Comment Status* **X**

the description of dot11APLCITable says: ""This table represents location of the AP in geospatial format, as described in RFC 3825." This is not a correct formulation, as geospatial is not a format. A better formulation: "This table represents the geospacial location of the AP in binary encoding as specified in RFC 3825bis".

*SuggestedRemedy*

change as suggested.

*Proposed Response* — *Response Status* **O**

Counter - Change to:

"This table represents the geospatial location of the AP as specified in clause 7.3.2.22.9".

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| *Cl* **00** | *SC* | | *P* **139** | *L* **52** | # | 7011 |

Bajko, Gabor — Nokia

*Comment Type* **TR** — *Comment Status* **X**

The MAX-ACCESS for dot11APLCIEntry is read-only. Change it to read-write.

*SuggestedRemedy*

as suggested.

*Proposed Response* — *Response Status* **O**

Accept -

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| *Cl* **00** | *SC* | | *P* **139** | *L* **52** | # | 7021 |

Bajko, Gabor — Nokia

*Comment Type* **TR** — *Comment Status* **X**

dot11LCI MIB variable has to be re-defined according to the new binary encoding for GeoLocation. There is a document in IETF, which is not yet finalized, but the format is clear. TGu should align with that before going to sponsor ballot. Also, there should be a new MIB variable defined for the GeoLocation of static elements, like APs, and that MIB variable should only contain the geocoordinates, ie Altitude, Latitude and Altitude values (of the point where the AP resides), without any uncertainty/accuracy estimates.

*SuggestedRemedy*

Make the two proposed changes: add a new MIB variable, and modify the existing one.

*Proposed Response* — *Response Status* **O**

Reject - TGu feels that this is now a maintenance issue and should be referred to IEEE 802.11mb

---

| *Cl* **00** | *SC* | | *P* **143** | *L* **43** | # | 7006 |

Bajko, Gabor — Nokia

*Comment Type* **TR** — *Comment Status* **X**

The description of dot11APCivicLocationTable says: "This table represents location of the AP in civic format as defined in IETF RFC-4776". A more accurate description would be: "This table represents the location of the AP in civic format using the Civic Address Type elements defined in IETF RFC-4776".

*SuggestedRemedy*

Change as suggested.

*Proposed Response* — *Response Status* **O**

Accept -

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| *Cl* **00** | *SC* | | *P* **143** | *L* **48** | # | 7008 |

Bajko, Gabor — Nokia

*Comment Type* **TR** — *Comment Status* **X**

The MAX-ACCESS for dot11APCivicLocationEntry is read-only. Change it to read-write.

*SuggestedRemedy*

as suggested.

*Proposed Response* — *Response Status* **O**

Accept -

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| *Cl* **00** | *SC* | | *P* **143** | *L* **54** | # | 7007 |

Bajko, Gabor — Nokia

*Comment Type* **TR** — *Comment Status* **X**

The description of dot11APCivicLocationEntry says: "AP location in Civic coordinates", which is not accurate. Change it to: "Civic Address location of the AP described with Civic Address Type elements defined in IETF RFC-4776".

*SuggestedRemedy*

Change as suggested.

*Proposed Response* — *Response Status* **O**

Accept -

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **00**
*SC*

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*Cl* **04**    *SC* **4**        *P* **3**    *L* **48**    # 4607
Ptasinski, Henry              Broadcom

*Comment Type* **TR**   *Comment Status* **X**
"802 .x LAN" is not consistent with IEEE Std. 802-2001.

*SuggestedRemedy*
Resolution to CID 362 from LB132 claims that "802.x LAN" is standard practice, but doesn't cite any references.  A search through several other 802 standards (e.g. 802.3, 802.1X) was unable to find any other usage of the term "802.x", and a single instance of it in 802.11-2007 is insufficient to claim "standard practice".

*Proposed Response*    *Response Status* **O**
Reject - The TG is re-using terminology from the baseline document.

---

*Cl* **05**    *SC* **5.2.10**        *P* **4**    *L* **14**    # 576
Ptasinski, Henry              Broadcom

*Comment Type* **TR**   *Comment Status* **X**
"... the IEEE 802 .xLAN" seems to be restricting the Interworking Interface to using only portals connected to IEEE 802 LANs. The base standard uses IEEE 802 LAN as an example of a network to which a portal may be connected, but it does not place any restriction.

*SuggestedRemedy*
If the restriction is necessary, make the restriction explicit and clarify the reasoning. Otherwise, remove the restriction.

*Proposed Response*    *Response Status* **O**
Accept - See CID 483

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*Cl* **05**    *SC* **5.2.10**        *P* **5**    *L* **14**    # 4609
Ptasinski, Henry              Broadcom

*Comment Type* **TR**   *Comment Status* **X**
Paragraph is repetitive and difficult to parse.

*SuggestedRemedy*
Change to: "An interworking-capable AP can interact with external networks using a logical SSPN interface for the purpose of authenticating users and provisioning services, as shown in Figure 5-6a (IEEE 802.11 Interworking Infrastructure Architecture). The exchange of authentication and provisioning information between the SSPN and the AP passes transparently through the Portal.  The protocol used to exchange this information is out of scope of this standard.    The logical SSPN interface provides the means for an AP to consult an SSPN for authenticating and authorizing a specific non-AP STA in the pre-association (States 1 and 2) and post-association (State 3) and to report statistics and status information to the SSPN. Authentication and provisioning information for non-AP STAs received from the SSPN are stored in the AP's MIB and are used to limit layer 2 services provided to that non-AP STA. Detailed interactions describing the interworking interface are provided in 11.18."

*Proposed Response*    *Response Status* **O**
Counter - Change to: "An interworking-capable AP can interact with external networks using a logical SSPN interface for the purpose of authenticating users and provisioning services, as shown in Figure 5-6a (IEEE 802.11 Interworking Infrastructure Architecture). The exchange of authentication and provisioning information between the SSPN and the AP passes transparently through the Portal.  The protocol used to exchange this information is out of scope of this standard.    The logical SSPN interface provides the means for an AP to consult an SSPN for authenticating and authorizing a specific non-AP STA and to report statistics and status information to the SSPN. Authentication and provisioning information for non-AP STAs received from the SSPN are stored in the AP's MIB and are used to limit layer 2 services provided to that non-AP STA. Detailed interactions describing the interworking interface are provided in 11.18."

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*Cl* **05**    *SC* **5.2.7**        *P* **7**    *L* **62**    # 4608
Ptasinski, Henry              Broadcom

*Comment Type* **TR**   *Comment Status* **X**
"The MSGCF does not interact directly with the MLME SAP and PLME SAP, but is made aware of interactions ..." How is it "made aware of" these interactions?

*SuggestedRemedy*
Clarify. Perhaps "... but receives information via the MSGCF-SME_SAP regarding interactions ..."

*Proposed Response*    *Response Status* **O**
Counter - Replace the sentence "The MSGCF does not interact directly with the MLME SAP and PLME SAP, but is made aware of interactions between the MLME and SME, and between the PLME and SME." with "The MSGCF observes the interactions between the MLME and SME, and between the PLME and SME."

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **05**
*SC* **5.2.7**

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*Cl* **05**     *SC* **5.4.8**       *P* **7**      *L* **40**      # 7220
Wang, Qi                Broadcom Corporation

*Comment Type* **TR**     *Comment Status* **X**

Is obtaining location information part of the 11u requirement for supporting Emergency Call (which is part of ES)? The text in V.4.2 b) 4) "If the STA can not determine it's own location by its own means, then Location information should be obtained from the network prior to imitating the emergency call request." Clarify the scope of 11u requirement for supporting Emergency call and the dependencies on other amendments, if any. Modify the feature description text here accordingly.

*SuggestedRemedy*

As in comment.

*Proposed Response*     *Response Status* **O**

Counter - Change the text:

"The Interworking Service supports Emergency Services (ES) by providing: methods for un-authenticated users to access emergency services via the IEEE 802.11 infrastructure, advertising that emergency services are reachable and identifying that a traffic stream is used for emergency services."

to

"The Interworking Service supports Emergency Services (ES) by providing: methods for un-authenticated users to access emergency services via the IEEE 802.11 infrastructure, advertising that emergency services are supported (see 11.21.5) and reachable and identifying that a traffic stream is used for emergency services."

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*Cl* **05**     *SC* **5.7**       *P* **6**      *L* **15**      # 578
Ptasinski, Henry             Broadcom

*Comment Type* **TR**     *Comment Status* **X**

Does the MSGCF communicate directly with MLME and PLME? Clause 21 doesnt' appear to define any indications that need to happen directly between the MLME or PLME and MSGCF.

*SuggestedRemedy*

Revise diagram to clarify that MSGCF does not directly communicate with MLME or PLME, and that MSGCF does not interfere with MLME_SAP or PLME_SAP communication to the SME.

*Proposed Response*     *Response Status* **O**

Counter - See 11-08-1100r0. This point is clarified in 5.7.1

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*Cl* **06**     *SC* **6.2.1.1.4**       *P* **13**      *L* **9**      # 6226
Vlantis, George             STMicroelectronics

*Comment Type* **TR**     *Comment Status* **X**

Throughout 6.2.1.1.4 and 6.2.1.2.4, occurrences of rate limiting are specified, where "The specific mechanism to perform rate limiting is outside the scope of the specification". One can imagine complex algorithms for dropping B-pictures and retaining I-pictures and P-pictures for AC_VI flows in video applications. Clearly, such an algorithm would be beyond the scope of the specification.

Conversely, when no knowledge of the application is known and the flow itself is "generic" (e.g AC_BE, AC_BG), there are a few obvious algorithms (e.g. leaky bucket), that could be given as examples. Minimally, the existence of an algorithm that "fits" the metrics defined in the specification should be given as an informative example, in the simplest case where no knowledge of the data or the application are known.

*SuggestedRemedy*

Provide an example or citation to an example that demonstrates that the procedures for the metrics related to rate limiting can be applied.

*Proposed Response*     *Response Status* **O**

Reject - There are currently multiple rate limiting algorithms available, and implementations may choose to implement whichever fits better the purpose. Adding some of them as examples may create the false impression that there is a preference for those algorithms over the ones not mentioned.

---

*Cl* **06**     *SC* **6.2.1.2.4**       *P* **12**      *L* **39**      # 4612
Ptasinski, Henry             Broadcom

*Comment Type* **TR**     *Comment Status* **X**

This behavior only makes sense for QoS data frames.

*SuggestedRemedy*

Add appropriate subtype constraint to "frame of type data".

*Proposed Response*     *Response Status* **O**

Counter - See CID #4087

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **06**
*SC* **6.2.1.2.4**

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*Cl* **06**     *SC* **6.2.1.2.4**          *P* **14**     *L* **44**          # 6225

Vlantis, George                    STMicroelectronics

*Comment Type*   **TR**      *Comment Status*  **X**

The first paragraph of this subclause addresses rate limiting for multicast frames, and the following paragraphs of the subclause address rate limiting for unicast frames.  While both methods state "The specific mechanism to perform rate limiting is outside the scope of the specification", there is a unexplained asymmetry as to why the unicast cases have specific mechanisms specified for the measurement of the frame and byte rate limiting (and even for all four access categories) along with MIB variable "knobs" to adjust the maximum authorized flows, whereas the multicast traffic is not similarly well-specified.

