

P802.15.3 Draft 14 Comments

Cl 00 SC P L # 209  
 Shvodian, William XtremeSpectrum  
 Comment Type E Comment Status X  
 Change parameters from aParameterName to mParameterName and pParameterName to distinguish between MAC and PHY parameters  
 SuggestedRemedy See comment  
 Proposed Response Response Status O

Cl 00 SC P L # 235  
 Shvodian, William XtremeSpectrum  
 Comment Type E Comment Status X  
 Do a global search on "a MLME" and change to "an MLME"  
 SuggestedRemedy Do a global search on "a MLME" and change to "an MLME"  
 Proposed Response Response Status O

Cl 00 SC P L # 64  
 gubbi, RAJUGOPAL BROADCOM, CORP  
 Comment Type TR Comment Status X  
 Change of GTS into CTA from D11 to D14 in clauses 5, 7 & 8:AT many places in clause-8, this has caused lot of confusion.For example pp-188, ln-17:18 where the first reader can easily confuse this withPNC listing the CTA information in the beacon as opposed to the GTS allocation inthat superframe. To a veteren 802.15.3-WPANer this may seem same, but they are not.CTA is only a way of providing a GTS, there may be other ways in the future. changeback all the GTS as they were in D11 in Clause 7 and 8.  
 SuggestedRemedy Revert back to the use of GTS when referring to time slot in super frame and CTA being limited to the component present in the beacon that is used to allocate a GTS to a DEV.  
 Proposed Response Response Status O

Cl 00 SC P L # 63  
 gubbi, RAJUGOPAL BROADCOM, CORP  
 Comment Type TR Comment Status X  
 Same as comment 513 in LB19Comment:same as comment #536 in LB12ORIGINAL COMMENT (LB12)If SA is broadcast and anybody could start tx, how's collision handled?What is the point in getting devices to collide here instead of makingthis MTS part of CAP and letting devices freely use CAP as alreadydefined. This is useless and adds unnecessary complexityORIGINAL SUGGESTED REMEDY (LB12): Remove lines 8:22 on page 151 and all references to "MTS/GTS with BC/MC-SA"from the draftResponse: REJECT. The slotted aloha access method is used to provide access to theseslots just as CSMA/CA is used in the CAP. The TG has decided to allow bothaccess methods, CSMA/CA in the CAP and slotted aloha in the MTSs so thatthe 802.15.3 MAC is capable of supporting different types of PHYs.REBUTTAL (LB19):The response does not resolve the issue of having COLLISION basedtransmissions under COLLISION FREE PERIOD, instead of making this partof CAP.I do not see 802.15.3 PHY or applications listed in PAR requiring it.I do not see how CSMA/CA mechanism used in CAP and TDM mechanism used inCFP fail in achieving whatever the slotted-aloha cheme is achieving.I do not see any reason or justification to add extra complexityresulting from having one another channel access mechanism. Suggested Remedy:Remove MTS mechanism and slotted aloha mechanism and all references to them from the draft. (This is applicable to section 8.4.4.4 and 8.4.4.5 in the current draft)Response:ACCEPT IN PRINCIPLE. Add new subclause 11.2.10, 'Channel access methods' with text 'A PNC-capable DEV compliant to this standard shall allow the use of the CAP for contention based access for association, data and commands, {xref 7.3.1} when using the 2.4 GHz PHY. A DEV compliant to this standard shall support the use of the CAP when using the 2.4 GHz PHY.'Use 1 bit from the reserved bits to the 'Piconet mode field', 'MCTAs used' with definitions 'The MCTAs used bit shall be set to 1 if the PNC will be using open or association MCTAs.' Delete the sentence on page 111, lines 1-2, 'If the CAP end time indicates no available time and no message types are permitted during the CAP, then MTSs are implied.' (note this deletion is in response to CID 407).Expand MLF13 in the PICs (note this will become MLF13.1 and MLF13.2 due to another comment.)MLF13.1; Open and association MCTA operations; 8.4.4.4, 8.4.4.5; O.1MLF13.2; Regular MCTA operations; 8.4.4.4; M{ed. note: the CAP stuff is like MLF13.3 now)Commentor's response:Response to this comment do not address the core issue of an additional access mechanism(MTS and slotted aloha) in the standard. The proposal does not justify why they are needed in802.15.3. Hence the resolution is unacceptable.  
 SuggestedRemedy Remove MTS mechanism and slotted aloha mechanism and all references to them from the draft. (This is applicable to section 8.4.4.4 and 8.4.4.5 in the current draft)  
 Proposed Response Response Status O

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Cl 00 SC P L # 56  
 gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type TR Comment Status X

same as comment #537 in LB12 and Comment 387 in LB19 ORIGINAL COMMENT (LB12): What is the point in having slotted aloha access in addition to the backoff in CAP, TDMA in CFP? Why is this complexity being thrust on the implementors of this "low cost", "low complexity" and "low power" standard? I don't see any justification in having yet another access scheme with WPAN. ORIGINAL SUGGESTED REMEDY Remove slotted aloha scheme in 8.4.3.4 and all references to it from the draft. RESPONSE: REJECT. Slotted Aloha was added to make the MAC more versatile so that more PHYs that could use the 802.15.3 MAC. While it could be added at a later date, that would make the MACs incompatible. REBUTTAL: SAME AS THAT FOR COMMENT 536 in LB12 Commenter's response (LB22) If slotted aloha is added so that the MAC is used in other PHYs, since DEVS using different PHYs can not directly communicate with each other why should it cause incompatibility? The new mechanisms in MAC must be added only when a defined PHY needs it, all of which we may not know today. At the time of addition of new mechanism, it has to be overlaid on the existing mechanism. and there is definitely a way to do the same with slotted aloha as and when it is needed. For example, a set of stream indices can be left reserved and used at that time for the purpose desired. Regarding MCTA, specifically, what is not objected to is the open and association MCTAs. What prevents these things to be done in CAP instead of devising a new mechanism altogether for such a relatively low probability events?

Suggested Remedy

Remove open/association MTS/MCTA mechanism and slotted aloha mechanism and all references to them from the draft (Applicable to 8.4.4.4 and 8.4.4.5 in LB22/D14) Reserve a group of stream indices in 7.2.5 for future enhancements like the slotted aloha so that it can be added if and when it is really needed

Proposed Response Response Status O

Cl 00 SC 00 P L 10 # 21  
 Gifford, Ian I. Gifford Consulting LL

Comment Type T Comment Status X

As I stated in LB19 802.15.3/D11 CommentID: #10, the title is incorrect. Specifically, "Part 15" should be "Part 15.3".

Suggested Remedy

I suggest:  
 Draft Standard for Information technology-  
 Telecommunications and information exchange between systems-  
 Local and metropolitan area networks Specific requirements-

Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPANs)

Please make the change globally.

Additionally, and in terms of the LB19 CommentID: #10 rejection, I understand the PAR issue but I think this is a clear editorial issue and we have WG precedents to apply the editorial suggestion. Here are some issues to consider in this rebuttal

1. The 802.15.3 PAR is incorrect and is in conflict with itself and should state the previously mentioned item in the title section i.e., "2. Assigned Project Number [P802.15.3]" or section 4 should state "...Part 15.3...". <http://grouper.ieee.org/board/nescom/802-15-3.pdf>
2. An example is the 802.15.1 PAR which TG3 copied and is why you have the error in the first place :). When 802.15.1 got to Sponsor Ballot the PE said 15.1 was ok cuz (a) we had a corrigendum: <http://ieee802.org/secmail/msg00600.html> and (b) implicitly it was necessary to add the dot level based on the 15.2, 15.3, 15.4, etc. approvals. <http://ieee802.org/15/par.html>
3. Specifically, having the 802.15.1(TM)-2002 published sets a precedent as our PAR says "Part 15..." but we are published with "Part 15.1..." <http://grouper.ieee.org/board/nescom/802-15.pdf>

Note: 802.15.4/D17 is in Sponsor Ballot with "Part 15.4..."

4. If you release the 15.3 Draft to Sponsor Ballot there might be an issue and someone might object BUT I think going forward w/ the title as-is is a bad idea. For example the 3rd of the 802 five criteria "Distinct Identity" will be problematic if the IEEE titles are NOT distinct and/or inconsistent in the WPAN Standards Family: <http://ieee802.org/3/rules/rules.html#P72>

Note: I applied (Session #20) the latest edit to the 802.15.3a DRAFT PAR because of this very issue and after careful review of other approved Alt PHY Layer Standards and their titles: <http://ieee802.org/secmail/msg02824.html>  
 In terms of the next step I suggest you ask Jennifer Longman what her opinion is i.e., leave as-is, apply edit, submit a corrigendum to the 802.15.3 PAR, etc.  
 Finally, I think just from a publishing and distribution point of view it will become confusing - make the edit. If the Editor or Chairs need to change the PAR then please do so, however, the approved IEEE Std 802.15.1-2002 states "Part 15.1" and the PAR does not. It was not an issue for RevCom and the StdBD so it should be an easy edit to apply to keep our family of standards consistent.

Proposed Response Response Status O

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Cl 00 SC 00 P L 20 # 22  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The sentence ending "...isochronous and asynchronous data types and is designed to support additional physical layers as might be specified at a later time." is out of scope based on the PAR.

SuggestedRemedy

I suggest ""...isochronous and asynchronous data types."

Proposed Response Response Status O

Cl 00 SC 00 P L 515 # 23  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

As weitten the paragraph "Conformance test methodology" is confusing e.g., IEEE 802.3, etc.

SuggestedRemedy

I suggest the Editor delete the entire paragraph or add something relevant to the draft.

Proposed Response Response Status O

Cl 01 SC 1.1 P 1 L 3435 # 42  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The sentence "This standard defines the PHY and MAC specifications for high data rate wireless connectivity with fixed, portable and moving devices within or entering a personal operating space." is gramatically incorrect.

SuggestedRemedy

In a series of three or more terms with a single conjunction, use a comma after each term except the last. I suggest "This standard defines the PHY and MAC specifications for high data rate wireless connectivity with fixed, portable, and moving devices within or entering a personal operating space."; adding a comma after portable. Refer to the May00, IEEE Standards Style Manual. Please make the change globally.

Proposed Response Response Status O

Cl 01 SC 1.1 P 1 L 43 # 26  
Gifford, Ian I. Gifford Consulting LL

Comment Type T Comment Status X

Again, the text "...20 Mb/s is proposed to be the lowest rate..." and the text on the next page, pg 2, ln 14 "...20 Mb/s or more..." are from the PAR but Clause 11, Table 118, pg 313, ln 14 states "...11 Mb/s...". It is very likely that this inconsistency (PAR vs. Draft) issue will come up in Sponsor Ballot. A parallel PAR change now will add mimimal to no delay to the project BUT RevCom can add 3-6 months!

SuggestedRemedy

I suggest that the 802.15.3 Ballot Review Committee (BRC) submit a draft corrigendum 802.15.3 PAR to the TG3/WG for submission to the SEC/NesCom the goal is to update the PAR to change the minimum data rate to "11 Mb/s".

Note: The current 15.4 PAR corrigendum is addressing the same issue "The draft says 20 so the PAR should say 20." said BobH but TG4 decided to act:

<http://ieee802.org/secmail/msg02790.html>

Here is follow up on the thread:

<http://ieee802.org/secmail/msg02794.html>

<http://ieee802.org/secmail/msg02796.html>

Proposed Response Response Status O

Cl 01 SC 1.1 P 1 L 47 # 24  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The sentence beginning "Consequently the..." is incorrect.

SuggestedRemedy

I suggest "Consequently, the..."; adding the comma.

Note that on pg 2, ln 2 the sentence beginning the same way is gramatically correct but inconsistent with the comment.

Proposed Response Response Status O

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Cl 01 SC 1.1 P 2 L 78 # 25  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The sentence "Compatibility and coexistence criteria were included in the proposal evaluations." is vague. The IEEE does not mandate the use of CFAs, CFPs, evaluations, and down selections so to say "...included in the proposal evaluations." does not make sense for non-IEEE 802.15 members.

SuggestedRemedy

I suggest adding a qualifier to the sentence such as "Compatibility and coexistence criteria were required during the 802.15.3 call for proposal evaluations and subsequent down selection to the current MAC/PHY specifications." or something similar. Or alternatively you can add the 802.15.3 Criteria Definitions document -00/110r14 URL: [http://ieee802.org/15/pub/2000/Nov00/00110r14P802-15\\_TG3-Criteria-Definitions.doc](http://ieee802.org/15/pub/2000/Nov00/00110r14P802-15_TG3-Criteria-Definitions.doc) or the following CFP URL: <http://ieee802.org/15/pub/TG3-Proposals.html> as a footnote to the current sentence.

Proposed Response Response Status O

Cl 02 SC 2.0 P 3 L 22 # 27  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The normative reference "IETF 1RFC 2459:..." is incorrect.  
 Note:<http://www.ietf.org/rfc/rfc2459.txt>

SuggestedRemedy

I suggest "IETF RFC 2459:..."; drop the stray "1" character.

Proposed Response Response Status O

Cl 02 SC 2.0 P 4 L 5354 # 28  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The footnotes 9 and 10 are inconsistent with the rest of Clause 2.

SuggestedRemedy

I suggest  
 "9 RSA publications are available from (<http://www.rsasecurity.com/rsalabs/pkcs/pkcs-1>)."  
 "10 SECG publications are available from (<http://www.secg.org>)."

Proposed Response Response Status O

Cl 03 SC 3.13 P 5 L 3839 # 30  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The definition of "coexistence" is correct but inconsistent with P802.15.2/D6.

SuggestedRemedy

To minimize the entries into IEEE 100, I suggest that we standardize on the definition of "coexistence". I suggest the Editor use the P802.15.2/D6 definition: "coexistence: The ability of one system to perform a task in a given shared environment where other systems have an ability to perform their tasks and may or may not be using the same set of rules.". Note I suggest the Editor synchronize with the 802.15.2 Editor to verify this definition i.e., LB21 comments and the 15.2 BRC before creating 802.15.3/D15.