*SuggestedRemedy*

Either: (1) provide similar MIB variables for rate limiting of multicast traffic;  or  (2) clarify why the types of traffic are handled differently; of (3) eliminate the distinction between individually-addressed and multicast frames.

*Proposed Response*          *Response Status*  **O**

Accept - Resolution provided by submission 11-09-0627r0

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*Cl* **06**     *SC* **6.2.1.2.4**          *P* **8**     *L* **20**          # 581

Ptasinski, Henry                    Broadcom

*Comment Type*   **TR**      *Comment Status*  **X**

The phrase "has the QoS bit in the Capabilities element in the (Re)-Association request frame set to 0" references fields in a frame that is not part of the MA-UNITDATA.indication and is not likely to exist in the LLC when the MA-UNITDATA.indication is received.

*SuggestedRemedy*

State requirement in terms of information that's contained in the indication, or present in the LLC at the time the indication is received.

*Proposed Response*          *Response Status*  **O**

Accept - See 11-08-1152r1

---

*Cl* **06**     *SC* **6.2.1.2.4**          *P* **8**     *L* **28**          # 492

Kolze, Tom                    Broadcom

*Comment Type*   **TR**      *Comment Status*  **X**

"aggregate datarate" is undefined.

*SuggestedRemedy*

Provide a precise description for the quantity being measured, and further, a method to perform the measurement.

*Proposed Response*          *Response Status*  **O**

Counter - The word "aggregate" has been removed. See 11-08-1152r1

---

*Cl* **06**     *SC* **6.2.1.2.4**          *P* **8**     *L* **28**          # 582

Ptasinski, Henry                    Broadcom

*Comment Type*   **TR**      *Comment Status*  **X**

"aggregate datarate" is not defined.  "DATARATE" is defined in the base std as the PHY rate of an MPDU. It seems unlikely that the intent is to penalize STAs that send unicast frames with a high PHY DATARATE.

*SuggestedRemedy*

Provide a unique, well-defined term for the quantity that is being measured, and a technique to perform the measurement.

*Proposed Response*          *Response Status*  **O**

Counter - The word "aggregate" has been removed. See 11-08-1152r1

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*Cl* **07**     *SC* **7.2.3.8**          *P* **11**     *L* **58**          # 850

Tolpin, Alexander                    Intel Corporation

*Comment Type*   **TR**      *Comment Status*  **X**

The usage of GAS as action frames creates additional traffic and forces STA to implement additional redundant scanning flows. Make GAS requests also a part of Probe Request

*SuggestedRemedy*

Add Advertisement Protocol information element  to Probe Request

*Proposed Response*          *Response Status*  **O**

Reject - This has been discussed in passed LBs (LB122 and LB107); TGu believes separate of function is the preferred method.  Probe Request/Response is for active scanning and GAS Request/Response is for network selection--this is what we mean by separation of function.

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*Cl* **07**     *SC* **7.3.1.32**          *P* **14**     *L* **35**          # 584

Ptasinski, Henry                    Broadcom

*Comment Type*   **TR**      *Comment Status*  **X**

Is one octet sufficient for the ID?  Can an AP have > 255 outstanding queries or is the number of outstanding queries limited elsewhere?  If an AP has 255 outstanding queries, and a new query comes in, how does the AP respond? Can an outstanding query take long enough that the ID space will wrap?

*SuggestedRemedy*

Increase ID to 2 octets, or: 1) cap the number of outstanding queries; 2) define behavior when too many queries are received and 3) require that IDs for outstanding queries not get reused until the query completes.

*Proposed Response*          *Response Status*  **O**

Counter - GAS Query ID and multicast delivery method are deleted, see 11-08-1028r2

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl*  **07**
*SC*  **7.3.1.32**

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*Cl* **07**     *SC* **7.3.1.33**     *P* **14**     *L* **59**     # 585
Ptasinski, Henry     Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

Fragment ID should have same semantics as Fragment Number and More Fragments fields in MAC header.

*SuggestedRemedy*

Initial GAS Fragment ID should be 0. Change "Last Fragment" to "More GAS Fragments" and only set the bit in fragments that are not the last or only one.

*Proposed Response*     *Response Status*   **O**

Accept - See 11-08-1028r2

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*Cl* **07**     *SC* **7.3.1.33**     *P* **14**     *L* **60**     # 586
Ptasinski, Henry     Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

"(and thus the re-assembly order)" implies that an AP may send GAS Query Response fragments out of order. Clause 11.18.2.2.5, at least, does not explicitly require the fragments to be transmitted in order.

*SuggestedRemedy*

Require fragments to be transmitted in order.

*Proposed Response*     *Response Status*   **O**

Accept - Change the sentence in 11.18.2.2.5 beginning, "If the Query Response is ." [P70L27] to "If the Query Response is a multi-fragment response (i.e., contains more than 1 fragment), the AP shall transmit in order all fragments that belong to the same Query Response until all fragments are exhausted."

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*Cl* **07**     *SC* **7.3.1.7**     *P* **12**     *L* **45**     # 583
Ptasinski, Henry     Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

Reason code 48 specifically refers to "SSP cipher suite requirement", but no reason code is provided for SSP AKM requirements (e.g. RSN/WPA2 vs. WPA or some future AKM), TGw support, etc.

*SuggestedRemedy*

Redefine reason code 48 as "SSP security requirement".

*Proposed Response*     *Response Status*   **O**

Counter - See CID # 485.

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*Cl* **07**     *SC* **7.3.1.7**     *P* **24**     *L* **17**     # 7057
Ecclesine, Peter     Cisco Systems

*Comment Type*   **ER**     *Comment Status*   **X**

Sponsor Ballot has to begin with an unchanged draft. Replace <ANA> with the correct numbers before the next recirculation ballor so 11u can request conditional approval to go to Sponsor Ballot.

*SuggestedRemedy*

Remove the EDITORIAL NOTES about ANA in order to be ready for Sponsor Ballot.

*Proposed Response*     *Response Status*   **O**

Accept - As suggested

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*Cl* **07**     *SC* **7.3.2**     *P* **15**     *L* **24**     # 587
Ptasinski, Henry     Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

Length of Interworking element does not match clause 7.3.2.59

*SuggestedRemedy*

Correct the Length in the table.

*Proposed Response*     *Response Status*   **O**

Accept - Change length in Table 7-26 to read "3 or 9"

---

*Cl* **07**     *SC* **7.3.2**     *P* **17**     *L* **30**     # 4614
Ptasinski, Henry     Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

"5 to 11" should be "5 or 11"

*SuggestedRemedy*

Correct.

*Proposed Response*     *Response Status*   **O**

Accept - As per comment.

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **07**
*SC* **7.3.2**

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*Cl* **07**     *SC* **7.3.2**     *P* **19**     *L* **34**     # 4615
Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

Where does the "default value" referenced in these sentences reside? "An AP sets the default value of Venue Group to Residen- tial and the default value of 802.11 Venue Type to unspecified. A non-AP STA sets the default value of Venue Group to unspecified and the default value of Venue Type to unspecified."

*SuggestedRemedy*

Delete the sentences, as they provide no useful information.  Or define appropriate MIB variables for these fields, and set the default values of those MIB variables.

*Proposed Response*     *Response Status*   **O**

Accept - Removde the sentence.

See 11-08-1342/r0

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*Cl* **07**     *SC* **7.3.2.59**     *P* **17**     *L* **20**     # 588
Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

"An AP sets the default value of Venue Group to Residential and the default value of Venue Type to unspecified." How is any other value ever set?

*SuggestedRemedy*

Define some mechanism for the AP to advertise other Venue Group and Venue Type values, or delete these fields from the IE.

*Proposed Response*     *Response Status*   **O**

Reject - It is up to the AP implementation as to how this is achieved.

---

*Cl* **07**     *SC* **7.3.2.59**     *P* **17**     *L* **55**     # 4616
Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

"The value of the Length field is the length of the Interworking capabilities field." Nothing called the "Interworking capabilities field" is defined in this amendment.

*SuggestedRemedy*

Delete the sentence.

*Proposed Response*     *Response Status*   **O**

Counter - Change it to Interworking element fields
See 11-08-1343/r1

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*Cl* **07**     *SC* **7.3.2.59**     *P* **17**     *L* **56**     # 589
Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

"A non-AP STA uses this field to indicate the desired HESSID in an active scan" but the length of this IE for a non-AP STA is specified as 1.

*SuggestedRemedy*

Fix the lengths.  Specify what values a non-AP STA uses for the Venue Group and Venue Type fields when including the HESSID in an active scan.

*Proposed Response*     *Response Status*   **O**

Counter - See CID 488

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*Cl* **07**     *SC* **7.3.2.59**     *P* **22**     *L* **2**     # 4617
Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

"HESSID Present bit in the Interworking capabilities field." Nothing called the "Interworking capabilities field" is defined in this amendment.  No "HESSID Present bit" is defined in this amendment.

*SuggestedRemedy*

Define an HESSID Present bit in an existing field, and correct this reference.

*Proposed Response*     *Response Status*   **O**

Counter - See 11-08-1342r1

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*Cl* **07**     *SC* **7.3.2.60**     *P* **21**     *L* **21**     # 591
Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

"If the first octet of this field is the vendor specific Advertisement Protocol ID as provided in Table 7-43t, then this field contains the Vendor Specific information element defined in 7.3.2.26. "  The vendor specific IE can be 257 octets long.  How is the Advertisement Protocol Tuple supposed to include one max size vendor specific IE let alone multiple?

*SuggestedRemedy*

Constrain the size of the VS IEs, or don't encapsulate the VS IEs in the APT IE, or use some other method for conveying VS protocol information.

*Proposed Response*     *Response Status*   **O**

Accept - Add the following sentence to the end of line 12: "When one or more vendor-specific elements are included in the Advertisment Protocol element, their total length needs to be constrained such that the total length of all the Advertisement Protocol Tuple fields is less than or equal to 255 octets."

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **07**
*SC* **7.3.2.60**

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*Cl* **07** *SC* **7.3.2.60** *P* **21** *L* **54** # 652
Stanley, Dorothy      Aruba Networks

*Comment Type* **TR** *Comment Status* **X**
The term "Native Query Protocol" is less than intuitive. Suggest renaming to "BSS Query Protocol" or "Local Interworking Query Protocol"

*SuggestedRemedy*
As in comment

*Proposed Response* *Response Status* **O**
Reject - The suggested names are not intuitive.  The commenter is encouraged to bring further suggestions to TGu sessions for discussion.

*Cl* **07** *SC* **7.3.2.65** *P* **27** *L* **13** # 656
Stanley, Dorothy      Aruba Networks

*Comment Type* **TR** *Comment Status* **X**
Re-format to include the optional fields as optional sub-elelements, as done in .11k for the 7.3.2 elements.

*SuggestedRemedy*
As in comment. Similarly for the other elements.