Proposed Response Response Status O

Cl 03 SC 3.25 P 6 L 16 # 212  
 Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

does a frame include the HCS? The FCS? The preamble? Other parts of the text call the MAC header and payload the frame.

SuggestedRemedy

Clarify the definition of frame.

Proposed Response Response Status O

Cl 03 SC 3.26 P 6 L 1819 # 31  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The definition of "interoperability" is correct but sort of inconsistent with P802.15.2/D6. D6 uses "interoperable and interworking"

SuggestedRemedy

To minimize the entries into IEEE 100, I suggest that we standardize on the definition of "interoperability". I suggest the Editor use the P802.15.2/D6 definition: "interoperable: The ability of two systems to perform a given task using a single set of rules."  
 Note that they also define "interworking: The ability of two systems to perform a task given that each system implements a different set of rules."

Proposed Response Response Status O

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CI 03 SC 3.3 P 5 L 11 # 29  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The definition of ad hoc network is correct but inconsistent with 802.15.1-2002 and P802.15.4/D17.

SuggestedRemedy

To minimize the entries into IEEE 100, I suggest that we standardize on the definition of ad hoc. I suggest the Editor use the 802.15.1-2002 and P802.15.4/D17 definition: "ad hoc network: A network typically created in a spontaneous manner. The principal characteristic of an ad hoc network is its limited temporal and spatial extent."  
 Note: The 802.15 definition is much shorter than the 802.11 version: "ad hoc network: A network composed solely of stations within mutual communication range of each other via the wireless medium (WM). An ad hoc network is typically created in a spontaneous manner. The principal distinguishing characteristic of an ad hoc network is its limited temporal and spatial extent. These limitations allow the act of creating and dissolving the ad hoc network to be sufficiently straightforward and convenient so as to be achievable by nontechnical users of the network facilities; i.e., no specialized "technical skills" are required and little or no investment of time or additional resources is required beyond the stations that are to participate in the ad hoc network. The term ad hoc is often used as slang to refer to an independent basic service set (IBSS)." 802.11-1999.pdf

Proposed Response Response Status O

CI 03 SC 3.35 P 6 L 4447 # 32  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

LB17 Comment ID #1051 was not applied to D11, D12, D13, or D14.  
 -----CommentID: 1051CommenterName: Gifford, IanCommenterEmail: giffordi@ieee.orgCommenterPhone: +1 978 251 3451CommenterFax: +1 978 815 8182CommenterCo: SelfClause: 03Subclause: 3.33Page: Line: CommentType: EComment: The definition "The area of overlapping coverage between the two piconets may vary between congruent with the parent coverage area to mostly non-overlapping." is incorrect (I think).CommentEnd: SuggestedRemedy: Change sentence to read "The area of overlapping coverage between the two piconets may vary between congruency with the parent coverage area to mostly non-overlapping."; change "congruent" to "congruency".RemedyEnd: Response: ACCEPT.ResponseEnd: CommentStatus: AResponseStatus: CTopic: CreateDate: 7/3/2002LastModDate: 8/8/2002DispatchDate: WrittenDate: 8/8/2002Accept\_RejectDate: 8/8/2002Closed\_UnsatisfDate: VoterStatus:-----

SuggestedRemedy

Again, change sentence to read "The area of overlapping coverage between the two piconets may vary between congruency with the parent coverage area to mostly non-overlapping."; change "congruent" to "congruency".

Proposed Response Response Status O

CI 03 SC 3.36 P 6 L 4950 # 33  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The sentence beginning "Aparameter..." is incorrect.

SuggestedRemedy

I suggest "A parameter..."; adding a space.

Proposed Response Response Status O

CI 03 SC 3.57 P 8 L 4 # 34  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The sentence "A channel time allocations..." is gramatically incorrect.

SuggestedRemedy

I suggest "A channel time allocation..."; change allocations to singular.

Proposed Response Response Status O

CI 03 SC 3.7 P 5 L 21 # 210  
 Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

Authentication and authroization are distinct. Authentication is the process of determining that it really is the entity that it is claiming to be.

SuggestedRemedy

Change the definition as follows: authentication: Authentication is the process of determining that an entity really is the entity that it is claiming to be.

Proposed Response Response Status O

CI 03 SC 3.9 P 5 L 26 # 211  
 Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

In the PS text awake state is AWAKE state.

SuggestedRemedy

Change awake to AWAKE

Proposed Response Response Status O

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Cl 04 SC P 11 L 1130 # 213  
Shvodian, William XtremeSpectrum  
Comment Type E Comment Status X  
RX and TX should be Rx and Tx. Dont mess with Texas.  
SuggestedRemedy  
Change to Rx and Tx.  
Proposed Response Response Status O

Cl 04 SC 4.0 P 9 L 42 # 36  
Gifford, Ian I. Gifford Consulting LL  
Comment Type E Comment Status X  
The acroymn or abbreviation "DLL data link layer" is incorrect and the term "DLL" is not used in D14.  
SuggestedRemedy  
For starters if you are going to call out terms in Clause 4 then they should be found in the draft. Also, I submit that for "DLL" it should be "Dynamic-Link Library" not "Data Link Layer". Finally, if you want to create an acroymn or abbreviation for "Data Link Layer" use "Layer 2" or "L2".  
Proposed Response Response Status O

Cl 05 SC 5.3.1 P 14 L 89 # 37  
Gifford, Ian I. Gifford Consulting LL  
Comment Type E Comment Status X  
The sentences "A piconet is formed when an 802.15.3 DEV that is capable of acting as the PNC begins transmitting beacons. Thus even..." is gramatically incorrect.  
SuggestedRemedy  
I suggest "A piconet is formed when an 802.15.3 DEV, that is capable of acting as the PNC, begins transmitting beacons. Thus, even..."; adding three (3) commas.  
Proposed Response Response Status O

Cl 05 SC 5.3.10 P 19 L 42 # 35  
Gifford, Ian I. Gifford Consulting LL  
Comment Type E Comment Status X  
The sentence ending "...membership in the piconet" is missing a period.  
SuggestedRemedy  
I suggest the Editor add the period.  
Proposed Response Response Status O

Cl 05 SC 5.3.10 P 19 L 45 # 40  
Gifford, Ian I. Gifford Consulting LL  
Comment Type E Comment Status X  
The sentence ending "...for that DEV" is missing a period.  
SuggestedRemedy  
I suggest you add the period.  
Proposed Response Response Status O

Cl 05 SC 5.3.2.1 P 15 L 39 # 38  
Gifford, Ian I. Gifford Consulting LL  
Comment Type E Comment Status X  
The word "effect" is incorrect.  
SuggestedRemedy  
I suggest "affect"; affect: to influence and effect: to cause. Please make the change globally.  
Proposed Response Response Status O

Cl 05 SC 5.3.4 P 16 L 10 # 39  
Gifford, Ian I. Gifford Consulting LL  
Comment Type E Comment Status X  
The sentence "The PNC is allowed to use an access control lists (ACLs) to admit or deny entry to the piconet." is gramatically incorrect.  
SuggestedRemedy  
I suggest either "...allowed to use an access control list (ACLs)..." or "...allowed to use access control lists (ACLs)...".  
Proposed Response Response Status O

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Cl 05 SC 5.4.1 P 20 L 19 # 41  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The term "trellis-code modulation" is different than the one in Clause 4 or "TCM trellis coded modulation".

SuggestedRemedy

I suggest changing the sentence to "...while the 11, 33, 44 and 55 Mb/s use trellis coded modulation (TCM), 11.3." for consistency (Clause 4>5), accuracy (no hyphen) and first (after Clause 4) usage style rules. Refer to the May00, IEEE Standards Style Manual. Please make the change globally.

Proposed Response Response Status O

Cl 06 SC 6.1 P 23 L 1517 # 43  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The text that introduces Figure 3 is accurate but does not reference the ISO/IEC 7498-1 : 1994(E) normative reference in Clause 2; which I think would help the reader and is required of all Clause 2 entries i.e., "References are those normative documents that contain material that must be understood and used to implement the standard. Thus, referenced documents are indispensable when applying the standard. The role and relationship of each referenced document shall be explained in the body of the standard." IEEE Standards Style Manual.

SuggestedRemedy

I suggest "This standard presents the architectural view, emphasizing the separation of the system into two major parts: the MAC of the data link layer and the PHY. These layers are intended to correspond closely to the lowest layers of the ISO/IEC basic reference model of Open Systems Interconnection (OSI) (ISO/IEC 7498-1: 1994). The layers, sublayers, SAPs, and management entities, described in this standard, are shown in Figure 3.

Note 1: The editor should create an xref (7498-1) to Clause 2.

Note 2: Remember "The purpose of this Reference Model of Open Systems Interconnection is to provide a common basis for the coordination of standards development for the purpose of systems interconnection, while allowing existing standards to be placed into perspective within the overall Reference Model." ISO/IEC 7498-1 : 1994(E) or ITU-T Rec. X.200 (1994 E).

Note 3: The reference model is a central figure in all 802 stds and D14 calls it out again in sc 6.7, pg 97, in 1 - bottom line it would be a good idea to baseline the draft to the 7 layer reference model.

Proposed Response Response Status O

Cl 06 SC 6.1 P 24 L 1214 # 44  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The sentence "If the SAP interfaces are not exposed in an 802.15.3 DEV, then these interfaces do not have to be implemented as described here. If the interfaces are exposed, then they should support the primitives described in this clause."; is vague. Is the term "not exposed" going to be clear to all readers? The sc 6.1 is normative but the statement "do not have to be implemented" is informative.

SuggestedRemedy

I suggest the Editor define the term "exposed" or provide examples for non native English speakers. Also, I suggest the Editor and the BRC discuss the normative and informative split nature of this paragraph. For example is it going to be clear to all readers what is required? Does the PICS resolve, supercede, and/or complement this? Should this sc point to the PICS annex as the final arbitrator?

Proposed Response Response Status O

Cl 06 SC 6.2 P 24 L 24 # 45  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The reference to "SNMP" requires the addition of this reference to Annex F or the Bibliography.

SuggestedRemedy

I suggest adding RFC XXX to Annex F or the Bibliography.

Proposed Response Response Status O

Cl 06 SC 6.3.15 P 61 L 16 # 11  
 Barr, John Motorola

Comment Type E Comment Status X

"There" instead of "These"

SuggestedRemedy

Change "There" to "These at beginning of sentence.

Proposed Response Response Status O

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Cl 06 SC 6.3.15.3 P 63 L 8 # 75  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
Parameter "ACLInfoSet" is called "ACL Record" in 7.5.4.4/KO  
SuggestedRemedy  
pick one  
Proposed Response Response Status O

Cl 06 SC 6.3.16.1 P 64 L # 76  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[ASIE] OUI may be same for several calls to MLME-CREATE-ASIE.request Even if not, it's easier to all with an index when you want to remove the IE. /KO  
SuggestedRemedy  
Add parameter to MLME-CREATE-ASIE.request: "ASIE-index", integer type, range is application specific.  
Proposed Response Response Status O

Cl 06 SC 6.3.16.2 P 65 L 16 # 77  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[ASIE] OUI may be same for several calls to MLME-CREATE-ASIE.request Even if not, it's easier to call with an index when you want to remove the IE. /KO  
SuggestedRemedy  
Add parameter to MLME-CREATE-ASIE.confirm: "ASIE-index", integer type, range is application specific.  
Proposed Response Response Status O

Cl 06 SC 6.3.16.2.3 P 65 L 39 # 216  
Shvodian, William XtremeSpectrum  
Comment Type TR Comment Status X  
There should not be an MLME that is sent every beacon.  
SuggestedRemedy  
Get rid of this MLME.  
Proposed Response Response Status O

Cl 06 SC 6.3.18.1 P 68 L 37 # 126  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[CTA/Isoch] Rename the SPSSetIndex parm to PSSetIndex since that is how the various PS sets are referenced now.  
SuggestedRemedy  
Please make the requested change.  
Proposed Response Response Status O

Cl 06 SC 6.3.18.1 P 68 L 41 # 128  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
[CTA/Isoch] Reorder these parms in the MLME-CREATE-STREAM.request parm list: CTR-TU,CTR-Interval-Type,CTR-Interval,CTA-Type,CTR-Type,Priority <to> Priority,CTR-Type,CTA-Type,CTR-Interval-Type, CTR-Interval, CTR-TU.  
SuggestedRemedy  
Please make the requested change. Its just an editorial but it will make it easier for people to correlate the parms between the primitive and the Channel Time request command.  
Proposed Response Response Status O

Cl 06 SC 6.3.18.1 P 71 L 7 # 130  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
[CTA/Isoch] Reorder these parms in the MLME-MODIFY-STREAM.request parm list: CTR-TU,CTR-Interval-Type,CTR-Interval,CTA-Type,CTR-Type <to> CTR-Type,CTA-Type,CTR-Interval-Type, CTR-Interval, CTR-TU.  
SuggestedRemedy  
Please make the requested change. Its just an editorial but it will make it easier for people to correlate the parms between the primitive and the Channel Time request command.  
Proposed Response Response Status O



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Cl 06 SC 6.3.18.7 P 72 L 45 # 80  
Heberling, Allen XtremeSpectrum  
Comment Type TR Comment Status X  
[CTA/Term] The source is not informed about termination via the NULL CTA, it's informed via the CTR response from the PNC. Ref Fig 120, page 193 and 8.3.4 page 176 line 16-17./KO  
SuggestedRemedy  
Change sentence to: This primitive is used to inform the SrcDEV DME that the MLME has received a channel time response command indicating that the channel time that was previously allocated has been terminated by the PNC or the TrgtDEV. It may also be used to indicate to the TrgtDEV DME that the MLME has seen a null-CTA in the beacon with its DEVID, BcstID or McstID as the destination.  
Proposed Response Response Status O

Cl 06 SC 6.3.24 table 29 P 83 L 17 # 2  
Bain, Jay Time Domain  
Comment Type E Comment Status X  
change the xref to point to 7.5.7.3 for description of next wake beacon  
SuggestedRemedy  
change as requested  
Proposed Response Response Status O