*Proposed Response* *Response Status* **O**
Reject - This element is present in beacon and probe response frames so it needs to follow information element formatting.

*Cl* **07** *SC* **7.3.2.83** *P* **23** *L* **36** # 7030
Chaplin, Clint      Samsung Electronics

*Comment Type* **ER** *Comment Status* **X**
"A non-AP STA sets ASRA, ESC, UESA fields to 0 when including the interworking in the Probe request frame."

*SuggestedRemedy*
"A non-AP STA sets ASRA, ESC, UESA fields to 0 when including the interworking element in the Probe request frame."

*Proposed Response* *Response Status* **O**
Accept - As suggested

*Cl* **07** *SC* **7.3.2.84** *P* **28** *L* **59** # 7031
Chaplin, Clint      Samsung Electronics

*Comment Type* **ER** *Comment Status* **X**
"it's set"

*SuggestedRemedy*
"it is set"

*Proposed Response* *Response Status* **O**
Accept - As suggested

*Cl* **07** *SC* **7.3.2.84** *P* **29** *L* **65** # 7062
Malarky, Alastair      Mark IV Industries

*Comment Type* **ER** *Comment Status* **X**
There is no such thing as a vendor specific element defined in 7.3.2.26; it is a vendor specific information element.  It is recognised that this change was made in response to a comment in LB148 but this has created a new error.

*SuggestedRemedy*
Suggest change "The format of the Advertisement Protocol element when the Advertisement Protocol ID is equal to 221 follows the format of the vendor specific element in 7.3.2.26" to "When the Advertisement Protocol ID is equal to 221, the format of the Advertisement Protocol element follows the format of the vendor specific information element in 7.3.2.26."

*Proposed Response* *Response Status* **O**
Accept - As suggested

*Cl* **07** *SC* **7.3.2.87** *P* **32** *L* **44** # 7032
Chaplin, Clint      Samsung Electronics

*Comment Type* **ER** *Comment Status* **X**
"is one-octet"

*SuggestedRemedy*
"is a one-octet"

*Proposed Response* *Response Status* **O**
Accept - As suggested

TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **07**
*SC* **7.3.2.87**

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*Cl* **07**    *SC* **7.3.2.87**      *P* **32**    *L* **51**     # 7064

Malarky, Alastair      Mark IV Industries

*Comment Type* **ER**    *Comment Status* **X**

The text "The OI field is a defined in 7.3.21" is not complete and the reference is incorrect. Further unless P802.11pD7.0 is cited, the OI is undefined.

*SuggestedRemedy*

Change to "The OI field is defined in 7.3.1.21." Cite P802.11p-D7.0 on page 1 list of amendments.

*Proposed Response*     *Response Status* **O**

Accept - Resolution provided in 11-09-0824r2

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*Cl* **07**    *SC* **7.3.2.88**      *P* **41**    *L* **40**     # 7221

Wang, Qi      Broadcom Corporation

*Comment Type* **TR**    *Comment Status* **X**

Replace "Emergency alert IE" with "Emergency alert identifier IE" to reflect the content of the IE accurately.

*SuggestedRemedy*

As in comment.

*Proposed Response*     *Response Status* **O**

Reject - The word "identifier" within the IE name is not necessary. The correct name would be "Emergency Alert Identifier Hash" IE, which seems a little verbose.

---

*Cl* **07**    *SC* **7.3.3.7**      *P* **34**    *L* **37**     # 4400

Kolze, Tom      Broadcom

*Comment Type* **TR**    *Comment Status* **X**

The text states, "The length of the information field (n) is 3 n the maximum MMPDU size". This is unclear.

*SuggestedRemedy*

Please make clear what the length of the information field is supposed to be.

*Proposed Response*     *Response Status* **O**

Accept - See CID #4410.

---

*Cl* **07**    *SC* **7.3.3.7**      *P* **34**    *L* **38**     # 4401

Kolze, Tom      Broadcom

*Comment Type* **TR**    *Comment Status* **X**

The text states, "The length of the vendor-specific content is n-3 octets", which contradicts what Figure 7-95bh shows, which is 3 octets.

*SuggestedRemedy*

Please make clear what the length of the vendor-specific content field is supposed to be, and make all figures and text consistent.

*Proposed Response*     *Response Status* **O**

Accept - See CID #4410.

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*Cl* **07**    *SC* **7.3.4.1**      *P* **34**    *L* **1**     # 7005

Bajko, Gabor      Nokia

*Comment Type* **TR**    *Comment Status* **X**

The AP Date, Time and Time Zone Native Query Element was removed. Part of the functionality was moved to TGv, part of the functionality was lost. What was moved to TGv was the timezone information, which ended up in the beacon. Since the time zone information is not something which is frequently needed, it is a bad idea to place it into the beacon, instead it should be available upon request. The functionality which was lost is the capability of communicating the local time of the AP to the requesting STA. The local time could be calculated from the UTC time, the timezone and the date, but the date info was lost. Besides, as we discussed in the meeting, it is not reasonable to expect the MAC layer to do all these calculations.

*SuggestedRemedy*

Put back the procedure which allowed for the STA to request the date, local time and timezone of the AP.

*Proposed Response*     *Response Status* **O**

Counter - TGu believes that TGv has properly resolved this functionality

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*Cl* **07**    *SC* **7.3.4.10**      *P* **45**    *L* **31**     # 7012

Bajko, Gabor      Nokia

*Comment Type* **TR**    *Comment Status* **X**

The first sentence of the paragraph says: "The AP Geospatial Location element provides the AP's location in LCI format". Actually the AP's location is a geospacial location in binary enoding. Replace the sentence with" The AP Geospacial Location Element provides the AP's geolocation in binary encoding".

*SuggestedRemedy*

as suggested.

*Proposed Response*     *Response Status* **O**

Reject - LCI format is already binary encoding, so that clarification is not necessary.

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TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected    RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

*Cl* **07**
*SC* **7.3.4.10**

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|---|---|---|---|---|---|---|---|---|
| *Cl* **07** | *SC* **7.3.4.10** | *P* **45** | *L* **40** | # 7013 |

Bajko, Gabor                                     Nokia

*Comment Type* **TR**     *Comment Status* **X**

Replace Location Configuration Report in Figure 7-95o137 with "AP geolocation" and delete the sentence "The format of the Location Configuration Report is provided in 7.3.2.22.9." below the figure.

*SuggestedRemedy*

as suggested.

*Proposed Response*     *Response Status* **O**

Reject - The name of the element "Location Configuration Report" has been standardised within IEEE 802.11k-2008.

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| | | | | |
|---|---|---|---|---|
| *Cl* **07** | *SC* **7.3.4.10** | *P* **45** | *L* **48** | # 7117 |

Roy, Richard                                      SRA

*Comment Type* **TR**     *Comment Status* **X**

Text reads: "The Length field is a 2-octet field and is equal to 18." Why take two octets to encode the integer 18?

*SuggestedRemedy*

Change to a one octet length field unless for some reason the digits 1 and 8 are being ASCII encoded.  If that's the case, then so state and don't foget to specify the order of the characters.

*Proposed Response*     *Response Status* **O**

Reject - The 2-octet length field is used, as this is a common format for all native query protocol elements.

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|---|---|---|---|---|
| *Cl* **07** | *SC* **7.3.4.10** | *P* **45** | *L* **52** | # 7014 |

Bajko, Gabor                                     Nokia

*Comment Type* **TR**     *Comment Status* **X**

What is the meaning of the sentence "There are no sub-elements present in the Location Configuration Report when it is used in the AP Geospatial Location element."? Since the query response should provide the AP's location instead of a report, this sentence should be deleted as well.

*SuggestedRemedy*

as suggested.

*Proposed Response*     *Response Status* **O**

Counter - Change to:

"There is no Optional Subelements field present in the Location Configuration Report when it is used in the AP Geospatial Location element."

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| | | | | |
|---|---|---|---|---|
| *Cl* **07** | *SC* **7.3.4.11** | *P* **46** | *L* **10** | # 7009 |

Bajko, Gabor                                     Nokia

*Comment Type* **TR**     *Comment Status* **X**

The first sentence of the paragraph says: "The AP Civic Location element provides the AP's location in civic format". The AP's civic location is configured in the MIB variable dot11APCivicLocationEntry. I.e., the response is not a civic location report, but it is the civic location value configured in the MIB (the response only contains the address of the AP, without any accuracy estimates).

*SuggestedRemedy*

Change in figure Figure 7-95o138 "Location Civic Report" to "AP civic Location".

*Proposed Response*     *Response Status* **O**

Reject - The Location Civic report is in IE format defined in 11v.  The values in the IE, are drawn from the MIB as desired by the commentor.

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|---|---|---|---|---|
| *Cl* **07** | *SC* **7.3.4.12** | *P* **46** | *L* **33** | # 7035 |

Chaplin, Clint                                    Samsung Electronics

*Comment Type* **ER**     *Comment Status* **X**

"whose networks are accessible the AP."

*SuggestedRemedy*

"whose networks are accessible via the AP."

*Proposed Response*     *Response Status* **O**

Accept - As suggested

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| | | | | |
|---|---|---|---|---|
| *Cl* **07** | *SC* **7.3.4.13** | *P* **47** | *L* **17** | # 7070 |

Malarky, Alastair                                 Mark IV Industries

*Comment Type* **ER**     *Comment Status* **X**

"Alert URI" should be "Emergency Alert Server URI"

*SuggestedRemedy*

As per comment

*Proposed Response*     *Response Status* **O**

Accept - As suggested

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **07**
*SC* **7.3.4.13**

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*Cl* **07**  *SC* **7.3.4.13**  *P* **47**  *L* **8**  # 7036
Chaplin, Clint  Samsung Electronics

*Comment Type* **ER**  *Comment Status* **X**
"7.3.4.13 Emergency Alert URI Information"

*SuggestedRemedy*
"7.3.4.13 Emergency Alert Server URI Information"

*Proposed Response*  *Response Status* **O**
Accept - As suggested

*Cl* **07**  *SC* **7.3.4.3**  *P* **36**  *L* **35**  # 7109
Roy, Richard  SRA

*Comment Type* **TR**  *Comment Status* **X**
Text reads: "The Length is a 2-octet field whose value is equal to the number and size of the Emergency Call Number Units." How can a 2-octet field containing a single value (an integer) be equal to two things . the number of things and the size of things?

*SuggestedRemedy*
Since the information element is composed of Emergency Call Number Units, each of which has a length octet in the first position, perhaps what was meant is "The Length is a 2-octet field whose value is equal to the number of the Emergency Call Number Units." which begs the question will there ever be more than 255 ECNUs?  If not, then one octet should suffice perhaps. This same comment apllies elsewhere such as in 7.3.4.4, 7.3.4.8 ... the entire draft should be checked for similar problems.

*Proposed Response*  *Response Status* **O**
Counter - Change the text:

"The Length is a 2-octet field whose value is equal to the number and size of the Emergency Call Number Units."

to

"The Length is a 2-octet field whose value is determined by the number and size of the Emergency Call Number Units."