Cl 06 SC 6.3.24.2 P 84 L 27 # 1  
Bain, Jay Time Domain  
Comment Type T Comment Status X  
The MLME-PS-SET-INFORMATION.confirm lacks a parameter for the number of PSStructureSet found in the confirm.  
SuggestedRemedy  
Add a parameter as defined above  
Proposed Response Response Status O

Cl 06 SC 6.3.24.3 P 85 L 10 # 132  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
Please move the PSSetOperation parameter from its current position in the MLME-PS-SET-CONFIGURE.request primitive's parm list to before the PSSetIndex. It just makes it easier for the reader to correlate the parms with the ones in the PS configuration request command, 7.5.7.2. Also in 6.3.24.3.1 change this sentence frag. <from> ...This primitive is used to request achange the PS set..." <to> "...This primitive is used to request a change to the PS set..."  
SuggestedRemedy  
Please make the requested change.  
Proposed Response Response Status O

Cl 06 SC 6.3.24.4 P 85 L 34 # 133  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[PM] Delete the PSSetOperation parm from the MLME-PS-SET-CONFIGURE.confirm parm list since it is not returned in the PS configuration response command's parm list.  
SuggestedRemedy  
Please make the requested deletion.  
Proposed Response Response Status O

Cl 06 SC 6.3.24.4 P 85 L 35 # 3  
Bain, Jay Time Domain  
Comment Type T Comment Status X  
The confirm has the PSSet operation included. The actual command lacks this.  
SuggestedRemedy  
remove the PSSetOperation from the primitive.  
Proposed Response Response Status O

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Cl 06 SC 6.3.24.6 P 86 L 22 # 186  
Heberling, Allen XtremeSpectrum  
Comment Type TR Comment Status X  
[PM] Small changes to support new TrgtID field in the PS Mode change command./KO  
SuggestedRemedy  
Add parameter TrgtId to MLME-PS-MODE-CHANGE.request. Add TrgtId to table 29, page 83: TrgtId, Integer, as defined in 7.5.7.1...  
Proposed Response Response Status O

Cl 06 SC 6.3.3.2.2 P 33 L 49 # 74  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
Repetition of line 47./KO  
SuggestedRemedy  
Remove second sentence about ALREADY\_STARTED  
Proposed Response Response Status O

Cl 06 SC 6.3.4.4 P 40 L 17 # 73  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[Assoc] Capability Field is not part of the DEV association IE. Consequently, delete this parm from the MLME-DEV-ASSOCIATION-INFO.indication primitive's parm list. After making the deletion, add DEVDataRates parm to the the list.  
SuggestedRemedy  
Please make the indicated corrections.  
Proposed Response Response Status O

Cl 06 SC 6.3.6.3.1 P 42 L 19 # 50  
Gifford, Ian I. Gifford Consulting LL  
Comment Type E Comment Status X  
The sentence ending "...the originating MLME" is missing the period.  
SuggestedRemedy  
I suggest adding the period.  
Proposed Response Response Status O

Cl 06 SC 6.3.7 P 43 L 11 # 9  
Barr, John Motorola  
Comment Type T Comment Status X  
TrgtDEVAddress description is "The DEV Address of the security manager." However, this is only used in the Challenge.request command and the frame format for the Challenge.request command does not include this field.  
SuggestedRemedy  
Remove from table and Challenge.request command.  
Proposed Response Response Status O

Cl 06 SC 6.3.7.1 P 42 L 40 # 120  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[SEC/Auth] Not clear whether PublicKeyObjectLength parm is required in the MLME-AUTHENTICATE.request/indication primitive's parm list since this parameter does not get used in the Authentication request command,7.5.2.1. Either add the parameter to the Authentication request command or delete the parm from the MLME-AUTHENTICATE.request primitive's parm list.  
SuggestedRemedy  
Please make the indicated change.  
Proposed Response Response Status O

Cl 06 SC 6.3.8.3 P 48 L 51 # 122  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[SEC/Auth] It is not clear whether the "Key" parm in the MLME-REQUEST-KEY.response/confirm primitive's parm list needs to be listed as "EncryptedKey" since that is how it is named in the request key response command, 7.5.2.6. Please clarify which name is correct and make the appropriate change in either clause 6 or clause 7.  
SuggestedRemedy  
Please make the requested clarification and change.  
Proposed Response Response Status O

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Cl 06 SC 6.3.8.4 P 49 L 18 # 124  
Heberling, Allen XtremeSpectrum

Comment Type T Comment Status X

[SEC/Auth] It is not clear whether the "Key" parm in the MLME-DISTRIBUTE-KEY.request/indication primitive's parm list needs to be listed as "EncryptedKey" since that is how it is named in the distribute key request command, 7.5.2.7. Please clarify which name is correct and make the appropriate change in either clause 6 or clause 7.

SuggestedRemedy

Please make the requested clarification and correction.

Proposed Response Response Status O

Cl 06 SC 6.3.9 P 49 L 53 # 10  
Barr, John Motorola

Comment Type E Comment Status X

The Key field in table 13 does not have a type, Valid Range, or Description.

SuggestedRemedy

Use same fields as defined in Table 12: Type="Octet string", Valid Range="Any valid key as defined by the security suite, 10.2", but with Description="The key to be used as defined for the associated SECID"

Proposed Response Response Status O

Cl 06 SC 6.6 P L # 217  
Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

there shouldn't be a period at the start of the sentence.

SuggestedRemedy

drop the dot

Proposed Response Response Status O

Cl 06 SC 6.6 P 92 L 53 # 53  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The word ".The" is incorrect.

SuggestedRemedy

I suggest "The".

Proposed Response Response Status O

Cl 06 SC 6.7.4.6.1 P 105 L 24 # 54  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The sentence "An unsupported date rate..." is gramatically incorrect.

SuggestedRemedy

I suggest "An unsupported data rate..."

Proposed Response Response Status O

Cl 06 SC Figure 3 P 23 L 19 # 214  
Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

The DME should have a dual point arrow above it to signify that there is an unspecified interface to upper layer management.

SuggestedRemedy

Add an arrow to the top of the DME.

Proposed Response Response Status O

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CI 06 SC Table 1 P 24 L 4247 # 46  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The column headings "Name request confirm" are incorrect.

SuggestedRemedy

I suggest you capitalize all three (3) column titles "Name Request Confirm". Refer to the May00, IEEE Standards Style Manual, page 19. This repeats on Table 3, etc. please make the change globally.

Note: "Only the initial letter of the first word and proper nouns shall be capitalized in Column and line headings in tables (see Table 1)" IEEE Standards Style Manual.

Proposed Response Response Status O

CI 06 SC Table 15 P 54 L 9 # 51  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The sentence "...being updated, 10." is incorrect.

SuggestedRemedy

I suggest "...being updated, Clause 10."; that is if you mean "10" refers to Clause 10.

Please make the change globally.

Note 1: that this repeats further in the table i.e., column three last row.

Note 2: The point being that clauses are called out e.g., "Clause 10" but subclauses e.g., "10.1" are not.

Proposed Response Response Status O

CI 06 SC Table 19 P 61 L 26 # 215  
Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

should say "information for all associated DEVs."

SuggestedRemedy

change to "information for all associated DEVs."

Proposed Response Response Status O

CI 06 SC Table 2 P 25 L 34 # 47  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The column heading "Valid Range" is incorrect.

SuggestedRemedy

I suggest "Valid range". Refer to the May00, IEEE Standards Style Manual, page 19. Please make the change globally.

Note: Also, in Table 2 add periods to the first and second "description" entries to match the third entry...or delete the third entry period for consistency. Please make the changes globally.

Proposed Response Response Status O

CI 06 SC Table 21 P 66 L 23 # 52  
Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The use of "N/A" is incorrect.

SuggestedRemedy

Again, I suggest adding "en-dash" (from IEEE FM template (basically a long hyphen character)) to all the blank table cells. Please make the change globally.

Proposed Response Response Status O

CI 06 SC Table 22 P 69 L 14 # 129  
Heberling, Allen XtremeSpectrum

Comment Type T Comment Status X

[CTA/Isoch] Rename the SPSSetIndex parm to PSSetIndex since that is how the various PS sets are referenced now.

SuggestedRemedy

Please make the requested change.

Proposed Response Response Status O

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Cl 06 SC Table 22 P 69 L 39 # 78  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [CTA] Range of AvailableNumTUs is wrong. CTR response carries only one octet for this parameter, see 7.5.5.2/KO  
 SuggestedRemedy  
 Valid range for AvailableNumTUs is 0-255.  
 Proposed Response Response Status O

Cl 06 SC Table 22 P 69 L 41 # 79  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [CTA/Asynch] AvailableNumTUs never returned for asynchronous requests (neither is the primitive!)/KO  
 SuggestedRemedy  
 Change description to: "The number of TUs available to the requesting DEV for allocation"  
 Proposed Response Response Status O

Cl 06 SC Table 29 P 83 L 12 # 81  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 NEW no longer used. Create is done by setting 'join' and PSIndex=UnAllocated Set./KO  
 SuggestedRemedy  
 Remove 'NEW' from PSSetOperation Valid Range column.  
 Proposed Response Response Status O

Cl 06 SC Table 29 P 83 L 25 # 131  
 Heberling, Allen XtremeSpectrum  
 Comment Type T Comment Status X  
 [PM] Please clarify the PSActiveEvent parm. There does not seem to be any correlation between the enumerations and the parm passed in the ps-mode-change command, 7.5.7.1.  
 SuggestedRemedy  
 Please make the requested clarification.  
 Proposed Response Response Status O

Cl 06 SC Table 3 P 2728 L # 48  
 Gifford, Ian I. Gifford Consulting LL  
 Comment Type E Comment Status X  
 The Table 3 is incorrect.  
 SuggestedRemedy  
 I suggest capitalizing columns 2-5, adding "en-dash" (from IEEE FM template (basically a long hyphen character)) to all the blank table cells, and add the word "(continued)" to the second page overflow for Table 3. Refer to the May00, IEEE Standards Style Manual, page 19. Please make the change globally.  
 Proposed Response Response Status O

Cl 06 SC Table 33 P 90 L 36 # 134  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 MACPIB\_MaxSPSSets needs to be renamed to MACPIB\_MaxPSSets since that is how they are denoted in clause 8.  
 SuggestedRemedy  
 Please make the requested change.  
 Proposed Response Response Status O

Cl 06 SC Table 34 P 91 L 16 # 135  
 Heberling, Allen XtremeSpectrum  
 Comment Type T Comment Status X  
 [PM] Delete these three parms: MACPIB\_PSPSSupported, MACPIB\_SPSSupported, MACPIB\_HibernateSupported. These three are no longer defined in the capabilities field. Also revamp the MACPIB\_PowerManagementMode parm. The codings provided in the definition column are no longer correlate with the codings in 7.5.7.1.  
 SuggestedRemedy  
 Please make the requested deletion.  
 Proposed Response Response Status O

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Cl 06 SC Table 7 P 32 L 7 # 49  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

The word "piconet.!" appears to be incorrect.

Suggested Remedy

I suggest "piconet.".

Proposed Response Response Status O

Cl 07 SC P L # 227  
 Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

IEs that don't are only used in probe commandds should mention that.

Suggested Remedy

Example 7.4.10 "The CTA status request IE in a probe is used by a DEV..."

Proposed Response Response Status O

Cl 07 SC 3.2.2 P 118 L 5051 # 58  
 gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type TR Comment Status X

Same as CID 410 in LB22Original comment:The new field "Num max frame size" is mostly useless. What if all the frames are (aMaxFrameSize-1) octets long? Instead of that, it is useful to include the total number of octets as sum of number of octets in the payload of all frames sent in the dly-ack-window. this total number of octets is helpful in buffer management at the receiver which is supposed to hold all the frames (in some corner cases) until a delayed-ack-frame is sent.Suggested Remedy:1. Remove "Num max frame size" from Figure-15 and all its references from the draft2. Include total number of octets as sum of number of octets in the payload of all frames sent in the delayed-ack-windowResponse:REJECT. Two variables are needed, the total amount that can be sent as well as the number of frames that the destination DEV is able to handle. The number of frames is important because there are physical limitations in the Dly-ACK generation. The other reason is that there are physical limitations in the buffer implementation, e.g. addressing.Commentor's response:The commenter agrees that there are two variables needed and it is evident by the suggestion. But what is not clear is the intention in providing number of frames of size aMaxFrameSize, instead of providing a direct bound of max on total number of octets that is entertained in the burst. The implementations can make use of this information in a useful way while the current info does not give any clue on the size of the (MxNumFrames - NumMxFrameSize) of the frames. How do you expect the implementations to guess those sizes? If all of them are (aMaxFrameSize-1), they are not indicated to the rx-DEV in this frame and the rx-DEV is supposed to handle them properly. In the worst case if all of the NumMaxFrames are of the size (aMaxFrameSize-1), then NumMxFrameSize will be indicated as zero although the rx-DEV has the pain of dealing with these mega-burst!!

Suggested Remedy

Remove "max frames" from Figure-17 and instead include a two-octet wide "total number of octets" as sum of number of octets in the payload of all frames sent in the burst

Proposed Response Response Status O

Cl 07 SC 3.2.3 P L # 57  
 gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type E Comment Status X

Same as 409 in LB19, the response was ACCEPT IN PRINCIPLE. A burst is the collection of the frames that are pending acknowledgement via a Dly-ACK frame. But what the commentor wants is the clarification in the draft.

Suggested Remedy

Add that "A burst is the collection of the frames that are pending acknowledgement via a Dly-ACK frame." as the definition in clause 3 (or 5)

Proposed Response Response Status O

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Cl 07 SC 4 P L # 59  
 gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type TR Comment Status X

Same as Comment 412 in LB19Original comment:In D10 the start of Information element was adjusted to be from even pos(2 octets) to help implementations having to deal with octet level searching for the start of required IE. Complexity involved in octet level searching is too much for low-cost implementations. This will also halve the computations needed in implementations that use higher size ords (like 4-octet).Suggested Remedy:Put back the paragraph that mandated the start of an IE at even position of octets and hence the padding of a zero if an IE whenever the total size of that IE is odd number.Response:REJECT. The frame formats specified only shows the bits sent over the air. Implementations of the receiver functions of a DEV are free to pad and rearrange to any word length, endian or bit order they may choose to optimize the interface to their host. This issue was discussed multiple times before the TG agreed to make the change.Commentor's response:The comment itself is about the bits sent over the air, not some construction within rx-DEV. The goal is to simplify, as much as possible, the processing of IEs.As noted in the comment, the even octet aligning of IEs does simplify the processing both in hardware and software implementations. By the time the frame arrives at the rx-DEV, the damage is already done in the sense that the rx-DEV has to go through octet level processing of the frame. Hence the resolution is NOT acceptable.