*Cl* **07**  *SC* **7.3.4.3**  *P* **36**  *L* **52**  # 7110
Roy, Richard  SRA

*Comment Type* **TR**  *Comment Status* **X**
Text reads: "The Length of Emergency Call Number is a one octet field whose value is determined by the size of the Emergency
Call Number field." but this doesn't tell the whole story.  How is it determined?  Is it 1 plus the length of the field, or just the length of the field for example.

*SuggestedRemedy*
Clarify here and in similar places throughout the draft where the same indeterminate language is used.

*Proposed Response*  *Response Status* **O**
Counter - See CID 7109

*Cl* **07**  *SC* **7.3.4.5**  *P* **38**  *L* **51**  # 7111
Roy, Richard  SRA

*Comment Type* **TR**  *Comment Status* **X**
Text reads: "The Length is a 2-octet field whose value is dependant on the number and size of OIs present in the element." First, dependent is mispelled.  Second, how is it dependent on the number and size?

*SuggestedRemedy*
Fix the typo and clarify.  Note that OIs can be of different lengths, so there are two choices: the total length of the OI subfields that follow or the number of Ois present.

*Proposed Response*  *Response Status* **O**
Accept - Resolution provided in 11-09-0824r2

*Cl* **07**  *SC* **7.3.4.5**  *P* **38**  *L* **54**  # 7066
Malarky, Alastair  Mark IV Industries

*Comment Type* **ER**  *Comment Status* **X**
The text "The OI field is a defined in 7.3.2.12" is not complete and the reference is incorrect.  Further unless P802.11pD7.0 is cited, the OI is undefined.

*SuggestedRemedy*
Change to "The OI field is defined in 7.3.1.21."  Cite P802.11p-D7.0 on page 1 list of amendments.

*Proposed Response*  *Response Status* **O**
Accept - Resolution provided in 11-09-0824r2

TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **07**
*SC* **7.3.4.5**

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*Cl* **07**     *SC* **7.3.4.5**          *P* **38**     *L* **54**          # 7033
Chaplin, Clint                           Samsung Electronics

*Comment Type*  **ER**     *Comment Status*  **X**
"The OI field is a defined in 7.3.2.12"

*SuggestedRemedy*
"The OI field is defined in 7.3.2.12"

*Proposed Response*     *Response Status*  **O**
Accept - As suggested

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*Cl* **07**     *SC* **7.3.4.6**          *P* **38**     *L*          # 7113
Roy, Richard                             SRA

*Comment Type*  **TR**     *Comment Status*  **X**
The OUI field has been replaced elsewhere in the document with thte OI defined in
802.11pD7.0.  Why not here?

*SuggestedRemedy*
Fix as appropriate.

*Proposed Response*     *Response Status*  **O**
Accept - Resolution provided in 11-09-0824r2

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*Cl* **07**     *SC* **7.3.4.6**          *P* **39**     *L* **8**          # 7067
Malarky, Alastair                        Mark IV Industries

*Comment Type*  **TR**     *Comment Status*  **X**
Although the resolution to LB148 comment 6058 indicates accept, the resolution document
and the text were not changed.  Within the OUI identifier space, the IEEE-RAC have been
issuing OUI based identifiers to organizations that are longer than 24-bits, specifically the
IAB and OUI-36, such that multiple organizations share the same OUI value.  If roaming
consortium and/or SSPs are allocated 36-bit identifiers, then the Native Query Protocol
vendor specific list cannot uniquely identify them to understand how to interpret the vendor
specific content.

*SuggestedRemedy*
Make the same change to this that was implemented to Roaming Consortium List in 7.3.4.5

*Proposed Response*     *Response Status*  **O**
Accept - Resolution provided in 11-09-0824r2

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*Cl* **07**     *SC* **7.3.4.7**          *P* **39**     *L*          # 7068
Malarky, Alastair                        Mark IV Industries

*Comment Type*  **ER**     *Comment Status*  **X**
The Length field should be 1 octet in length and have the value of 2;  The IP address
should be length 2 octets.

*SuggestedRemedy*
Fix figure 7-95o129 and sentence on line 54.

*Proposed Response*     *Response Status*  **O**
Reject - See Section 7.3.4 fig 7-95o119 for the Native query format

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*Cl* **07**     *SC* **7.3.4.8**          *P* **42**     *L* **50**          # 7034
Chaplin, Clint                           Samsung Electronics

*Comment Type*  **ER**     *Comment Status*  **X**
"is 1 octet"

*SuggestedRemedy*
"is a 1-octet"

*Proposed Response*     *Response Status*  **O**
Accept - As suggested

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*Cl* **07**     *SC* **7.3.4.8**          *P* **44**     *L* **51**          # 7069
Malarky, Alastair                        Mark IV Industries

*Comment Type*  **TR**     *Comment Status*  **X**
Within the OUI identifier space, the IEEE-RAC have been issuing OUI based identifiers to
organizations that are longer than 24-bits, specifically the IAB and OUI-36, such that
multiple organizations share the same OUI value.  If roaming consortium and/or SSPs are
allocated 36-bit identifiers, then the Vendor-Specific Authentication Parameters cannot
uniquely identify them to understand how to interpret the vendor specific content.

*SuggestedRemedy*
Replace OUI with OI.

*Proposed Response*     *Response Status*  **O**
Accept - Resolution provided in 11-09-0824r2

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **07**
*SC* **7.3.4.8**

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| | | | | | |
|---|---|---|---|---|---|
| *Cl* **07** | *SC* **7.3.4.8** | *P* **44** | *L* **8** | *#* | 7116 |

Roy, Richard                                                         SRA

*Comment Type* **TR**          *Comment Status* **X**

Vendor ID is given as 3 bytes.  Nowhere in this draft or the base standard is "Vendor ID" defined.  It is possible that what was meant was OUI.  This presents another challenge since OUUI is generally being replaced by the OI found in 11pD7.0 clasue 7.3.1.21.  However, the OI is a variable length identifier and not suitable for a fixed length field if uniqueness in that field is a requirement, and this may be the case for the security protocols beign referred to.

*SuggestedRemedy*

This issue needs careful thought and consideration before a solution can be crafted.  Think about it and craft an appropriate change to the draft. Other places in the draft are likely to be affected by this issue. If so, fix them as well.

*Proposed Response*          *Response Status* **O**

Counter - on P44L4, change the phrase "values for the Expanded EAP method are specified in RFC 3748."

to

"values for the Vendor ID and Vendor Type are specified in RFC 3748."

| | | | | | |
|---|---|---|---|---|---|
| *Cl* **07** | *SC* **7.4.7.1** | *P* **45** | *L* **23** | *#* | 6054 |

Kolze, Tom                                                           Broadcom

*Comment Type* **TR**          *Comment Status* **X**

Table 5-57e Public Action Field Values, has four missing Action field values, as explained in the Editorial note.

*SuggestedRemedy*

allocate these four action field values

*Proposed Response*          *Response Status* **O**

Reject - TGu agrees that these values are assigned by ANA prior to SB, once ExCom has approved SB.

Note: the Table reference within the comment is Table 7-57e

| | | | | | |
|---|---|---|---|---|---|
| *Cl* **07** | *SC* **7.4.7.10** | *P* **45** | *L* **47** | *#* | 6053 |

Kolze, Tom                                                           Broadcom

*Comment Type* **TR**          *Comment Status* **X**

Generic advertisement Service (GAS) frames, such as the GAS Initial Request frame, are management frames, and in EDCA networks they are always sent at access category voice (AC_VO) without any admission control restrictions. The GAS protocol could involve transferring of a large number of frames, which will negatively impact data traffic performance.

*SuggestedRemedy*

Use mechanism for sending GAS protocol information at lower priority.  This comment was Rejected in the previous ballot, with the following explanation:

Even though TGu agrees with the commenter, we have not found a reasonable method to resolve the comment and the commenter did not suggest a specific resolution.  Some comments follow:

Public action frames are class 1 frames and thus can't use the 802.11v data encapsulation method (at least until STA is in associated state).  While this method could be used to provide lower priority for GAS frames, the primary usage of GAS is intended to be when STA is in un-associated state, so this method would probably help that much in practice.

In previous 802.11 drafts, we included text which mandated GAS frames be transmitted at lower priority than AC_VO.  However, this would apply to all public action frames and others in the 802.11 WG commented that other uses needed higher priority.  Thus TGu removed this text from the amendment.

Because of these reasons, this comment is rejected.

--- --- ---
I am glad that TGu agrees with this comment.  We are nearly on the same page and close to closing this issue.  Clearly this is an important issue and avenues exist which can address this matter.

I believe there is a typo in the 2nd paragraph of the Rejection (3rd paragraph above), wherein it is stated that "...method would probably help that much in practice" is likely intended to be "...method would probably not help that much in practice."  Still, this method would ameliorate some of the problem if it were used when the stations were in associated state.  This should be considered, but the following paragraph in the Rejection holds even more promise for finding a solution.  A solution where GAS frames could be separately classified from "all public action frames" --- especially those of the kind which "other commenters" felt in previous ballots needed higher priority --- should be investigated in earnest.

This commenter appreciates the attention given this issue, and if more solutions are not developed in this cycle, this commenter recommends that at least two solutions be voted --- the current draft state and the previous draft wherein GAS frames were transmitted at lower priority than AC_VO.  I do further recommend that using the above-

TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected      RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

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*SC* **7.4.7.10**          16/07/2009  21:17:19

mentioned 802.11v data encapsulation method for associated state be examined and (perhaps) included as a third option in the vote. Hopefully time and effort will provide yet another solution which will please everyone of us in TGu.

*Proposed Response*     *Response Status*   **O**

Reject - Neither the commentor or TGu has determined a viable method to transmit GAS frames between un-associated STAs at best effort priority. TGu invites the commentor to attend a future meeting with a submission to address this.

---

*Cl* **07**     *SC* **7.4.7.10**       *P* **47**      *L* **26**      # 5189

Ptasinski, Henry                Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

Since GAS protocol frames are management frames, in EDCA networks they are always sent at AC_VO without any admission control restrictions. Given that the GAS protocol could involve the transfer of a significant number of frames, this will significantly impact performance of data traffic.

*SuggestedRemedy*

Provide a mechanism for sending GAS protocol information at lower priority.

*Proposed Response*     *Response Status*   **O**

Reject - See CID 5161

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*Cl* **07**     *SC* **7.4.7.10**       *P* **47**      *L* **26**      # 5161

Kolze, Tom                Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

Generic advertisement Service (GAS) frames, such as the GAS Initial Request frame, are management frames, and in EDCA networks they are always sent at access category voice (AC_VO) without any admission control restrictions. The GAS protocol could involve transferring of a large number of frames, which will negatively impact data traffic performance.

*SuggestedRemedy*

Use mechanism for sending GAS protocol information at lower priority.

*Proposed Response*     *Response Status*   **O**

Reject - Even though TGu agrees with the commenter, we have not found a reasonable method to resolve the comment and the commenter did not suggest a specific resolution. Some comments follow:

Public action frames are class 1 frames and thus can't use the 802.11v data encapsulation method (at least until STA is in associated state). While this method could be used to provide lower priority for GAS frames, the primary usage of GAS is intended to be when STA is in un-associated state, so this method would probably help that much in practice.

In previous 802.11 drafts, we included text which mandated GAS frames be transmitted at lower priority than AC_VO. However, this would apply to all public action frames and others in the 802.11 WG commented that other uses needed higher priority. Thus TGu removed this text from the amendment.

Because of these reasons, this comment is rejected.

TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

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*SC* **7.4.7.10**      16/07/2009  21:17:19

*Cl* **07**    *SC* **7.4.7.10**    *P* **49**    *L* **40**    # 7061

Kolze, Tom    Broadcom

*Comment Type*   **TR**    *Comment Status*   **X**

Generic advertisement Service (GAS) frames, such as the GAS Initial Request frame, are management frames, and in EDCA networks they are always sent at access category voice (AC_VO) without any admission control restrictions. The GAS protocol could involve transferring of a large number of frames, which will negatively impact data traffic performance.

*SuggestedRemedy*

Use mechanism for sending GAS protocol information at lower priority.  This comment was Rejected in the previous two ballots, with the following explanation:

Even though TGu agrees with the commenter, we have not found a reasonable method to resolve the comment and the commenter did not suggest a specific resolution.  Some comments follow:

Public action frames are class 1 frames and thus can't use the 802.11v data encapsulation method (at least until STA is in associated state).  While this method could be used to provide lower priority for GAS frames, the primary usage of GAS is intended to be when STA is in un-associated state, so this method would probably help that much in practice.

In previous 802.11 drafts, we included text which mandated GAS frames be transmitted at lower priority than AC_VO.  However, this would apply to all public action frames and others in the 802.11 WG commented that other uses needed higher priority.  Thus TGu removed this text from the amendment.

Because of these reasons, this comment is rejected.

Then, in the previous ballot, there was NO explanation given, so I don't know why the responses are becoming LESS informative and the working group is putting LESS attention and effort into finding a substantive solution.  The response to this very detailed comment was simply "attend a future meeting and make a submission."  I will attend the next meeting, but THIS COMMENT IS MY SUBMISSION.  That is how this process works.  I hope the response isn't sarcasm or being flippant, but is simply misguided.  It does not reflect recognition of the process and was probably written in a room with only a few participants, right?  At the next meeting, those who are formulating the response should READ my solution(s) which are explained below, and take the votes which I identify in my "submission" below, and PLEASE REPORT in the comment resolution on the RESULTS of that vote --- the TOTAL NUMBER OF Y, N, and A.  That will be much more respectful of the IEEE 802 longstanding process than simply trying to deny that I have in fact made serious recommendations for a solution.  There is NO evidence in the response to MY COMMENT on the previous ballot that my comment was even read.

--- --- ---
I am glad that TGu agrees with this comment.  We are nearly on the same page and close to closing this issue.  Clearly this is an important issue and avenues exist which can address this matter.

I believe there is a typo in the 2nd paragraph of the Rejection (3rd paragraph above), wherein it is stated that "...method would probably help that much in practice" is likely intended to be "...method would probably not help that much in practice."  Still, this method would ameliorate some of the problem if it were used when the stations were in associated state.  This should be considered, but the following paragraph in the Rejection holds even more promise for finding a solution.  A solution where GAS frames could be separately classified from "all public action frames" --- especially those of the kind which "other commenters" felt in previous ballots needed higher priority --- should be investigated in earnest.

This commenter appreciates the attention given this issue, and if more solutions are not developed in this cycle, this commenter recommends that at least two solutions be voted --- the current draft state and the previous draft wherein GAS frames were transmitted at lower priority than AC_VO.  I do further recommend that using the above-mentioned 802.11v data encapsulation method for associated state be examined and (perhaps) included as a third option in the vote.  Hopefully time and effort will provide yet another solution which will please everyone of us in TGu.

*Proposed Response*    *Response Status*   **O**

Reject - After further consideration, this comment is declined because it is out-of-scope of the TGu PAR; the following is extracted from TGu's PAR and is the scope of 802.11u: "The purpose of this document is to provide amendments to the IEEE 802.11 PHY/MAC layers which enable interworking with other networks. This includes both enhanced protocol exchanges across the air interface and provision of primitives to support required interactions with higher layers for interworking."

Prioritization of public action frames is a general 802.11 issue and not specific to interworking with external networks.

Note that although TGu choose public action frames for the transport of GAS frames, TGu did not create this action frame category and behavior (i.e., that it's a class 1 frame).  PAFs were created by 802.11k amendment--TGu did not create the problem.  Several amendments including 11k, 11n and 11y use public action frames as well, so we are not free to change the behavior of PAFs without creating problems for those amendments.  Thus, this is a problem for the 802.11 WG to solve.

WNG has now passed a motion to ask the IEEE 802.11 WG to create a SG regarding the prioritization of management frames.  This group would have the scope to properly address the problem.

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **07**     *SC* **7.4.7.11**     *P* **47**     *L* **26**     # 5190
Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**
Since GAS protocol frames are management frames, in EDCA networks they are always sent at AC_VO without any admission control restrictions. Given that the GAS protocol could involve the transfer of a significant number of frames, this will significantly impact performance of data traffic.

*SuggestedRemedy*
Provide a mechanism for sending GAS protocol information at lower priority.

*Proposed Response*     *Response Status*   **O**
Reject - See CID 5161

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*Cl* **07**     *SC* **7.4.7.12**     *P* **47**     *L* **26**     # 5191
Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**
Since GAS protocol frames are management frames, in EDCA networks they are always sent at AC_VO without any admission control restrictions. Given that the GAS protocol could involve the transfer of a significant number of frames, this will significantly impact performance of data traffic.

*SuggestedRemedy*
Provide a mechanism for sending GAS protocol information at lower priority.

*Proposed Response*     *Response Status*   **O**
Reject - See CID 5161

---

*Cl* **07**     *SC* **7.4.7.13**     *P* **47**     *L* **26**     # 5192
Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**
Since GAS protocol frames are management frames, in EDCA networks they are always sent at AC_VO without any admission control restrictions. Given that the GAS protocol could involve the transfer of a significant number of frames, this will significantly impact performance of data traffic.

*SuggestedRemedy*
Provide a mechanism for sending GAS protocol information at lower priority.

*Proposed Response*     *Response Status*   **O**
Reject - See CID 5161

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*Cl* **08**     *SC* **8.1.6**     *P* **55**     *L* **9**     # 7020
Bajko, Gabor        Nokia

*Comment Type*   **TR**     *Comment Status*   **X**
This Emergency Service support for unauthenticated STAs in RSNA seems to be restricted to infrastructure mode. What about IBSS or WLAN-STAs in concurrent operation (P2P and infra)? Eg when a STA is associated with an AP, but participates in P2P networking as well, and wants to offer access for unauthenticated STAs for Emergency Service, it can not, because the current TGu spec is ambiguous, and assumes that the STA offering the service is an AP which has a 'network side'.

*SuggestedRemedy*
either delete this whole feature of allowing unauthenticated STAs to connect to RSNA, or define clearly how it should be implemented to work. There were suggestions in my previous LB comment.

*Proposed Response*     *Response Status*   **O**
Reject - P2P is not defined within IEEE 802.11 and is out of scope.

Emergency services are not possible in an IBSS, because an IBSS has no access to a DS and integration service is only defined to operate between a DS and a LAN. Therefore there is no way for an IBSS to communicate with a PSAP.

---

*Cl* **09**     *SC* **9.2.7**     *P* **42**     *L* **12**     # 493
Kolze, Tom        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**
Repeating normative behavior described in 6.2.1.2.4

*SuggestedRemedy*
Specify behavior in only one place. More suited to clause 11.

*Proposed Response*     *Response Status*   **O**
Counter - See CID 427

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*Cl* **09**     *SC* **9.2.7**     *P* **46**     *L* **13**     # 4402
Kolze, Tom        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**
The text states, in part, "When. is true, a group addressed frame is forwarded by an AP, it shall distribute the broadcast/group addressed message shall be distributed into the BSS only if . is set to true."  The intent of this sentence is not clear.

*SuggestedRemedy*
This sentence is not clear, and the intent of the sentence is not clear.  The sentence needs to contain a clear instruction.

*Proposed Response*     *Response Status*   **O**
Accept - See 11-08-1374/r0

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **09**
*SC* **9.2.7**

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*Cl* **10**     *SC* **10.3.2.1**     *P* **44**     *L* **24**     # 663

Stanley, Dorothy        Aruba Networks

*Comment Type* **TR**     *Comment Status* **X**

New values: HESSID and Network Type" should be inserted at the end of the list, just before the vendor specific entry.

*SuggestedRemedy*

Change the editor instructions in line 36, and move the entries. Similarly in 10.3.10.1.2, 10.3.24.1.2.

*Proposed Response*     *Response Status* **O**

Reject - There is no reason to move these values to the end of the list. MLME primitives are not implementation specific.

---

*Cl* **10**     *SC* **10.3.24.2.2**     *P* **48**     *L* **42**     # 148

Chaplin, Clint        Samsung

*Comment Type* **TR**     *Comment Status* **X**

"A TS is not created with this definition"

*SuggestedRemedy*

"A TS has not been set up with this definition"

*Proposed Response*     *Response Status* **O**

Reject - The terminology "created" is part of the base standard (this was not added/modified by 802.11u-d3.0); if this change were made, then it would become inconsistent with other places in the base standard which uses the word "created".

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*Cl* **11**     *SC* **11.1.3.2.1**     *P* **59**     *L* **49**     # 664

Stanley, Dorothy        Aruba Networks

*Comment Type* **TR**     *Comment Status* **X**

Delete list item (a) stentence referring to defailt or non-default SSID

*SuggestedRemedy*

As in comment

*Proposed Response*     *Response Status* **O**

Counter - Delete the phrase "(whether or not the SSID is a default or non-default SSID)". See CID #805

---

*Cl* **11**     *SC* **11.1.3.2.1**     *P* **59**     *L* **54**     # 592

Ptasinski, Henry        Broadcom

*Comment Type* **TR**     *Comment Status* **X**

Probe response behavior requires HESSID to be present in Interworking IE, but Interworking IE definition does not require non-AP STA to include HESSID always.

*SuggestedRemedy*

Either require the HESSID to always be present (bloat) or fix probe response behavior to handle missing HESSID case.

*Proposed Response*     *Response Status* **O**

Accept - Change the text to read "the HESSID field, if present in the Interworking element, is the wildcard HESSID or the HESSID of the STA" P59 L54

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*Cl* **11**     *SC* **11.1.3.2.1**     *P* **91**     *L* **49**     # 7058

Ecclesine, Peter        Cisco Systems

*Comment Type* **ER**     *Comment Status* **X**

Sponsor Ballot has to begin with an unchanged draft. Fix this alignment before the next recirculation. Take this comment to also apply to any alignment with other amendments in 11u's baseline.