Suggested Remedy

Put back the paragraph that mandated the start of an IE at even position of octets and hence the padding of a zero at the tx-DEV at the end of an IE whenever the total size of that IE is odd number of octets.

Proposed Response Response Status O

Cl 07 SC 4.4 P L # 60  
 gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type TR Comment Status X

same as CID 414 in LB19Original comment:In this sentence what does "multiple beacons" actually mean? Multiple beacons in the same superframe, similar to fragmentation beacon, OR IE being present in beacons sent at different TBTT but each time with different contents of association info. I think what is intended is to say that if there are too many assoc/disassoc, the beacon at current TBTT may not be big enough to carry them all, so the remaining Dev-assoc-IEs will be filled into the next beacon sent at next TBTT.Suggested Remedy:If intended, do NOT allow fragmentation of beacon. Alter the sentence in ln42:43 to mean that the PNC may send IE corresponding to a recent assoc/deassoc in the beacon at next TBTT if the current beacon does not have space for it.Response:ACCEPT IN PRINCIPLE. Delete the sentence "The PNC may use multiple beacons to broadcast successive DEV association IEs if too many DEVs are associating than will fit in a single beacon.." as it is confusing and does not add any new information. The PNC is able to choose when it sends any IE. Commentor's response (LB22)The response addresses the issue only partially. For interpretations towards conformance, "The PNC is able to choose when it sends any IE" is not correct The interpretation by vendors can go either way. that is, a group of implementors might expect the Dev-Assoc-IE containing the recently associated DEVs to appear immediately after assoc while the rest might tolerate it appearing anytime. Hence the inclusion of the suggested remedy is required. I have rephrased the same in the following text for editor's peruse (Applicable after the removal of sentence as in the response)."The the DEV association IE corresponding to an association shall be included in the beacon sent at the start of immediate next superframe, excepting the case where that beacon is already at its maximum allowed size where the inclusion of IE is delayed until the space in the beacon permits the same."

Suggested Remedy

I have rephrased my earlier suggested remedy in the following text for editor's peruse (Applicable after the removal of sentence as in the response)."The the DEV association IE corresponding to an association shall be included in the beacon sent at the start of immediate next superframe, excepting the case where that beacon is already at its maximum allowed size where the inclusion of IE is delayed until the space in the beacon permits the same."

Proposed Response Response Status O

Cl 07 SC 7.0 P 107 L 1 # 55  
 Gifford, Ian I. Gifford Consulting LL

Comment Type E Comment Status X

Again, the title "MAC Frame Formats" is incorrect.

Suggested Remedy

I suggest "MAC frame formats"

Proposed Response Response Status O

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Cl 07 SC 7.1 P 108 L 34 # 218  
 Shvodian, William XtremeSpectrum

Comment Type TR Comment Status X

If conformant DEVS are not allowed to send reserved values in fields, how does a DEV receive a reserved value? Unsupported version?

SuggestedRemedy

Clarify by changing the sentence to: "Reserved values in non-reserved fields shall not be transmitted by conformant DEVS. However, a DEV may receive frames of a different protocol version with values that it considers to be reserved values in non-reserved fields.

Proposed Response Response Status O

Cl 07 SC 7.2 P 109 L 13 # 220  
 Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

"maximum frame length" is not specific enough because the definition of frame vague.

SuggestedRemedy

change to "maximum MAC frame body length"

Proposed Response Response Status O

Cl 07 SC 7.2.4.3 P 112 L 18 # 223  
 Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

"maximum number of fragments" is confusing.

SuggestedRemedy

change to "total number of fragments"

Proposed Response Response Status O

Cl 07 SC 7.2.7.3 P 113 L 11 # 224  
 Shvodian, William XtremeSpectrum

Comment Type E Comment Status X

change to Secure Payload field.

SuggestedRemedy

change to Secure Payload field.

Proposed Response Response Status O

Cl 07 SC 7.4 P 123 L 1 # 178  
 Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PNC/Scan] A new IE is needed to support comment about PNC channel scan in 8.9.5. This IE informs the piconet that the beacon will be suspended for a certain time./KO

SuggestedRemedy

Add new IE: PNC Scan IE. The PNC scan IE is used to inform all DEVS in the piconet that the PNC beacon transmission will be suspended for a specified time, and to order all DEVS in the piconet to suspend all transmission for the same time. [octets:1 | 2 | 1 | 1 ] [Quiet | Suspend beacon | Length=3 | Element ID ] [superframes | number | | ]

Proposed Response Response Status O

Cl 07 SC 7.4.11 P 129 L # 85  
 Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Rename 'Start Beacon Cycle' to 'Start Beacon Number'. We always use the name beacon number throughout the draft./KO

SuggestedRemedy

Change Figure 38 and line 24 from 'cycle' to 'number'.

Proposed Response Response Status O

Cl 07 SC 7.4.11 P 129 L 21 # 4  
 Bain, Jay Time Domain

Comment Type E Comment Status X

remove the "a" from sentence at end of line 21.

SuggestedRemedy

make change as requested.

Proposed Response Response Status O



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Cl 07 SC 7.4.11 P 129 L 8 # 138  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Change the length field from "6" to "8"  
 SuggestedRemedy  
 Please make the change.  
 Proposed Response Response Status O

Cl 07 SC 7.4.12 P 129 L 41 # 202  
 Roberts, Richard XtremeSpectrum  
 Comment Type TR Comment Status X  
 Delete the "preferred fragment size" sub-field from the DEV capabilities field of the capability information IE. There were no CIDs from LB-19 that requested this addition. If the TE felt this was a necessary item to address why wasn't it raised as a comment during LB-19? No CID, no discussion, no to its inclusion.  
 SuggestedRemedy  
 Make the deletion.  
 Proposed Response Response Status O

Cl 07 SC 7.4.12 P 129 L 41 # 137  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [Frag] Delete the "preferred fragment size" sub-field from the DEV capabilities field of the capability information IE. There were no CIDs from LB-19 that requested this addition. Arbitrary additions by the TE are abominable. If the TE felt this was a necessary item to address why wasn't it raised as a comment during LB-19? No CID, no discussion, no to its inclusion.  
 SuggestedRemedy  
 Make the deletion.  
 Proposed Response Response Status O

Cl 07 SC 7.4.15 P 131 L 31 # 205  
 Roberts, Richard XtremeSpectrum  
 Comment Type TR Comment Status X  
 Delete the continued wake beacon clause. The use of the CWB IE in the wake beacon only works if the sleeping SPS DEV hears the wake beacon and in that case the SPS DEV doesn't need the CWB IE. And in the other case it doesn't matter, because it can't use the info in the CWB IE because it didn't hear it. The simpler solution is to implement the following rule for item 3 in clause 8.13.2.3, P219, L3: "If the DEV is in PSPS or SPS mode, the announcement shall be made in aMinBeaconInfoRepeat subsequent beacons starting with the system or SPS wake beacon."  
 SuggestedRemedy  
 Make the requested deletion.  
 Proposed Response Response Status O

Cl 07 SC 7.4.15 P 131 L 31 # 139  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PM/CWB] Delete the continued wake beacon clause. The use of the CWB IE in the wake beacon only works if the sleeping SPS DEV hears the wake beacon and in that case the SPS DEV doesn't need the CWB IE. And in the other case it doesn't matter, because it can't use the info in the CWB IE because it didn't hear it. The simpler solution is to implement the following rule for item 3 in clause 8.13.2.3, P219, L3, and for a combined item 2 & 3 in clause 8.6.4, P198, L41: - If the DEV is in PSPS or SPS mode, the announcement shall be made in aMinBeaconInfoRepeat subsequent beacons starting with the system or SPS wake beacon.(solution by KO)  
 SuggestedRemedy  
 Make the requested deletion.  
 Proposed Response Response Status O

Cl 07 SC 7.4.16 P 132 L 26 # 229  
 Shvodian, William XtremeSpectrum  
 Comment Type E Comment Status X  
 This is inconsistent with 10.3.4.2.1 The public key object is not the key in clause 10, it is the "manual certificate" Which includes the dev address.  
 SuggestedRemedy  
 Which is it - a manual certificate or a key?  
 Proposed Response Response Status O

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Cl 07 SC 7.4.7 P 127 L 29 # 226  
Shvodian, William XtremeSpectrum  
Comment Type E Comment Status X  
Application Specific IE? What Applicaation?  
SuggestedRemedy  
Change this to "vendor specific IE."  
Proposed Response Response Status O

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Cl 07 SC 7.4.7 P 127 L 37 # 127  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[ASIE] OUI may be same for several calls to MLME-CREATE-ASIE.request. Consequently, it may be necessary to add an ASIE index to both the ASIE and to the MLME-CREATE-ASIE.request/confirm primitives.  
SuggestedRemedy  
Please make the requested change.  
Proposed Response Response Status O

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Cl 07 SC 7.4.8 P 128 L 3 # 84  
Heberling, Allen XtremeSpectrum  
Comment Type TR Comment Status X  
[PM] There's not much use setting an element in the beacon for a DEV that doesn't listen to beacons!KO  
SuggestedRemedy  
Remove "HIBERNATE" from the first sentence.  
Proposed Response Response Status O

---

Cl 07 SC 7.5.2.1 P 138 L 25 # 121  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[SEC/Auth] Not clear whether PublicKeyObjectLength parm is required in the MLME-AUTHENTICATE.request/indication primitive's parm list since this parameter does not get used in the Authentication request command, 7.5.2.1. Either add the parameter to the Authentication request command or delete the parm from the MLME-AUTHENTICATE.request primitive's parm list.  
SuggestedRemedy  
Please make the indicated change.  
Proposed Response Response Status O

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Cl 07 SC 7.5.2.6 P 141 L 12 # 123  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[SEC/Auth] It is not clear whether the "Key" parm in the MLME-REQUEST-KEY.response/confirm primitive's parm list needs to be listed as "EncryptedKey" since that is how it is named in the request key response command, 7.5.2.6. Please clarify which name is correct and make the appropriate change in either clause 6 or clause 7.  
SuggestedRemedy  
Please make the requested clarification and change.  
Proposed Response Response Status O

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Cl 07 SC 7.5.2.7 P 141 L 29 # 125  
Heberling, Allen XtremeSpectrum  
Comment Type T Comment Status X  
[SEC/Auth] It is not clear whether the "Key" parm in the MLME-DISTRIBUTE-KEY.request/indication primitive's parm list needs to be listed as "EncryptedKey" since that is how it is named in the distribute key request command, 7.5.2.7. Please clarify which name is correct and make the appropriate change in either clause 6 or clause 7.  
SuggestedRemedy  
Please make the requested clarification and correction.  
Proposed Response Response Status O

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Cl 07 SC 7.5.4.4 P 145 L 15 # 86  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 "ACL record" is called "ACL info set" in 6.3.15.3/KO  
 SuggestedRemedy  
 pick one.  
 Proposed Response Response Status O

Cl 07 SC 7.5.4.4 P 145 L 18 # 12  
 Barr, John Motorola  
 Comment Type E Comment Status X  
 Verification info length(=L2) does not seem to be required since the length of the ACL record field will determine length of the Verification info.  
 SuggestedRemedy  
 Remove Verification info length if not really required.  
 Proposed Response Response Status O

Cl 07 SC 7.5.4.6 P 149 L 24 # 140  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PNC Service] Seems there is a need for an MLME-PICONET-SERVICES.indication/response set of primitives. During association a DEV can set its PiconetServiceInquiry bit to request a list of piconet services from the PNC. The response to the services request bit is independent of the association response. Also I'm assuming that since the Services database is not managed by the MAC or MLME, that the PNC DME or some other protocol layer needs to receive some sort of notification that a request for services information has been received. Consequently, the current resolution to CID xxx is incomplete and not acceptable.  
 SuggestedRemedy  
 Add the missing MLME primitives regarding piconet services or delete all references to piconet services.  
 Proposed Response Response Status O

Cl 07 SC 7.5.5.1 P 150 L 17 # 141  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Change all references to "SPS set" in this clause <to> "PS set" since power management resolutions from LB-19 implemented in clause 8 have changed all references to an "SPS set" to a "PS set".  
 SuggestedRemedy  
 Please make the change.  
 Proposed Response Response Status O

Cl 07 SC 7.5.5.1 P 151 L 3 # 88  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [CTA/Term] The terminate bit no longer exists./KO  
 SuggestedRemedy  
 Delete the sentence "The stream termination field...".  
 Proposed Response Response Status O

Cl 07 SC 7.5.5.2 P 152 L 37 # 116  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [CTA/PM] CTR may be refused because destination is in hibernation. Therefore change the error code to reflect both the case were a stream is established but the destination enters hibernation or SPS, and the case where a CTR is made for a DEV in hibernation/KO  
 SuggestedRemedy  
 Rename error code 7 to 'destination in power save mode'  
 Proposed Response Response Status O

Cl 07 SC 7.5.5.2 P 152 L 40 # 232  
 Shvodian, William XtremeSpectrum  
 Comment Type TR Comment Status X  
 What about unsupported sub-rate?  
 SuggestedRemedy  
 Add "or unsupported sub rated"  
 Proposed Response Response Status O

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Cl 07 SC 7.5.6.2 P 153 L 22 # 142  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Change this field <from> "Rx error frame count" <to> "Rx frame error count". This change will make the parameter name consistent with the parm name in the parm list of MLME-CHANNEL-STATUS.response primitive.  
 SuggestedRemedy  
 Please make the requested change.  
 Proposed Response Response Status O