*SuggestedRemedy*

per comment

*Proposed Response*     *Response Status* **O**

Accept - As suggested

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*Cl* **11**     *SC* **11.18.2**     *P* **65**     *L* **26**     # 594

Ptasinski, Henry        Broadcom

*Comment Type* **TR**     *Comment Status* **X**

Unintelligible sentence: "The Advertisement Protocol identifies the query language used by the advertisement server, GAS, which is used to transport Queries and Query Responses is transparent to the Advertisement Protocol."

*SuggestedRemedy*

3 verbs seems excessive. Take out at least one and revise the punctuation.

*Proposed Response*     *Response Status* **O**

Accept - Change the sentence "The Advertisement Protocol identifies the query language used by the advertisement server, GAS, which is used to transport Queries and Query Responses is transparent to the Advertisement Protocol." to "The Advertisement Protocol identifies the query language used by the advertisement server. The GAS protocol, which is used to transport Queries and Query Responses, is transparent to the Advertisement Protocol."

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:  Clause, Subclause, page, line

*Cl* **11**
*SC* **11.18.2**

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*Cl* **11**     *SC* **11.18.2.1.1**     *P* **65**     *L* **65**     # 595

Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

If a STA in state 3 goes into power save, GAS queries will always fail if the value of dot11GasResponseTimeout is less than the wakeup interval (typically the DTIM interval, but possibly much longer especially if TGv sleep features are used).

*SuggestedRemedy*

Clarify the interaction between the timeout value and power save/sleep modes. Specify a lower limit on the timeout.

*Proposed Response*     *Response Status*   **O**

Reject - 8/26 teleconference: the GAS Initial Response action frame will typically be returned by the AP with minimum delay (as measured from receipt of the GAS Initial Request action frame). So the dot11GasResponse timer should not expire. That said, it is up to the SME or higher layers to manage the operation of the STAs timers/MIB so that the desired operation of GAS is obtained.

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*Cl* **11**     *SC* **11.18.2.2.3**     *P* **68**     *L* **47**     # 596

Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

GASTIM count and period are unnecessary. Multicast/broadcast GAS messages should be sent using the same rules as multicast/broadcast data. Use DTIM interval (and possibly FBMS) instead of defining a new interval which may have a significantly different period than DTIM.

*SuggestedRemedy*

As described in comment.

*Proposed Response*     *Response Status*   **O**

Counter - GASTIM element and multicast delivery method are deleted. See 11-08-1028r2.

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*Cl* **11**     *SC* **11.18.2.2.4**     *P* **17**     *L* **12**     # 4613

Ptasinski, Henry        Broadcom

*Comment Type*   **TR**     *Comment Status*   **X**

Reordering of Query Response fragments is not explicitly prohibited.

*SuggestedRemedy*

Change "the AP shall transmit all fragments that belong to the same Query Response until all fragments are exhausted" to "the AP shall transmit all fragments that belong to the same Query Response, in sequence according to their GAS Query Response Fragment ID field, until all fragments are exhausted."

*Proposed Response*     *Response Status*   **O**

Counter - Replace the existing definition of HESSID with the following: "3.u.5 Homogenous ESS Identifier (HESSID): The Identifier for A collection of BSSes, within the same extended service set (ESS), in which the SSPN or other external network reachable at one BSS, is reachable at all them. All BSSs identified by an HESSID are in the same mobility domain, if one is defined."

In clause 4, add the abbreviation HESSID with a definition of Homogeneous ESS Identifier.

Note that the definition of mobility domain is provided by IEEE 802.11r-2008.

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*Cl* **11**     *SC* **11.21.1**     *P* **73**     *L* **31**     # 6099

Stanley, Dorothy        Aruba Netowrks

*Comment Type*   **TR**     *Comment Status*   **X**

The difference between "native GAS" and "non-Native GAS" protocols is now more clearly defined. The names are still not quite there yet. What happens when a new protocol is invented, say the abracadabra protocol that wants to use the "STA-to_STA internal network protocol rather than the AP-STA external network protocol? But it is a protocol different from the "Native" protocol.

*SuggestedRemedy*

Change "Native GAS" to Local GAS and from "Non-Native GAS" to "External/Remote Network GAS"

*Proposed Response*     *Response Status*   **O**

Reject - Local GAS, as a name for the protocol, is confusing considering 7.3.4.3-Emergency Call Number Information-since that information is for an external network (i.e., is not local).

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected      RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **11**
*SC* **11.21.1**

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*Cl* **11**    *SC* **11.21.2.1.1.1**    *P* **84**    *L* **29**    # 7015

Bajko, Gabor                Nokia

*Comment Type* **TR**    *Comment Status* **X**

The text says: "A STA in the associated state should retrieve geospatial location information from the AP using the procedures in 11.10.8 or 11.20.4; a STA in the associated state may retrieve an AP's geospatial location using Native GAS procedures in 11.21.2.1, but this is not recommended." A STA should use the Native GAS procedures to retrieve the AP's geospacial information, regardless of the state it is in. If it wants to retrieve measurements related to geospacial info, then it should use the procedures in 11.10.8. I did not find a 11.20.4 section anywhere. There is a difference between retrieving statically configured data vs retrieving measurement (dynamic) data. The draft should make this distinction.

*SuggestedRemedy*

remove the quoted sentence and change the may to should in the first sentence. The first sentence clearly states that what the STA can retrieve using Native GAS is the AP's geolocation, nothing else.

*Proposed Response*    *Response Status* **O**

Counter - Change all references, within the TGu amendment, to "11.20.4" to "11.22.4".

Change the following sentence:

"A STA in non-associated state, having dot11InterworkingServiceEnabled set to true, may use Native-GAS procedures in 11.21.2.1 to retrieve an AP's Geospatial location. A STA in the associated state should retrieve geospatial location information from the AP using the procedures in 11.10.8 or 11.20.4; a STA in the associated state may retrieve an AP's geospatial location using Native GAS procedures in 11.21.2.1, but this is not recommended."

to

"A STA having dot11InterworkingServiceEnabled set to true, may retrieve an AP's Geospatial location using Native-GAS procedures in 11.21.2.1. A STA in the associated state should retrieve geospatial location information from the AP using the procedures in 11.10.8 or 11.22.4."

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*Cl* **11**    *SC* **11.21.2.1.1.1**    *P* **84**    *L* **31**    # 7222

Wang, Qi                Broadcom Corporation

*Comment Type* **TR**    *Comment Status* **X**

"A STA in the associated state may retrieve an AP's geospatial location using Native GAS procedures in 11.2.1.2.1, but his not recommended." What are both methods (GAS and procedures in 11.10.8 or 11.20.4) needed when associated? Provide justifications; otherwise specify only one method (e.g., using procedures in 11.10.8 or 11.20.4) to be used.

*SuggestedRemedy*

As in comment.

*Proposed Response*    *Response Status* **O**

Counter - See CID 7015

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*Cl* **11**    *SC* **11.21.2.1.1.2**    *P* **84**    *L* **39**    # 7016

Bajko, Gabor                Nokia

*Comment Type* **TR**    *Comment Status* **X**

The text says: "A STA in the associated state should retrieve civic location information from the AP using the procedures in 11.20.4; a STA in the associated state may retrieve an AP's civic location using Native GAS procedures in 11.21.2.1, but this is not recommended." A section 11.20.4 could not be found. Regardless, the Native GAS procedures should be used to retrieve the AP's civic location, which is a statically configured data, not a measurement. There is a difference between retrieving statically configured data vs retrieving measurement (dynamic) data. The draft should make this distinction. Retrieving a civic location does not require retrieving any accuracy estimates with it.

*SuggestedRemedy*

remove the quoted sentence and change the may to should in the first sentence. The first sentence clearly states that what the STA can retrieve using Native GAS is the AP's civic location, nothing else.

*Proposed Response*    *Response Status* **O**

Counter - Change the text:

"A STA in non-associated state, having dot11InterworkingServiceEnabled set to true, may use Native-GAS procedures in 11.21.2.1 to retrieve an AP's Civic location. A STA in the associated state should retrieve civic location information from the AP using the procedures in 11.20.4; a STA in the associated state may retrieve an AP's civic location using Native GAS procedures in 11.21.2.1, but this is not recommended."

to

"A STA having dot11InterworkingServiceEnabled set to true, may retrieve an AP's Civic location using Native-GAS procedures in 11.21.2.1. A STA in the associated state should retrieve Civic location information from the AP using the procedures in 11.10.8 or 11.22.4."

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:  Clause, Subclause, page, line

*Cl* **11**
*SC* **11.21.2.1.1.2**

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*Cl* **11**    *SC* **11.21.2.1.1.2**    *P* **84**    *L* **40**    # 7223

Wang, Qi        Broadcom Corporation

*Comment Type* **TR**    *Comment Status* **X**

"A STA in the associated state may retrieve an AP's civic location using Native GAS procedures in 11.2.1.2.1, but his not recommended." What are both methods (GAS and procedures in 11.10.8 or 11.20.4) needed when associated? Provide justifications; otherwise specify only one method (e.g., using procedures in 11.10.8 or 11.20.4) to be used.

*SuggestedRemedy*

As in comment.

*Proposed Response*    *Response Status* **O**

Counter - See CID 7016

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*Cl* **11**    *SC* **11.21.2.1.1.3**    *P* **84**    *L* **60**    # 7141

Stanley, Dorothy        Aruba Networks

*Comment Type* **TR**    *Comment Status* **X**

"the EAP Method list shall be inpriority order" and "the EAP methods all be of equal priority" are in conflict

*SuggestedRemedy*

Fix this

*Proposed Response*    *Response Status* **O**

Accept - See CID 7082.

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*Cl* **11**    *SC* **11.21.2.2.3**    *P* **89**    *L* **36**    # 7143

Stanley, Dorothy        Aruba Networks

*Comment Type* **TR**    *Comment Status* **X**

"If a query response has not been received from the external network and PostReply Timer has not expired." leaves a long window potentially during which "the AP shall transmit a GAS Comeback action response" should this be "and the PostReplyTImer has expired"

*SuggestedRemedy*

Clarify

*Proposed Response*    *Response Status* **O**

Counter - Change the phrase "If a query response has not been received from the external network and PostReplyTimer has not expired" to "If a query response has not been received from the external network and the PostReplyTimer has not expired".

The text stating the "PostReplyTimer has not expired" is correct. This bullet is to address the situation where the non-AP STA transmits a GAS Comeback Request action frame before the AP receives the query response from the server. This can happen, for example, if the PostReplyTimer is set to a larger value than the non-AP STA's dot11GASComebackDelay or if the non-AP STA transmits the GAS Comeback Request action frame prior to the expiry of the Comeback Delay provided in the GAS Initial Response action frame (i.e., a buggy implementation).

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*Cl* **11**    *SC* **11.21.3**    *P* **91**    *L* **13**    # 7146

Stanley, Dorothy        Aruba Networks

*Comment Type* **TR**    *Comment Status* **X**

"AP bridging IP datagrams to and from the MIH PoS in an external network" This is probably accurate for an AP physical box, but not for the AP functionality itself. The AP moves data received from the STA to the DS. It then goes to the portal, then to an external network.See IEEE 802.11-2007 P 1174. Suggest changing to "AP moving IP datagrams destined for the MIH PoS to the DS."