Cl 07 SC 7.5.6.2 P 153 L 32 # 233  
 Shvodian, William XtremeSpectrum  
 Comment Type T Comment Status X  
 Why are bcast and multicast excluded from the Rx frame count. A DEV gets a feel for channel status by whether or not it is getting ACKs. However, mcast and bcast cannot have ACKs, so channel status could be more important.  
 SuggestedRemedy  
 include mcast and bcast frames into channel status response command.  
 Proposed Response Response Status O

Cl 07 SC 7.5.6.4 P 155 L 9 # 89  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [RemoteScan] You can't tell from a beacon if the PNC \_is\_ a parent, only that it \_has\_ a parent./KO  
 SuggestedRemedy  
 Change piconet type codes to: 0 -> Independent or parent piconet 1 -> Dependent piconet 2-255 -> Reserved  
 Proposed Response Response Status O

Cl 07 SC 7.5.7.1 P 155 L 40 # 183  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PM] Some attempts have been made to create a wakeup signal from a DEV to a sleeping peer DEV. A simple addition to the PS mode change command can cause the PNC to set the PCTM bit for a sleeping DEV./KO  
 SuggestedRemedy  
 Add one octet to PS Mode change command: TrgtID TrgtID is set to the SrclD if the DEV wants to inform the PNC that it's switching to the ACTIVE MODE. If the TrgtID is set to the DEVID of another member DEV, the PNC will set the bit for this DEV in the PCTM IE. If the PS Mode field is set to Hibernate or PS, this field shall be ignored upon reception.  
 Proposed Response Response Status O

Cl 07 SC 7.5.7.2 P 156 L 46 # 5  
 Bain, Jay Time Domain  
 Comment Type T Comment Status X  
 The low end of the PS wake beacon interval should be 2 and not 4.  
 SuggestedRemedy  
 Please make requested change.  
 Proposed Response Response Status O

Cl 07 SC 7.5.7.3 P 157 L 20 # 6  
 Bain, Jay Time Domain  
 Comment Type T Comment Status X  
 The use of shall may not be correct for this. Perhaps "If the PS set index field has been set to zero ..."  
 SuggestedRemedy  
 make suggested change  
 Proposed Response Response Status O

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Cl 07 SC 7.5.7.3 P 157 L 20 # 90  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Two typos: Second sentence on line 20, change from If the PS set index "shall be" to "was".  
 Line 23: make multiple requests to join "a" PSPS set, should be "the"./KO  
 SuggestedRemedy  
 fix  
 Proposed Response Response Status O

Cl 07 SC 7.5.7.5 P 158 L 20 # 8  
 Bain, Jay Time Domain  
 Comment Type T Comment Status X  
 The wake beacon interval and next wake beacon should be set to zero for set 0 by the PNC  
 and ignored on reception.  
 SuggestedRemedy  
 Separate the text of PSPS and HIBERNATE with regard to unused fields for HIBERNATE.  
 Proposed Response Response Status O

Cl 07 SC 7.5.7.5 P 157 L 49 # 7  
 Bain, Jay Time Domain  
 Comment Type T Comment Status X  
 In figure 92, each structure is noted as 37 octets in length. In figure 93, the DEVID bitmap is  
 1 to 32 octets in length so the each structure may take on values of from 8 to 37 octets. The  
 Length calculation requires change.  
 SuggestedRemedy  
 Change the headers in figure 92 to be "8 to 37" in two places.  Change the Length formula  
 to (1 + sum of PS set structure 1 through PS set structure n).   
 Proposed Response Response Status O

Cl 07 SC 7.5.8.1 P 158 L 40 # 145  
 Heberling, Allen XtremeSpectrum  
 Comment Type T Comment Status X  
 [ASIE] OUI may be same for several calls to MLME-CREATE-ASIE.request. Consequently,  
 it may be necessary to add an ASIE index to the Vendor specific command just after the  
 Vendor OUI field.  
 SuggestedRemedy  
 Please make the requested change.  
 Proposed Response Response Status O

Cl 07 SC 7.5.7.5 P 157 L 49 # 143  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 The octet field sizes for the PS set structure are incorrect. Please change from field size of  
 37 to a variable size ranging from 8 to 39 octets. Also make an appropriate change to the  
 Length field. A suggested change is: > Length (= 1+(sum of PS set structure lengths))  
 SuggestedRemedy  
 Please make the requested change.  
 Proposed Response Response Status O

Cl 07 SC Figure 50 P L # 231  
 Shvodian, William XtremeSpectrum  
 Comment Type T Comment Status X  
 Why aren't the Max CTRBs and Max associated DEVs part of the PNC capabilities?  
 SuggestedRemedy  
 MMake ax CTRBs and Max associated DEVs part of the PNC capabilities  
 Proposed Response Response Status O

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Cl 07 SC Figure 6 P 109 L 6 # 219  
Shvodian, William XtremeSpectrum  
Comment Type E Comment Status X  
Part of the MAC frame is called the payload, as is part of the non-secure frame body and the secure frame body. This is inconsistent, especially since PHY Table 127 has a "payload length" field. Which payload???

SuggestedRemedy  
Change this to Frame Payload.

Proposed Response Response Status O

Cl 07 SC Figure 12 P 114 L 27 # 187  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
'PNC response' was change to 'CTRRespTime' in 8.4.4.3 and 7.3.11. Recommend changing it in all places to 'CTRResponseTime'./KO

SuggestedRemedy  
Change field to CTRResponseTime, or at a minimum to CTRRespTime.

Proposed Response Response Status O

Cl 07 SC Figure 22 P 109 L 21 # 221  
Shvodian, William XtremeSpectrum  
Comment Type E Comment Status X  
Change Payload to MAC payload.

SuggestedRemedy  
Change Payload to MAC payload.

Proposed Response Response Status O

Cl 07 SC Figure 40 P 129 L 42 # 228  
Shvodian, William XtremeSpectrum  
Comment Type TR Comment Status X  
What is the "preferred fragment size?" Is it the biggest, smallest or nominal? What if it is ignored? Is it the preferred fragment size as transmitter or receiver?

SuggestedRemedy  
This field has no place and should be deleted. The fragment size is solely up to the transmitter based on the channel conditions. Drop this from tex, too.

Proposed Response Response Status O

Cl 07 SC Figure 5 P 108 L # 82  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
The current text and figure will be very informative if you just make a vertical flip of the picture. That is, draw the transmission order arrow from left to right and flip the figure so that Octet 0 is to the left. This is no change in bitorder. The only result is that you see the picture the same way as a text field is put in a memory buffer. This will make more sense to most people!/KO

SuggestedRemedy  
Flip it!

Proposed Response Response Status O

Cl 07 SC Figure 79 P 150 L 51 # 87  
Heberling, Allen XtremeSpectrum  
Comment Type TR Comment Status X  
[CTA/Term] Terminate bit is terminated/KO

SuggestedRemedy  
Remove 'stream termination', pack all fields to the right and let b7 be reserved.

Proposed Response Response Status O

Cl 07 SC Figure 8 P 109 L 32 # 222  
Shvodian, William XtremeSpectrum  
Comment Type E Comment Status X  
Change payload to Secure Payload

SuggestedRemedy  
Change payload to Secure Payload. Also show that everything in the figure but the FCS is part of the MAC payload.

Proposed Response Response Status O

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Cl 07 SC Table 47 P 118 L 22 # 225  
 Shvodian, William XtremeSpectrum  
 Comment Type TR Comment Status X  
 What does "may be decoded" mean?  
 SuggestedRemedy  
 Change to "may be ignored"  
 Proposed Response Response Status O

Cl 07 SC Table 52 P 127 L 21 # 83  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 The last sentence is redundant. /KO  
 SuggestedRemedy  
 Remove "Otherwise this field shall be ignored upon reception"  
 Proposed Response Response Status O

Cl 07 SC Table 51 P 123 L 33 # 136  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PM/CWB] Delete the Continued wake beacon IE. The use of the CWB IE in the wake beacon only works if the sleeping SPS DEV hears the wake beacon and in that case the SPS DEV doesn't need the CWB IE. And in the other case it doesn't matter, because it can't use the info in the CWB IE because it didn't hear it. The simpler solution is to implement the following rule for item 3 in clause 8.13.2.3, P219, L3, and for a combined item 2 & 3 in clause 8.6.4, P198, L41: - If the DEV is in PSPS or SPS mode, the announcement shall be made in aMinBeaconInfoRepeat subsequent beacons starting with the system or SPS wake beacon.(solution by KO)  
 SuggestedRemedy  
 Make the requested deletion.  
 Proposed Response Response Status O

Cl 07 SC Table 53 P L # 230  
 Shvodian, William XtremeSpectrum  
 Comment Type TR Comment Status X  
 The channel tiem request command normally requires authentication, but what is the authentication process for neighbor piconets. The piconet group key clearly cannot be exchanged.  
 SuggestedRemedy  
 Clarify how security works with neighbor piconets.  
 Proposed Response Response Status O

Cl 07 SC Table 51 P 123 L 33 # 204  
 Roberts, Richard XtremeSpectrum  
 Comment Type TR Comment Status X  
 Delete the Continued wake beacon IE. The use of the CWB IE in the wake beacon only works if the sleeping SPS DEV hears the wake beacon and in that case the SPS DEV doesn't need the CWB IE. And in the other case it doesn't matter, because it can't use the info in the CWB IE because it didn't hear it. The simpler solution is to implement the following rule for item 3 in clause 8.13.2.3, P219, L3: "If the DEV is in PSPS or SPS mode, the announcement shall be made in aMinBeaconInfoRepeat subsequent beacons starting with the system or SPS wake beacon."  
 SuggestedRemedy  
 Make the requested deletion.  
 Proposed Response Response Status O

Cl 08 SC 13 P L # 70  
 gubbi, RAJUGOPAL BROADCOM, CORP  
 Comment Type TR Comment Status X  
 Table-66. The cell corresponding to "Hibernate in wake superframe" column and "Beacon" row contradicts the text on pp-220, lines36-41 where the hibernating DEVs are allowed the liberty of sleeping through "any" beacon until they themselves change over to ACTIVE state (and it should be within ATP to retain the membership of Piconet)  
 SuggestedRemedy  
 Change the referred entry from "AWAKE" to "May sleep"  
 Proposed Response Response Status O

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Cl 08 SC 13 P 215 L 56 # 61  
 gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type TR Comment Status X

Definition of wake beacon is vague and hence can cause confusion to the implementors who are not part of TG3

*Suggested Remedy*

A wake beacon is a beacon sent by PNC at a previously declared periodic interval at which time all the sleeping DEVS, except those in HIBERNATE mode, are expected to be awake and be able to receive. Wake beacons contains <TBD??> in addition to other fields/elements that can be present in beacons transmitted at other times. The BC/MC traffic in a piconet shall always be in the superframe in which a wake beacon was transmitted by the PNC.[NOTE: If beacon transmission time is defined (BTT), this can be defined as WBTT which makes the text flow naturally since wake beacon referred here is mostly to do with the time of its transmission than its contents]

Proposed Response Response Status O

Cl 08 SC 13.1 P 215 L # 62  
 gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type TR Comment Status X

Same as comment 509 in LB19 (Applicable for 8.13.2 also) PS status bit map has an issue and that is, let's say DEV-A and DEV-B are members of the same piconet managed by a PNC. If DEV-A sees the PS-status-bit corresponding to DEV-B as set in the beacon from PNC (meaning DEV-B is in power save mode), but in the same superframe receives a frame (directed or not) from DEV-B, can DEV-A assume that the DEV-B is in AWAKE state for that superframe? I think that should be allowed. it helps certain BC/MC traffic transactions. Suggested Remedy: 1. If a DEV in in PSPS (SPS) mode in a superframe, but transmits a frame the DEV shall consider itself in AWAKE state and hence may enter SLEEP state only after another successful transaction of power-save-commands(s) with PNC. AND 2. The DEV shall enter SLEEP state only at the start of superframe following the successful transaction of power-save-commands(s) with PNC. Response: ACCEPT IN PRINCIPLE. 1. A DEV in PSPS keeps its GTS and may transmit in them. This does not imply that the DEV wishes to change power save mode. 2. It is specified in 13.1 that a DEV may enter the SLEEP state only after having received an ACK from PNC on a PS mode change command with the PS Mode set to PSPS. Commentor's response (LB22) The comment exposes an ambiguity in the interpretation of PS-status bits and frame transmissions by a PSPS DEV as read in the draft (D11). But the resolution is just an explanatory to the commentor with no clarification in the draft. Hence the ambiguity in the draft is still left remaining.

*Suggested Remedy*

1. If a DEV in in PSPS (SPS) mode in a superframe, but transmits a frame the DEV shall consider itself in AWAKE state and hence may enter SLEEP state only after another successful transaction of power-save-commands(s) with PNC. AND 2. The DEV shall enter SLEEP state only at the start of superframe following the successful transaction of power-save-commands(s) with PNC.

Proposed Response Response Status O

Cl 08 SC 14 P L # 71  
 gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type TR Comment Status X

See CID-446, 477, 478 and 479 in LB19 Use of Vendor specific command is the answer to the issue that is intended to be solved through this app-specific IE.

*Suggested Remedy*

Remove this subclause and references to ASIE from the draft

Proposed Response Response Status O



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Cl 08 SC 2.3 P 164 L 33 # 65  
gubbi, RAJUGOPAL BROADCOM, CORP  
Comment Type E Comment Status X  
Lines 32:34 describe an two cases of handover cancellation. But the sentences make them to be perceived as just one case.  
SuggestedRemedy  
Insert "In addition, " before "If the DEV sees a shutdown IE ...."  
Proposed Response Response Status O

Cl 08 SC 2.4 P L # 66  
gubbi, RAJUGOPAL BROADCOM, CORP  
Comment Type E Comment Status X  
editorial note  
SuggestedRemedy  
act upon it and remove it  
Proposed Response Response Status O

Cl 08 SC 4.3 P 178179 L 535413 # 67  
gubbi, RAJUGOPAL BROADCOM, CORP  
Comment Type TR Comment Status X  
Lines 53-54 on pp-178 with lines 1-3 on pp-179 create an unnecessary special case for starting backoff algorithm at the start of CAP. The save is not worth the special case at the lowest level of MAC where Backoff algo is run. Added to that, applicability of this special case gets narrowed by another level by the probability of not-correctly-receiving the beacon and/or the last extended beacon by a DEV. Although this specail case has a "may" in it and hence does not enforce its applicability, it is worth the space in the standard given the above reasoning.  
SuggestedRemedy  
Change "SIFS" to "BIFS" in Lines 53-54 on pp-178 and lines 1-3 on pp-179  
Proposed Response Response Status O

Cl 08 SC 8.10 P 208 L 31 # 181  
Heberling, Allen XtremeSpectrum  
Comment Type TR Comment Status X  
[ChngParms] aMaxLostBeacons used for minimum repetition of IE, but in 8.6.4 we has specified it to be aMinBeaconInfoRepeat. Change here accordingly/KO  
SuggestedRemedy  
replace aMaxLostBeacons with aMinBeaconInfoRepeat and change "following that system wake beacon" to "including that system wake beacon"  
Proposed Response Response Status O

Cl 08 SC 8.11 P 211 L 13 # 160  
Heberling, Allen XtremeSpectrum  
Comment Type TR Comment Status X  
[TxPwr] This whole concept of reducing the maximum transmit power in the piconet seems wrong. I could see it if we had a mechanism for overlapping piconets to negotiate a more appropriate power level but we don't. So if l(the PNC) get an indication that one of my piconet DEVs is having trouble hearing my beacon because of its proximity to an overlapping piconet, l(the PNC) am going to reduce my power? I don't think so, I'm going to crank it up, baby! Consequently, I think we need to either rethink the whole concept reducing Tx power as an infereence mitigation mechanism or just delete any occurence of the concept in this document.  
SuggestedRemedy  
Please make one of the requested changes.  
Proposed Response Response Status O

Cl 08 SC 8.11.1 P 211 L 33 # 161  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
Change this sentence frag. <from> "...when deciding whether to change of channel is outside of the scope of this standard." <to> "...when deciding whether to change channels is outside the scope of this standard."  
SuggestedRemedy  
Please make the requested change.  
Proposed Response Response Status O

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Cl 08 SC 8.11.1 P 211 L 36 # 162  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[ChnlChng] Change this sentence frag. <from> "...after it has performed a PNC channel scan,8.9.5, and ..." <to> "...after it has performed either a PNC channel scan,8.9.5, or a remote channel scan, 8.9.4, and..." The original sentence is too restrictive in its scope and implies that an implementor can only execute a channel change after performing only a PNC channel scan.

SuggestedRemedy

Make the indicated change.

Proposed Response Response Status O

Cl 08 SC 8.11.1 P 211 L 39 # 110  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[ChnlChng] Missing text from CID 317/KO

SuggestedRemedy

Insert text: PNC shall broadcast the piconet parameter change information element, 7.4.6, with the change type set to CHANNEL...

Proposed Response Response Status O

Cl 08 SC 8.11.1 P 212 L 42 # 163  
Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Change this sentence frag. <from> "...to the channel indicated in the IE at the appropriate time." <to> "...to the channel indicated in the piconet parameter change IE at the appropriate time."

SuggestedRemedy

Please make the requested change.

Proposed Response Response Status O

Cl 08 SC 8.11.1 P 212 L 46 # 164  
Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Please change this sentence frag. <from> "...shall remove the parent BSID IE from its beacon..." <to> "...shall remove the parent piconet IE from its beacon..."

SuggestedRemedy

Please make the requested change.

Proposed Response Response Status O

Cl 08 SC 8.11.1 P 212 L 6 # 182  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[ChnlChng] aMaxLostBeacons used for minimum repetition of IE, but in 8.6.4 we has specified it to be aMinBeaconInfoRepeat. Change here accordingly/KO

SuggestedRemedy

replace aMaxLostBeacons with aMinBeaconInfoRepeat and change "following that system wake beacon" to "including that system wake beacon"

Proposed Response Response Status O

Cl 08 SC 8.13 P 214 L 48 # 184  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PM] Some attempts have been made to create a wakeup signal from a DEV to a sleeping peer DEV. A simple addition to the PS mode change command can cause the PNC to set the PCTM bit for a sleeping DEV. New subclause 8.13.x Waking up a DEV in power save mode/KO

SuggestedRemedy

The PNC may request that a DEV in power save mode switches to ACTIVE mode after its next wake beacon. In this case, the PNC shall set the bit for the DEV it wants to wake up in the PCTM IE. The bit shall be set to 1 until the power save DEV informs the PNC that it's switching to ACTIVE mode by sending the PS Mode change command with the PS Mode field set to ACTIVE and the TrgtID field set to it's own DEVID. A power save DEV that wakes up and finds its bit set in the PCTM shall switch to ACTIVE mode and remain ACTIVE for at least the CTRResponseTime indicated in the beacon. A DEV may request that the PNC sets the PCTM bit for another DEV by sending the PS Mode change command with the PS Mode field set to ACTIVE and the TrgtID field set to the DEVID of the peer DEV it wishes to wake up.

Proposed Response Response Status O

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Cl 08 SC 8.13 P 215 L 10 # 193  
 Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PM/CWB] PCTM and CWB don't work if the DEV missed its wake beacon. The rule in SPS that beacon announcements shall be done in N subsequent wake beacons, in stead of just N subsequent beacons starting with the wake beacon, makes PNC implementation utterly complicated. All this calls for a unified rule for PSPS and SPS: If you miss your wake beacon, listen to the next beacon/KO

SuggestedRemedy

Add text: "A DEV that misses its wake beacon shall listen to the following beacon".

Proposed Response Response Status O

Cl 08 SC 8.13 P 215 L 37 # 207  
 Roberts, Richard XtremeSpectrum

Comment Type TR Comment Status X

Delete this sentence frag. "... when the PNC is battery powered and support at least four SPS sets when the PNC is powered by the alternating current mains, Table 60." As Allen Heberling stated in his BRC PM e-mail ballot of 10/29/02 regarding his opposition to making 4 SPS sets mandatory:"...Mr. M. Schrader, on the other hand is advocating 4 SPS sets for an AC powered device. This approach constrains the customer/implementor to having to support a powermanagement scheme that forces the PNC to manage DEV defined wake beacon intervals for each SPS set instantiation (this has complex implications for the MAC CTA scheduler and Beacon generation algorithms). In addition, it also forces the customer/implementor to implement a MAC that has to support a minimum of 4 SPS sets regardless of whether it is battery powered or AC powered. It is highly unlikely that implementors are going to develop/support two different MAC HW/SW instantiations based on whether one instantiation is going to be in a battery powered environment and one is going to be in an AC powered environment."

SuggestedRemedy

Make the requested deletion.

Proposed Response Response Status O

Cl 08 SC 8.13 P 215 L 37 # 165  
 Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PM/SPS-4] Delete this sentence frag. "... when the PNC is battery powered and support at least four SPS sets when the PNC is powered by the alternating current mains, Table 60." As I stated in my BRC PM e-mail ballot of 10/29/02 regarding my opposition to making 4 SPS sets mandatory: "...Mr. M. Schrader, on the other hand is advocating 4 SPS sets for an AC powered device. This approach constrains the customer/implementor to having to support a powermanagement scheme that forces the PNC to manage DEV defined wake beacon intervals for each SPS set instantiation(this has complex implications for the MAC CTA scheduler and Beacon generation algorithms). In addition, it also forces the customer/implementor to implement a MAC that has to support a minimum of 4 SPS sets regardless of whether it is battery powered or AC powered. It is highly unlikely that implementors are going to develop/support two different MAC HW/SW instantiations based on whether one instantiation is going to be in a battery powered environment and one is going to be in an AC powered environment."

SuggestedRemedy

Make the requested change.

Proposed Response Response Status O

Cl 08 SC 8.13 P 215 L 41 # 185  
 Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PM] Small changes to support new TrgtID field in the PS Mode change command. Editorial: Switching to ACTIVE is the same procedure regardless of PS mode. Maybe lift out to the general clause?/KO

SuggestedRemedy

8.13.1 page 216 line 22. (for PSPS) 8.13.2.2 page 217 line 39. (for SPS) 8.13.3 page 221 line 2. (for HIBERNATION) Add "with the PS Mode field set to ACTIVE and the TrgtID set to its own DEVID" Change Figure 146, page 224. Add param TrgtID=SrcID to MLME-PS-MODE-CHANGE.req and to PS mode change command

Proposed Response Response Status O

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Cl 08 SC 8.13.1 P 215 L 42 # 112  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PM] The DEV is not forced to be in the AWAKE state during the entire wake superframe, only as described in 8.13. Use the correct text from 02/276r13./KO  
 SuggestedRemedy  
 Change first sentence to: "In the PSPS mode the DEV is only required to listen to system wake beacons and CTAs where its DEVID is indicated as the destination."  
 Proposed Response Response Status O

Cl 08 SC 8.13.1 P 215 L 48 # 166  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Change this sentence frag. <from> "...every beacon is a system wake beacons..." <to> "...every beacon is a system wake beacon ..." Also change this sentence frag. on page 216, line 22: <from> "Once this command is sent the DEV shall..." <to> "Once this command is sent, the DEV shall..." And this sentence frag. on page 216, line 23: <from> "...ACTIVE mode regardless if the command was ack..." <to> "...ACTIVE mode whether the command was ack..."  
 SuggestedRemedy  
 Please make the requested changes.  
 Proposed Response Response Status O

Cl 08 SC 8.13.1 P 215 L 49 # 111  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PM] range for system wake beacon interval has no lower limit/KO  
 SuggestedRemedy  
 Change to: "The system wake beacon interval shall not be less than 4 and not greater than 255".  
 Proposed Response Response Status O

Cl 08 SC 8.13.1 P 216 L 19 # 113  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 This sentence is a repetition of almost the same text on page 215 line 42/KO  
 SuggestedRemedy  
 Delete sentence on page 216 line 19.  
 Proposed Response Response Status O

Cl 08 SC 8.13.1 P 216 L 51 # 190  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PM/MCTA] Just like with SPS, PSPS DEVs needs an MCTA to change modes when they wake up. I chose the wording "should" because there may be overload in the system wake superframe so there is no space for all MCTA, or the PNC may use another predictable cyclic allocation scheme in which case the PSPS DEVs will know when the next MCTA occurs/KO  
 SuggestedRemedy  
 Add sentence: "The PNC should allocate assigned MCTA for PSPS DEVs or open MCTA in the system wake beacon"  
 Proposed Response Response Status O

Cl 08 SC 8.13.2 P 216 L 31 # 167  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Change this sentence frag. <from> "...created and managed by PNC, but ..." <to> "...created and managed by the PNC, but ..."  
 SuggestedRemedy  
 Please make the requested change.  
 Proposed Response Response Status O

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Cl 08 SC 8.13.2.1 P 216 L 40 # 168  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Change this sentence frag. <from> "...Both of these parameters of shall be..." <to> "...Both of these parameters shall be ..."  
 SuggestedRemedy  
 Please make the requested change.  
 Proposed Response Response Status O

Cl 08 SC 8.13.2.2 P 218 L 8 # 188  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 SPS DEV gets an MCTA, not a CTA./KO  
 SuggestedRemedy  
 change to "and an MCTA with the SPS DEV ..." Same on page 218, line 12, and line 14, change "CTA" to "MCTA".  
 Proposed Response Response Status O

Cl 08 SC 8.13.2.2 P 217 L 30 # 169  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Change this sentence frag. <from> "...interval, the PNC shall terminate those streams,..." <to> "...interval, the PNC shall..." Also change this sentence frag. on p217,line 40: <from> "...as in the ACTIVE mode regardless if the command ..." <to> "...as in the ACTIVE mode whether the command..."  
 SuggestedRemedy  
 please make the requested spelling change to the word interval. Also make the other requested editorial change as well.  
 Proposed Response Response Status O

Cl 08 SC 8.13.2.3 P 219 L 41 # 171  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Change this sentence frag. <from> "Continue to attempt to allocate..." <to> "...Continue attempting to allocate..."  
 SuggestedRemedy  
 Please make the requested change.  
 Proposed Response Response Status O

Cl 08 SC 8.13.2.2 P 218 L 7 # 170  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PM] Please clarify the intent of this sentence which starts with these words: "In the SPS DEV DEV's next wake superframe, ..." <and ends with these words:> "...that is long enough to handle a PS change command and a channel time request command with 4 isochronous CTRBs." Why 4 isoch CTRBs?  
 SuggestedRemedy  
 Please clarify and if need me rewrite to make the intent clearer.  
 Proposed Response Response Status O

Cl 08 SC 8.13.2.3 P 219 L 43 # 206  
 Roberts, Richard XtremeSpectrum  
 Comment Type TR Comment Status X  
 Delete item 3 from this clause. The use of the CWB IE in the wake beacon only works if the sleeping SPS DEV hears the wake beacon and in that case the SPS DEV doesn't need the CWB IE. And in the other case it doesn't matter, because it can't use the info in the CWB IE because it didn't hear it. The simpler solution is to implement the following rule: "If the DEV is in PSPS or SPS mode, the announcement shall be made in aMinBeaconInfoRepeat subsequent beacons starting with the system or SPS wake beacon."  
 SuggestedRemedy  
 Make the requested change.  
 Proposed Response Response Status O

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Cl 08 SC 8.13.2.3 P 219 L 43 # 172  
 Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PM/CWB] Delete item 3 from this clause. The use of the CWB IE in the wake beacon only works if the sleeping SPS DEV hears the wake beacon and in that case the SPS DEV doesn't need the CWB IE. And in the other case it doesn't matter, because it can't use the info in the CWB IE because it didn't hear it. The simpler solution is to implement the following rule: - If the DEV is in PSPS or SPS mode, the announcement shall be made in aMinBeaconInfoRepeat subsequent beacons starting with the system or SPS wake beacon.(solution by KO)

SuggestedRemedy

Make the requested change.