*SuggestedRemedy*

As in comment

*Proposed Response*    *Response Status* **O**

Accept - As per commentor

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **11**
*SC* **11.21.3**

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*Cl* **11**     *SC* **11.21.3**     *P* **91**     *L* **22**     # 7147

Stanley, Dorothy        Aruba Networks

*Comment Type* **TR**     *Comment Status* **X**

SME and STA usage is mixed here. Suggest changing to "can use GAS Request frames to discover" and "using the GAS Request frame with the Advertisement."

*SuggestedRemedy*

As in comment

*Proposed Response*     *Response Status* **O**

Counter - Change the text:

"Non-AP STAs in the un-authenticated or un-associated or associated states can use MLME-GAS.request primitives to discover MIH Command and Event Services Capability as specified in Table 7-43bw. Non-AP STAs can discover whether the MIH PoS provides MIES and/or MICS using the MLME-GAS.request primitive with the Advertisement protocol set to the value of MIH Command and Event Services Capability Discovery in Table 7-43bw and the Query set to a MIES/MICS query as specified in IEEE 802.21-2008."

to

"Non-AP STAs in the un-authenticated or un-associated or associated states can use Non-Native GAS procedures to discover MIH Command and Event Services Capability as specified in Table 7-43bw."

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*Cl* **11**     *SC* **11.21.4.2**     *P* **92**     *L* **10**     # 7148

Stanley, Dorothy        Aruba Networks

*Comment Type* **TR**     *Comment Status* **X**

"The PPNS may reject" Are we placing requirements on the SSPN? We should not. Change to "The SSPN can reject" here and throughout the document

*SuggestedRemedy*

As in comment

*Proposed Response*     *Response Status* **O**

Accept - As per commentor

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*Cl* **11**     *SC* **11.21.4.3**     *P* **92**     *L* **29**     # 7037

Chaplin, Clint        Samsung Electronics

*Comment Type* **ER**     *Comment Status* **X**

"At an AP with dot11SSPNInterfaceEnabled set to TRUE shall subsequent to a non-AP STA re-associating to a new AP, the DS shall move the dot11InterworkingTableEntry for that non-AP STA to the new AP." What? This sentence is confusing. It looks like it has more than one subject, and too many verbs.

*SuggestedRemedy*

Please rewrite the sentence so that it is clear.

*Proposed Response*     *Response Status* **O**

Accept - As suggested

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TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected    RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

*Cl* **11**
*SC* **11.21.4.3**

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*Cl* **11**    *SC* **11.21.4.3**    *P* **92**    *L* **29**    # 7149
Stanley, Dorothy    Aruba Networks

*Comment Type*  **TR**    *Comment Status*  **X**

The sentence beginning "At an AP." is very confusing:
At an AP with dot11SSPNInterfaceEnabled set to TRUE shall subsequent to a non-AP STA re-associating to a new AP, the DS shall move the dot11InterworkingTableEntry for that non-AP STA to the new AP."
The DS does not move move MIB variables on its own accord. To a new AP in any ESS? The dot11InterworkingTableEntry for a non-AP STA shall be known to all APs in a homogeneous ESS. The means by which this is accomplished is beyond the scope of this standard." And delete the subsequent sentence about deleting it at the former AP.

*SuggestedRemedy*

As in comment

*Proposed Response*    *Response Status*  **O**

Counter - "At an AP with dot11SSPNInterfaceEnabled set to TRUE shall subsequent to a non-AP STA re-associating to a new AP, the DS shall move the dot11InterworkingTableEntry for that non-AP STA to the new AP. The method and protocol by which this is done, is beyond the scope of this standard. After the dot11InterworkingTableEntry is moved, it shall be deleted from the AP's dot11InterworkingTable. An AP with dot11SSPNInterfaceEnabled set to TRUE shall delete the dot11InterworkingEntry for a non-AP STA when it disassociates from the BSS."

to

"An AP having dot11SSPNInterfaceEnabled set to TRUE, the following procedure occurs:

(bullet) The non-AP STA's state contained within the dot11InterworkingEntry shall be transmitted to the new AP after a successful transition.  The state definition and the protocol used to transfer the state are beyond the scope of this standard.

(bullet) After the state is succesfully transmitted to the new AP, the dot11InterworkingEntry for that non-AP STA shall be deleted from the AP's dot11InterworkingTable.

An AP with dot11SSPNInterfaceEnabled set to TRUE shall delete the dot11InterworkingEntry for a non-AP STA when it disassociates from the BSS."

---

*Cl* **11**    *SC* **11.21.4.3**    *P* **92**    *L* **30**    # 7038
Chaplin, Clint    Samsung Electronics

*Comment Type*  **ER**    *Comment Status*  **X**

"The method and protocol by which this is done, is beyond the scope of this standard."

*SuggestedRemedy*

"The method and protocol by which this is done is beyond the scope of this standard."

*Proposed Response*    *Response Status*  **O**

Accept - As suggested

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*Cl* **11**    *SC* **11.21.4.3**    *P* **92**    *L* **44**    # 7039
Chaplin, Clint    Samsung Electronics

*Comment Type*  **ER**    *Comment Status*  **X**

"with TID is set to 6 or 7,"

*SuggestedRemedy*

"with TID set to 6 or 7," or "where TID is set to 6 or 7,"

*Proposed Response*    *Response Status*  **O**

Accept - As suggested

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*Cl* **11**    *SC* **11.21.4.3**    *P* **92**    *L* **51**    # 7040
Chaplin, Clint    Samsung Electronics

*Comment Type*  **ER**    *Comment Status*  **X**

"with TID is set to 4 or 5,"

*SuggestedRemedy*

"with TID set to 4 or 5," or "where TID is set to 4 or 5,"

*Proposed Response*    *Response Status*  **O**

Accept - As suggested

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*Cl* **11**    *SC* **11.21.4.3**    *P* **92**    *L* **57**    # 7041
Chaplin, Clint    Samsung Electronics

*Comment Type*  **ER**    *Comment Status*  **X**

"with TID is set to 0 or 3,"

*SuggestedRemedy*

"with TID set to 0 or 3," or "where TID is set to 0 or 3,"

*Proposed Response*    *Response Status*  **O**

Accept - As suggested

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **11**
*SC* **11.21.4.3**

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*Cl* **11**     *SC* **11.21.4.3**          *P* **92**     *L* **64**          # 7042

Chaplin, Clint                          Samsung Electronics

*Comment Type*  **ER**     *Comment Status*  **X**

"with TID is set to 1 or 2,"

*SuggestedRemedy*

"with TID set to 1 or 2," or "where TID is set to 1 or 2,"

*Proposed Response*          *Response Status*  **O**

Accept - As suggested

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*Cl* **11**     *SC* **11.21.4.3**          *P* **93**     *L* **4**          # 7043

Chaplin, Clint                          Samsung Electronics

*Comment Type*  **ER**     *Comment Status*  **X**

"with access policy is HCCA or HEMM and deny all subsequent ADDTS request frames with access policy is set to HCCA or HEMM."  Two problems

*SuggestedRemedy*

"with access policy of HCCA or HEMM and deny all subsequent ADDTS request frames with access policy set to HCCA or HEMM."

*Proposed Response*          *Response Status*  **O**

Accept - As suggested

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*Cl* **11**     *SC* **11.21.5**          *P* **107**     *L* **61**          # 7225

Wang, Qi                          Broadcom Corporation

*Comment Type*  **TR**     *Comment Status*  **X**

". when the ES CIVIC location or ES Geo Location field in the Extended Capabilities Element is et to 1." In LB150 (TGv_D6.0) comment resolution, it is proposed to rename the two fields to "CIVIC location" and "Geo Location", respectively. TGu should synchronize with TGv on the names of the two fields.

*SuggestedRemedy*

As in comment.

*Proposed Response*          *Response Status*  **O**

Accept - Per commenter.  TGu Editor should confirm TGv names prior to committing this edit.

---

*Cl* **11**     *SC* **11.21.5**          *P* **93**     *L* **18**          # 7150

Stanley, Dorothy                          Aruba Networks

*Comment Type*  **TR**     *Comment Status*  **X**

Change from
"If the AP is located in a regulatory domain that requires location capabilities, the ESC field set to 1 indicates that location capability is enabled on the AP. Location capability is enabled when the ES CIVIC Location or ES Geo Location field in the Extended Capabilities Element is set to 1 in a Beacon or probe response frame."
to
Te ESC field set to 1 indicates that either the CIVIC Location or Geo Location field in the Extended Capabilities Element is set to 1 in a Beacon or Probe Response frame."

*SuggestedRemedy*

As in comment

*Proposed Response*          *Response Status*  **O**

Counter - Change the text:

"If the AP is located in a regulatory domain that requires location capabilities, the ESC field set to 1 indicates that location capability is enabled on the AP. Location capability is enabled when the ES CIVIC Location or ES Geo Location field in the Extended Capabilities Element is set to 1 in a Beacon or probe response frame."

to

"If the AP is located in a regulatory domain that requires location capabilities, the ESC field shall only be set to 1 if location capability is enabled on the AP. Location capability is enabled when the ES CIVIC Location or ES Geo Location field in the Extended Capabilities Element is set to 1 in a Beacon or probe response frame."

---

*Cl* **11**     *SC* **11.21.5**          *P* **93**     *L* **18**          # 7073

Malarky, Alastair                          Mark IV Industries

*Comment Type*  **TR**     *Comment Status*  **X**

This references "ES CIVIC Location or ES Geo Location field in the Extended Capabilities Element", however these are not listed in Table 7-35a.

*SuggestedRemedy*

Put the fields into the Extended Capability element.

*Proposed Response*          *Response Status*  **O**

Reject - These references are present in Table 7-35a of the IEEE P802.11v-D6.01 amendment.

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **11**
*SC* **11.21.5**

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*Cl* **11**     *SC* **11.21.5**     *P* **93**     *L* **19**     # 7044

Chaplin, Clint              Samsung Electronics

*Comment Type*   **ER**     *Comment Status*   **X**

"probe response"

*SuggestedRemedy*

"Probe Response"

*Proposed Response*     *Response Status*   **O**

Accept - As suggested

---

*Cl* **11**     *SC* **11.21.6**     *P* **93**     *L* **19**     # 7018

Bajko, Gabor              Nokia

*Comment Type*   **TR**     *Comment Status*   **X**

The paragraph assumes that all non-AP STAs have a browser they can use to retrieve an EAS message from a given URI. There are a number of problems: 1. in order to retrieve a message using http, the STA needs to have an IP address. 2. The STA needs to have its DNS Name Server configured, in order to resolve the EAS URI to an IP address. 3. A STA has a browser. 4.The STA has its browser running. Point 1 is easy to achieve, but should not be required. Point 2 is harder to achieve, it requires the STA to invoke some bootstrapping like DHCP to configure that, it should not be required. 3. A digital camera with WLAN interface does not have a browser, but may be able to display a message received in the link layer. Since an EAS message should be downloadable in state-1, when there is no IP address, DNS name server, etc., the URI thing should only be in addition to the possibility to fetch the message using link layer procedures, like Native GAS.