Proposed Response Response Status O

Cl 08 SC 8.13.3 P 220 L 41 # 173  
 Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Missing xrefs to PS mode change command in clause 7. First missing xref is in line 41 and the second missing xref regarding disassoc is at the end of line 45.

SuggestedRemedy

Please provide correct xrefs.

Proposed Response Response Status O

Cl 08 SC 8.13.3 P 221 L # 189  
 Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PM/MCTA] Just like with SPS, HIBERNATE DEVs needs enough MCTA to change modes when they wake up/KO

SuggestedRemedy

Add sentence: "The PNC shall provide enough assigned MCTA or open MCTA for the DEV in HIBERNATE mode that it is able to send a PS Mode change, probe or other command to the PNC before its ATP expires."

Proposed Response Response Status O

Cl 08 SC 8.13.3 P 221 L 7 # 114  
 Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

The first part of this sentence is a repetition of almost the same text on page 220 line 42/KO

SuggestedRemedy

remove!

Proposed Response Response Status O

Cl 08 SC 8.13.3 P 221 L 9 # 115  
 Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PM] The requestor cannot hang and wait an indefinite time for a decision from the PNC. Either you get your channel time or you don't. If the destination is in hibernation, any CTR shall be denied. If a DEV wants to know about traffic it can select PSPS or SPS. In Hibernation it just wants to sleep. I would kindly urge all editors to please try to refrain from putting undiscussed ad-hoc inventions into the draft. If you really want to wake up a sleeping DEV at some unknown time in the future, we could consider having a new command to set the PCTM bit. One way would be to add a DEVID to PS mode change. If (operation == ACTIVE && dev != UNASSOC) set PCTM(dev)/KO

SuggestedRemedy

Delete page 145 line 9-14. Replace with: "The PNC shall deny a channel time request if the destination is in HIBERNATE mode. The PNC shall return a channel time response command with the error code set to 'destination in power save mode' (rename error code 7 in 7.5.5.2)

Proposed Response Response Status O

Cl 08 SC 8.2.2 P 163 L 37 # 146  
 Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Please change this sentence frag. < from> "...should periodically allocate the CFP such that..." <to> "... should periodically allocate channel time in the CFP so that..."

SuggestedRemedy

Please make the requested change so that the sentence is easier to read and understand.

Proposed Response Response Status O

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Cl 08 SC 8.2.3 P 164 L 28 # 91  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
The information is not only associations and CTRB, but also PS and ACL./KO  
SuggestedRemedy  
Change from "be prepared to receive the PNC information command, 7.5.4.2, and CTRB records" To "be prepared to receive the piconet records"  
Proposed Response Response Status O

Cl 08 SC 8.2.3 P 164 L 48 # 147  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
Change this sentence frag. <from> "...SPS sets to transfer." <to> "...PS sets to transfer."  
The reason for the requested change is because the power management resolutions have switched to talking about all the power management schemes in terms of Power Save (PS) sets. Please run a "Find & Change" search on the phrase "SPS set" and replace with "PS set"  
SuggestedRemedy  
Please make the requested change and excute the requested Find and change search.  
Proposed Response Response Status O

Cl 08 SC 8.2.3 P 165 L 20 # 92  
Heberling, Allen XtremeSpectrum  
Comment Type TR Comment Status X  
[PNC\_HndOvr] The two sentences on line 20-22 belongs in 8.2.6, where they are missing. The first sentence should be changed to "handover announcement" and be kept here./KO  
SuggestedRemedy  
Fix  
Proposed Response Response Status O

Cl 08 SC 8.2.3 P 165 L 5 # 180  
Heberling, Allen XtremeSpectrum  
Comment Type TR Comment Status X  
[PNC\_HndOvr] aMaxLostBeacons used for minimum repetition of IE, but in 8.6.4 we has specified it to be aMinBeaconInfoRepeat. Change here accordingly/KO  
SuggestedRemedy  
replace aMaxLostBeacons with aMinBeaconInfoRepeat and change "following that system wake beacon" to "including that system wake beacon"  
Proposed Response Response Status O

Cl 08 SC 8.2.4 P 168 L 14 # 13  
Barr, John Motorola  
Comment Type E Comment Status X  
Editors Note in the text.  
SuggestedRemedy  
Remove and do as the note indicates.  
Proposed Response Response Status O

Cl 08 SC 8.2.4 P 168 L 14 # 94  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
left over Ed Note/KO  
SuggestedRemedy  
remove (or possibly do what it suggests!)  
Proposed Response Response Status O

Cl 08 SC 8.3.1 P 172 L 35 # 234  
Shvodian, William XtremeSpectrum  
Comment Type E Comment Status X  
"DEV performas a MLME-Sync.request" doesn't sound right.  
SuggestedRemedy  
Vchange to "the DME issues an MLME-Sync.request"  
Proposed Response Response Status O

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Cl 08 SC 8.3.1 P 172 L 49 # 144  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Replace association address with the phrase "unAssocID" Also run a "Find and Change" search on the phrase "association address" for the rest of clause 8.  
 SuggestedRemedy  
 Please make the requested changes.  
 Proposed Response Response Status O

Cl 08 SC 8.3.4 P 176 L 44 # 192  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [Assoc] This should be obvious, but the fact is that a dumb PNC implementation can create problems for other DEVs! Examples are PS status and PCTM. Let's plug this one/KO  
 SuggestedRemedy  
 Add text: "When a DEV is disassociated, the PNC shall reset its bit from all relevant bitmaps in all IEs in the beacon."  
 Proposed Response Response Status O

Cl 08 SC 8.3.1 P 173 L 15 # 149  
 Heberling, Allen XtremeSpectrum  
 Comment Type T Comment Status X  
 [Assoc] Please change this sentence frag. <from> "...accept the DEVID as its address for all future communications." <to> "...accept the DEVID for all future communications." This change will make the sentence less confusing. Address implies a 48bit MAC address and not the 8 bit assignment.  
 SuggestedRemedy  
 Please make the requested change.  
 Proposed Response Response Status O

Cl 08 SC 8.4.4.2 P 180 L 38 # 98  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [CTA] The last sentence "Channel time requests that are ACKed are valid until the next channel time request is made" is only true for asynchronous data, and only if the TrgtIdList bit is set. In all other cases it's false./KO  
 SuggestedRemedy  
 Remove this sentence.  
 Proposed Response Response Status O

Cl 08 SC 8.3.2 P 175 L 22 # 97  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PiconetService] The probe isn't used for service response due to its potential length. The fragmentable piconet services command shall be used. /KO  
 SuggestedRemedy  
 In the first sentence on line 21-22, replace "probe command" with "piconet services command".  
 Proposed Response Response Status O

Cl 08 SC 8.4.4.2 P 180 L 40 # 99  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [CTA] MaxProcessedCTA and MaxAssignedCTA are deleted from standard and thus the paragraph on lines 40-43 is obsolete./KO  
 SuggestedRemedy  
 Delete line 40-43 onpage 180.  
 Proposed Response Response Status O



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Cl 08 SC 8.4.4.4 P 182 L 12 # 191  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[MCTA] We need a little better specification on how often MCTA are allocated to assure that the PNCRespTime can be met. /KO

SuggestedRemedy

New text, continuing on "When MCTA are used...": "The PNC shall allocate MCTA assigned to a DEV, open MCTA or both. The frequency of assigned MCTA shall be at least CTRRespTime, as defined in the beacon. If only open MCTA are used, the PNC shall allocate at least one open MCTA per DEV and CTRRestTime. The PNC may reduce the MCTA allocation frequency for power save DEVs, and for DEVs requesting a longer interval between assigned MCTA using the CTR command, 7.5.5.1. Special rules power save DEVs is listed in 8.13.1, 8.13.2.2 and 8.13.3"

Proposed Response Response Status O

Cl 08 SC 8.4.4.7 P 185 L 26 # 150  
Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Change this sentence frag. <from> "...delay to around ns, or even..." <to> "...delay to around 33 ns, or even..."

SuggestedRemedy

Please make the requested change.

Proposed Response Response Status O

Cl 08 SC 8.5.1 P 187 L 38 # 100  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[CTA/Isoch] The last sentence is what happens with asynchronous data if no CTA arrives before the SDU timeout. In the case of ISOCH-DATA, you do MLME-CREATE-STREAM first./KO

SuggestedRemedy

Delete the last sentence of the paragraph on page 187 line 38-40

Proposed Response Response Status O

Cl 08 SC 8.5.1 P 187 L 39 # 236  
Shvodian, William XtremeSpectrum

Comment Type TR Comment Status X

Why does the MLME timeout for the DME? Why doesn't the DME do it's own timeout. What if the MLME gets a response just after it sends the time out? Does it send the response up the confirm to the DME or abandon it.

SuggestedRemedy

DME should do it's own timeout. MLME should't be tracking state for the DME request. Elimiate the last sentence in this paragraph.

Proposed Response Response Status O

Cl 08 SC 8.5.1.1 P 188 L 14 # 101  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[CTA/Isoch] The original purpose of this IE got lost! All subrates shall also be announced, regardless if the DEV is in PS mode. The DestDEV cannot find the CTR-interval in any other way and it needs it if it wants to go into a PS mode./KO

SuggestedRemedy

Add "and of all subrate streams" to the sentence on line 14.

Proposed Response Response Status O

Cl 08 SC 8.5.1.1 P 188 L 18 # 151  
Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Change this sentence frag. <from> "...in the superframe of the CTR status IE announcement." <to> "...in the superframe of the CTA status IE announcement, (xref: CTA Status IE)."

SuggestedRemedy

Please make the requested change.

Proposed Response Response Status O

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Cl 08 SC 8.5.1.1 P 188 L 41 # 152  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Change this sentence frag. <from> "...shall be set to the either ..." <to> "...shall be set to either ..."  
 SuggestedRemedy  
 Please make the indicated change.  
 Proposed Response Response Status O

Cl 08 SC 8.5.1.1 P 188 L 52 # 237  
 Shvodian, William XtremeSpectrum  
 Comment Type E Comment Status X  
 typo thte  
 SuggestedRemedy  
 fix  
 Proposed Response Response Status O

Cl 08 SC 8.5.1.2 P 191 L 13 # 104  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 The last sentence on line 13-14 belongs to stream creation, 8.5.1.1/KO  
 SuggestedRemedy  
 Move sentence to 8.5.1.1  
 Proposed Response Response Status O

Cl 08 SC 8.5.1.2 P 191 L 9 # 103  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [CTA/Isoch] All changed substrates shall also be announced, regardless if the DEV is in PS mode. The DestDEV cannot find the CTR-interval in any other way and it needs it if it wants to go into a PS mode./KO  
 SuggestedRemedy  
 Always announce CTR-Interval changes. Remove the words "if any DEV is in power save mode"  
 Proposed Response Response Status O

Cl 08 SC 8.5.1.3 P 192 L 33 # 153  
 Heberling, Allen XtremeSpectrum  
 Comment Type T Comment Status X  
 [CTA/Term] Delete this sentence "The stream termination field in the CTR control field shall be set to one." It is my recollection that one of the resolutions to a LB-19 comment required the elimination of the termination bit. If that is a valid recollection than make the requested change. Also modify the MSCs in Figure 119 and 120 so that there is no reference to the "termination bit"  
 SuggestedRemedy  
 Please make the requested deletion.  
 Proposed Response Response Status O

Cl 08 SC 8.6.2 P 197 L 46 # 105  
 Heberling, Allen XtremeSpectrum  
 Comment Type E Comment Status X  
 Left over Ed note. BTW, name is correct./KO  
 SuggestedRemedy  
 Proposed Response Response Status O

Cl 08 SC 8.6.2 P 197 L 46 # 14  
 Barr, John Motorola  
 Comment Type E Comment Status X  
 Editors note appears in the text.  
 SuggestedRemedy  
 Remove note and replace with correct name if necessary.  
 Proposed Response Response Status O

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Cl 08 SC 8.6.4 P 198 L 42 # 119  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PM/CWB] PCTM and CWB don't work if the DEV missed its wake beacon. The rule in SPS that beacon announcements shall be done in N subsequent wake beacons, in stead of just N subsequent beacons starting with the wake beacon, makes PNC implementation unnecessarily complicated. All this calls for a unified rule for PSPS and SPS: If you miss your wake beacon, listen to the next beacon/KO

SuggestedRemedy

In rules for individual DEV, combine second and third rule to: - If the DEV is in PSPS or SPS mode, the announcement shall be made in aMinBeaconInfoRepeat subsequent beacons starting with the system or SPS wake beacon.

Proposed Response Response Status O

Cl 08 SC 8.7 P 199 L 35 # 203  
Roberts, Richard XtremeSpectrum

Comment Type TR Comment Status X

Delete this sentence: "A dEV indicates its preferred fragment size for reception in the preferred frament size field in the capabilities IE,..." There were no CIDs from LB-19 that requested this addition. If the TE felt this was a necessary item to address why wasn't it raised as a comment during LB-19? No CID, no discussion, no to its inclusion.

SuggestedRemedy

Make the requested deletion.

Proposed Response Response Status O

Cl 08 SC 8.7 P 199 L 35 # 154  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[Frag] Delete this sentence: "A dEV indicates its preferred fragment size for reception in the preferred frament size field in the capabilities IE,..." There were no CIDs from LB-19 that requested this addition. Arbitrary additions by the TE are abominable. If the TE felt this was a necessary item to address why wasn't it raised as a comment during LB-19? No CID, no discussion, no to its inclusion.

SuggestedRemedy

Make the requested deletion.

Proposed Response Response Status O

Cl 08 SC 8.7 P 200 L 4 # 106  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[Frag] Unclear what "A DEV shall support concurrent reception of fragments of at least three MSDU/MCDUs" means. Is it per stream or totally? Where did this sentence come from?/KO

SuggestedRemedy

Delete or clarify.

Proposed Response Response Status O

Cl 08 SC 8.8.3 P 201 L 16 # 107  
Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

"max burst size" is an old name/KO

SuggestedRemedy

rename to "max burst".