*SuggestedRemedy*

change as proposed.

*Proposed Response*     *Response Status*   **O**

Reject - RFC 2616 states that http only needs a reliable transport protocol (e.g. GAS). It is not required to run over an IP protocol stack.

---

*Cl* **11**     *SC* **11.21.6**     *P* **93**     *L* **50**     # 7224

Wang, Qi              Broadcom Corporation

*Comment Type*   **TR**     *Comment Status*   **X**

Is EAS support, along with Emergency call support, a type of ES support? If so, move 11.21.6 to be a subclause of 11.21.5. Clarify the relationship between ES, EAS, and Emergency calls, etc.

*SuggestedRemedy*

As in comment.

*Proposed Response*     *Response Status*   **O**

Reject - TGu believes that the two services are different. Emergency services are requested by an end-user and specific to that user whereas EAS is a push broadcast service from the network.

---

*Cl* **11**     *SC* **11.21.6**     *P* **93**     *L* **53**     # 7151

Stanley, Dorothy              Aruba Networks

*Comment Type*   **TR**     *Comment Status*   **X**

Change from
The Emergency Alert System (EAS) provides alerts, typically issued by authorities, to be transmitted upon request from APs to non-AP STAs.
To
The Emergency Alert System (EAS) provides alerts, typically issued by authorities. The Interworking Procedures EAS support enables the alerts to be transmitted upon request from APs to non-AP STAs.

*SuggestedRemedy*

As in comment

*Proposed Response*     *Response Status*   **O**

Accept - Per commenter.

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*Cl* **11**     *SC* **11.21.6**     *P* **94**     *L* **1**     # 7045

Chaplin, Clint              Samsung Electronics

*Comment Type*   **ER**     *Comment Status*   **X**

"Probe response"

*SuggestedRemedy*

"Probe Response"

*Proposed Response*     *Response Status*   **O**

Accept - As suggested

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected     RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:  Clause, Subclause, page, line

*Cl* **11**
*SC* **11.21.6**

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*Cl* **11**    *SC* **11.21.6**     *P* **94**    *L* **12**    # 7047
Chaplin, Clint            Samsung Electronics

*Comment Type* **ER**    *Comment Status* **X**
"Probe response"

*SuggestedRemedy*
"Probe Response"

*Proposed Response*     *Response Status* **O**
Accept - As suggested

*Cl* **11**    *SC* **11.21.6**     *P* **94**    *L* **2**    # 7046
Chaplin, Clint            Samsung Electronics

*Comment Type* **ER**    *Comment Status* **X**
"Probe response"

*SuggestedRemedy*
"Probe Response"

*Proposed Response*     *Response Status* **O**
Accept - As suggested

*Cl* **11**    *SC* **11.21.6**     *P* **94**    *L* **2**    # 7152
Stanley, Dorothy            Aruba Networks

*Comment Type* **TR**    *Comment Status* **X**
Descriptionis too implementation specific. Change from
The Emergency Alert element provides to the non-AP STA an Alert Identifier Hash value of the alert, which is a unique indicator of the EAS Message. This Alert Identifier Hash value allows the non-AP STA to determine whether this is a new alert which it has not downloaded before, by comparing this hash with the current hash (or list of previously received hashes) which it has cached in its local memory.
to
The Emergency Alert element provides an Alert Identifier Hash value, a unique indicator of the EAS Message of the alert to the non-AP STA. The Alert Identifier Hash value allows the non-AP STA to determine whether this is a new alert."

*SuggestedRemedy*
As in comment

*Proposed Response*     *Response Status* **O**
Accept - Per commenter.

*Cl* **11**    *SC* **11.21.7**     *P* **95**    *L* **11**    # 7153
Stanley, Dorothy            Aruba Networks

*Comment Type* **TR**    *Comment Status* **X**
There is no mechanism defined for the for the AP to have its SME send a primitive.
Change from
Whenever the AP detects a change in the QoS mapping information, it shall update the non-AP STA with the new QoS Map Set element. It accomplishes this update by having its SME send an MLME-QoSMap.response primitive.
To
When the AP's SME detects a change in the QoS mapping information, it shall update the non-AP STA with the new QoS Map Set element. It accomplishes this update invoking the MLME-QoSMap.response primitive.

*SuggestedRemedy*
As in comment

*Proposed Response*     *Response Status* **O**
Counter - Accept but correct the wording and change to

"When the AP's SME detects a change in the QoS mapping information, it shall update the non-AP STA with the new QoS Map Set element. It accomplishes this update by invoking the MLME-QoSMap.response primitive."

*Cl* **11**    *SC* **11.7.1.2**     *P* **81**    *L* **43**    # 7217
Vlantis, George            STMicroelectronics

*Comment Type* **TR**    *Comment Status* **X**
Several issues with this clause:
(1) Why is dot11SSPNInterfaceEnabled set to TRUE and additional condition for disabling DSS? What is the reason/motivation here.
(2) What happens to other communications between two non-AP STAs in the BSS? For example:
 (a) Traditional frames sent to the AP with DS bits set to zero and the destination address of a non-AP STA in the BSS; and
 (b) 802.11z TDLS communications. (Granted, it's a future standard that need not be referred to here, but some guidance should be given as to why DLS "breaks" 802.11u.)

*SuggestedRemedy*
Clarify what is the reasoning of this additional clause and whether other mechanisms (e.g. (2)(a) in the comment) are allowed/disallowed or have no impact whatsoever.

*Proposed Response*     *Response Status* **O**
Counter - See resolution to CID #7050.

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:  Clause, Subclause, page, line

*Cl* **11**
*SC* **11.7.1.2**

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*Cl* **21** *SC* **21.3.1.1.2** *P* **77** *L* **63** # 4618

Ptasinski, Henry                                     Broadcom

*Comment Type* **TR** *Comment Status* **X**

"The HESSID is encoded as described in RFC 3580" is unclear.  RFC 3580 doesn't include anything about HESSID, and doesn't seem to provide any significant encoding information other than a couple of cases where it says simply "is encoded as an ascii string."

*SuggestedRemedy*

Clarify the encoding to be used.  Delete RFC reference.

*Proposed Response* *Response Status* **O**

Accept - See CID 4570

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*Cl* **Annex** *SC* **Annex A** *P* **133** *L* **33** # 7056

Ecclesine, Peter                                     Cisco Systems

*Comment Type* **ER** *Comment Status* **X**

802.11z uses CF17, and is shown as Amendment 6, so 11u should be using CF18 throughout Annex A.

*SuggestedRemedy*

Change all Annex A references from CF17 to CF18, and remove the nonsense EDITORIAL NOTE.

*Proposed Response* *Response Status* **O**

Accept - As suggested

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*Cl* **Annex** *SC* **Annex D** *P* **139** *L* **64** # 597

Ptasinski, Henry                                     Broadcom

*Comment Type* **TR** *Comment Status* **X**

No limits are specified for dot11GasResponseTimeout. Units are inconsistent with other timeouts.

*SuggestedRemedy*

Specify max, min, and default values for this variable.  Make units for all GAS-related timeouts consistent, or at least from the same domain (don't mix msec and TUs).

*Proposed Response* *Response Status* **O**

Accept - P139L65: replace "INTEGER" with "INTEGER (1000..65535)"

P140L7: replace "ms" with "TUs"

Insert after P140L7 the following: DEFVAL(5000)

---

*Cl* **Annex** *SC* **Annex D** *P* **143** *L* **7** # 7055

Ecclesine, Peter                                     Cisco Systems

*Comment Type* **ER** *Comment Status* **X**

dot11InterworkingEntry OBJECT-TYPE is the first of many lines that are not the correct font for Annex D MIBs

*SuggestedRemedy*

Fix the fonts in Annex D

*Proposed Response* *Response Status* **O**

Accept - As suggested

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*Cl* **V** *SC* **V.1.5** *P* **171** *L* **27** # 7048

Chaplin, Clint                                     Samsung Electronics

*Comment Type* **ER** *Comment Status* **X**

"A traveller arrives to their new destination and switches on the his/her gadgets with WLAN interface it intends to use (phone, multimedia device, digital camera, video camera, etc.)."  Did anybody review this sentence after the change was made?  Just to note that the change had been put in the wrong place?  Anybody? Beuller? Beuller?

*SuggestedRemedy*

"A traveller arrives to their new destination and switches on his/her gadgets with WLAN interface he/she intends to use (phone, multimedia device, digital camera, video camera, etc.)."

*Proposed Response* *Response Status* **O**

Accept - As suggested

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*Cl* **V** *SC* **V.2.1** *P* **172** *L* **20** # 7060

Engwer, Darwin                                     Self

*Comment Type* **TR** *Comment Status* **X**

The text of this paragraph (and the accompaning figure) confuses the 802.11 AP (a logical entity) with a physical device containing an AP, or one or more APs.

*SuggestedRemedy*

Change "the same physical AP" to "the same device, containing multiple APs,".
Enhance the figure to show STA3 directly ajoining *two* logical APs, AP1 and AP2. Additionally, revise the figure to show the two co-located APs connecting to a DS.  The DS should have three portals, one for DN1, one for DN2, and one for the AAA Client (since the AAA Client seems to be on its own network and not DN1 or DN2).

*Proposed Response* *Response Status* **O**

Counter - Resolution provided in 11-09-0878r0

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected      RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **V**
*SC* **V.2.1**

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*Cl* **V**      *SC* **V.2.1**        *P* **172**      *L* **25**      # 7059

Engwer, Darwin                Self

*Comment Type* **TR**     *Comment Status* **X**

Figure V-1 incorrectly shows an AP as a device. The AP is a logical entitiy within 802.11. The AP cannot connect directly to the two DN entities. Such connections must pass through a DS and a portal to be valid data paths, e.g., otherwise how will the appropriate integration function be applied? Similarly the AAA client cannot connect directly to the AP, it must connect to one of two DNs, or to a separate, third portal not conencted to either DN.

*SuggestedRemedy*

Correct the figure to show the required logical entities needed to establish the desired data paths. Recommendation: Connect the AP to a DS with three portals, two of the the portals in turn connecting to one of the two DNs, and the third portal connecting to the AAA client.

*Proposed Response*     *Response Status* **O**

Counter - Resolution provided in 11-09-0878r0

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*Cl* **V**      *SC* **V.4.1**        *P* **179**      *L* **38**      # 7049

Chaplin, Clint               Samsung Electronics

*Comment Type* **ER**     *Comment Status* **X**

"Supporting emergency services, such as E911, calling" Anybody awake over there?

*SuggestedRemedy*

"Supporting emergency services, such as E911 calling,"

*Proposed Response*     *Response Status* **O**

Accept - As suggested

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
COMMENT STATUS: D/dispatched  A/accepted  R/rejected    RESPONSE STATUS: O/open  W/written  C/closed  U/unsatisfied  Z/withdrawn
SORT ORDER:   Clause, Subclause, page, line

*Cl* **V**
*SC* **V.4.1**

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