Proposed Response Response Status O

Cl 08 SC 8.8.4 P 201 L 51 # 108  
Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

sentence in paranthesis says "transmission" where you mean a new frame/KO

SuggestedRemedy

Change to: (or new frame if the failed...

Proposed Response Response Status O

Cl 08 SC 8.9.2 P 205 L 29 # 156  
Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Change the sentence frag. <from> "...probe requests are listed in Table 57 ." <to> "...probe requests are listed in Table 57."

SuggestedRemedy

Please make the requested change.

Proposed Response Response Status O

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Cl 08 SC 8.9.3 P 205 L 42 # 157  
 Heberling, Allen XtremeSpectrum

Comment Type T Comment Status X

[ChnlStatus] This sentence is too exclusive: "Thus, the command should only be used for DEVs that are actively participating in a data transfer as the information would not have much meaning otherwise." The reason for this comment is that the PNC can request that all DEVs in the piconet send it(PNC) channel status responses as described in 8.11.1, item 3. Either delete the quoted sentence above or add an additional qualifying sentence regarding the PNC.

SuggestedRemedy

Please make one of the requested changes.

Proposed Response Response Status O

Cl 08 SC 8.9.4 P 206 L 36 # 109  
 Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Replace algorithm with A-L-G-O-R-I-T-H-M. :-)/KO

SuggestedRemedy

Proposed Response Response Status O

Cl 08 SC 8.9.4 P 206 L 38 # 158  
 Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Change this sentence frag. <from> " ThePNC may optionally allocate the CFP such that there is ..." <to > "The PNC may optionally allocate channel time in the CFP so that there is..."

SuggestedRemedy

Please make the requested change.

Proposed Response Response Status O

Cl 08 SC 8.9.5 P 207 L 37 # 118  
 Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PNC Scan] Implementation wise it is preferable to just stop beacon transmission and then start at a later time continuing from where it stopped. The reason we force the PNC to upgrade the timetoken for silent beacons is that a consistent increment is needed for SEC DEVs. On the other hand, if the PNC wants to scan it would be better to have the whole piconet silent. Unfortunately the PNC cannot just remove the CTA since that would cause dependent networks to cease operations on the current channel. A better solution would be to announce when scan starts and how long it will last./KO

SuggestedRemedy

1) Create a new PNC Scan IE. Parameters: Suspend beacon number[16b], Quiet superframes [8b]. Add to clause 7.4. (see other comment). 2) Change text in 8.9.5, line 48-51: If the PNC initiates a scan of one or more alternate channels, the PNC shall insert the PNC scan IE with the Suspend beacon number field set to the last beacon number before the scan and the Quiet superframes set to the number of superframe durations where no beacon will be sent. The PNC scan IE shall be sent in at least one system wake beacon and at least aMinBeaconInfoRepeat beacons including that system wake beacon. After the beacon that was indicated as suspend beacon number has been sent, the PNC shall suspend beacon transmissions. The PNC shall not suspend beacon transmissions for more than twice aMinChannelScan. The PNC shall resume beacon transmission after the indicated amount of superframes. The PNC, upon returning to its current channel and resuming the transmission of its beacons, shall increment the time token field from the last beacon before the scan by one. A DEV that receives the PNC scan IE shall suspend transmission of the indicated amount of superframes, regardless of the CTA. A Dependent PNC that receives the PNC scan IE shall immediately insert its own PNC scan IE in its beacon

Proposed Response Response Status O

Cl 08 SC 8.9.5 P 208 L 1 # 159  
 Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Delete the first sentence at the top of this page, it is redundant with the second sentence which is more informative than the first sentence. And as we all know: Redundancy is bad.

SuggestedRemedy

Please make the requested change.

Proposed Response Response Status O

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Cl 08 SC Figure 100 P 169 L 23 # 95  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
SUB MSC does not use the condition symbol./KO  
SuggestedRemedy  
Please refer to example in 02276r13P802-15\_TG3-commentsD11\_KO.doc page 5 for correct syntax. Replace both association and CTR symbols.  
Proposed Response Response Status O

Cl 08 SC Figure 102 P 171 L 23 # 96  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
SUB MSC does not use the condition symbol./KO  
SuggestedRemedy  
Please refer to example in 02276r13P802-15\_TG3-commentsD11\_KO.doc page 5 for correct syntax. Replace both association and CTR symbols.  
Proposed Response Response Status O

Cl 08 SC Figure 114 P 189 L 10 # 102  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
This comment concerns Figure 114, Figure 115 and Figure 116. "Evaluate request", "Allocate resources" and "Build beacon" is unnecessary information. Delete all these. Rename "Check resources" to "Resources available". The reason is that they are in a condition symbol and not in a task symbol, so the condition for approving the request is that resources are available./KO  
SuggestedRemedy  
Please change.  
Proposed Response Response Status O

Cl 08 SC Figure 129 P 205 L 25 # 155  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
Change the title <from> "MSC showing requesting information only using probe command" <to> "MSC of DEV requesting information via the probe command"  
SuggestedRemedy  
Please make the requested change.  
Proposed Response Response Status O

Cl 08 SC Figure 143 P 223 L 21 # 174  
Heberling, Allen XtremeSpectrum  
Comment Type E Comment Status X  
Change the title of figure 143 <from> "MSC for PS set inquiry command" <to> "MSC for PS set information request command" Also it would make more sense to move Figure 143 to just before Figure 140, since the text in Clause 8.13.2.1 &2 describes the SPS set creation and management as being: 1) query PNC as to whether there are existing SPS sets via the PS set information request command 2) If one isn't available create/join an SPS set via the PS set configure command. 3) If one is available join an SPS set ia the PS set configure command. 4) and so on.  
SuggestedRemedy  
Please make the requested changes.  
Proposed Response Response Status O

Cl 08 SC Figure 98 P 166 L 40 # 93  
Heberling, Allen XtremeSpectrum  
Comment Type TR Comment Status X  
[PNC\_HndOvr] Old MSC. Please use the correct one in 02/276r13. The Optional ACL handover is not only between MLME and DME. Besides the symbol for sub-MSC is wrong. The text referring to the ACL handover is missing. There is no MSC for cancellation./KO  
SuggestedRemedy  
Start with the MSC on page 5 in 02276r13P802-15\_TG3-commentsD11\_KO.doc. Delete second MLME-PNC-HANDOVER.ind(COMPLETED). Add text under MSC: "The ACL Handover is described in {xref 9.2.4}. See also Figure nn {xref 'wherever you moved the ACL handover MSC to'} Make a new MSC for CANCELLED.  
Proposed Response Response Status O

P802.15.3 Draft 14 Comments

Cl 08 SC Table 60 P 167 L 9 # 148  
 Heberling, Allen XtremeSpectrum  
 Comment Type T Comment Status X  
 [PM] Remove from the table all the entries for "SPS supported in capability", "PSPS supported in capability", and "Hibernation supported in capability". These modes are no longer indicated in the capability fields.  
 SuggestedRemedy  
 Please make the requested change.  
 Proposed Response Response Status O

Cl 08 SC Table 64 P L # 238  
 Shvodian, William XtremeSpectrum  
 Comment Type TR Comment Status X  
 How does a PNC meet aAssocRespConfirmTime of 5 ms? The assoc may be at the end of the CAP or in an association MTS and the PNC may not have any channel time available in 5 ms. or DEV  
 SuggestedRemedy  
 Change to 2\* max SF duration  
 Proposed Response Response Status O

Cl 08 SC Table 61 P 198 L 10 # 179  
 Heberling, Allen XtremeSpectrum  
 Comment Type TR Comment Status X  
 [PNC scan] Add the new PNC scan IE to table/KO  
 SuggestedRemedy  
 PNC scan IE, 7.4.x, aMinBeaconInfoRepeat, 8.9.5  
 Proposed Response Response Status O

Cl 08 SC Table 64 P 226 L 26 # 239  
 Shvodian, William XtremeSpectrum  
 Comment Type TR Comment Status X  
 How does a PNC or DEV meet aProbeResponseDelay of 8 ms? The probe may be at the end of the CAP or in a CTA and the responder may have no available channel time..  
 SuggestedRemedy  
 Delete this parameter altogether.  
 Proposed Response Response Status O

Cl 08 SC Table 64 P L # 240  
 Shvodian, William XtremeSpectrum  
 Comment Type TR Comment Status X  
 Why is there a MaxRetransmissionLimit? Does that mean that a DEV that tries to associate and gets no response must self destruct?  
 SuggestedRemedy  
 Get rid of maximum retransmission limit. That should be left to the implementer.  
 Proposed Response Response Status O

Cl 09 SC 1.6 P L # 194  
 Rasor, Gregg Motorola  
 Comment Type TR Comment Status X  
 At the Vancouver plenary, in the agreeded upon security resolution regarding security models, the GROUP was told that the architecture presented by NTRU and adopted in St. Louis as the baseline would support both piconet wide data protection and smaller groups beginning at the peer to peer level. The current text does not support that model. The suggested text supports the current model as well as a sub-group starting at 2 DEVs and going up to the nmaximum allowable number of DEVs in the piconet - 1.  
 SuggestedRemedy  
 Delete section 9.1.6 and insert the following text: Data encryption uses a symmetric cipher to protect data from being read by parties without the cryptographic key. Data may be encrypted either by using a key shared by all piconet DEVs or by using a key shared between two or more DEVs.  
 Proposed Response Response Status O

P802.15.3 Draft 14 Comments

Cl 09 SC 1.7 P L # 195  
 Rasor, Gregg Motorola

Comment Type TR Comment Status X

At the Vancouver plenary, in the agreeded upon security resolution regarding security models, the GROUP was told that the architecture presented by NTRU and adopted in St. Louis as the baseline would support both piconet wide data protection and smaller groups beginning at the peer to peer level. The current text does not support that model. The suggested text supports the current model as well as a sub-group starting at 2 DEVS and going up to the nmaximum allowable number of DEVS in the piconet - 1.

SuggestedRemedy

Data integrity uses an integrity code, often referred to as a message authentication code, to protect data from being modified by parties without the cryptographic key. It further provides assurance that data came from a party with the cryptographic key. Integrity may be provided using a key shared by all piconet DEVS or using a key shared between two or more DEVS. All secure data frames that fail integrity checks are discarded.

Proposed Response Response Status O

Cl 09 SC 2.2 P L # 196  
 Rasor, Gregg Motorola

Comment Type TR Comment Status X

The current text in 9.2.2 attempts to implement a very loose heartbeat function that closes teh set of authenticated DEVS in an established piconet. The problem is that security, in the sense of a wireless network, cannot be "mushy." In more definite terms, the text of 9.2.2 is indefinite and cannot be used to implement a method that securely, reliably closes teh network set. Replace the exsiting text with the following text:

SuggestedRemedy

The PNC or another DEV shall request that each DEV with which it has authenticated (previously authenticated DEV) periodically transmit a secure frame using the management key to be certain that that DEV is still in the piconet. If no secure frames are being transmitted by the previously authenticated DEV, the PNC or requesting DEV shall send a secure probe command requesting an information element (such as the DEV adress) from the previously authenticated DEV. If the previously authenticated DEV does not respond with a secure frame within a predetermined period of time, the previously authenticated DEV's authentication is revoked and the PNC or requesting DEV shall disassociate or deauthenticate the previously authenticated DEV. By definition, dissassociation of an authenticated DEV results in deauthentication.

Proposed Response Response Status O

Cl 09 SC 2.6 P 232 L 89 # 197  
 Rasor, Gregg Motorola

Comment Type E Comment Status X

The current text reads: "The authentication and challenge commands are designed to be used with security turned off." Is this an accurate statement?

SuggestedRemedy

Proposed Response Response Status O

Cl 09 SC 3.2 P 237 L 711 # 198  
 Rasor, Gregg Motorola

Comment Type TR Comment Status X

In reading this clause, an implementer will certainly be confused. The Access Control List is said to contain information "about which devices are authorized to authenticate with the DEV using their corresponding public key." The implementer then see the "manner in which the ACL is used depend[ing] on the application and the security suite in use." This is very confusing for the following reason. In the 802.15.3 ad-hoc network, DEVS are openly admitted (associated), and admitted DEVS then request authentication, and if successful, the PNC will add the authenticated DEV to the ACL. Does the current text preclude this operation?

SuggestedRemedy

The text must be modified to address the correct issue. That issue is the binding of a DEV's identity to its public key, then the subsequent addition of the DEV's public key, or other representation into the ACL to control future group membership in the piconet.

Proposed Response Response Status O

Cl 09 SC 4 P 237 L 48 # 199  
 Rasor, Gregg Motorola

Comment Type TR Comment Status X

The reference "While the security suites are interoperable," is inaccurate and misleading. Interoperation implies exactness in purpose, operation and results. In our case, the purpose of all security suites is the same, but the operation and results are different. For example, the ECMQV suite establishes a 128 bit key, while the NTRU and RSA suites establish only 80 bit keys.

SuggestedRemedy

Repair the text to accurately reflect the defined operation of any current or future security suite.

Proposed Response Response Status O

P802.15.3 Draft 14 Comments

Cl 09 SC 9 P 244 L 2425 # 201  
Rasor, Gregg Motorola

Comment Type TR Comment Status X

The SRF - Security requirements field, defined as being included in the authentication response command used to indicate the authentication policies of the security manager. This should be more fully discussed with respect to the operation and establishment of data keys. It needs to be able to establish a required bit level of security in a system.

SuggestedRemedy

Reference to current sections:  
7.5.2.2 Authentication response command  
If the certificates required bit is set to 1, the security manager shall only authenticate DEVs with a security suite that uses certificates, 1.2.1 and Table 96, while it operates as the security manager. If the 128-bit security required bit is set to 1, the security manager shall only authenticate DEVs with a security suite that is stated to provide 128-bit security in Table 96 while it operates as the security manager. The auth response field is the integrity code generated by the security manager and associated with the authentication protocol, 10.2. 10.3. 1.3 ECMQV key agreement protocol The optional parameter Text2 as specified in sections 6.11.1 and 6.11.2 of ANSI X9.63-2001 shall be the one-byte value of the security requirements field included in the authentication response command,7.5.2.2.

Proposed Response Response Status O

Cl 09 SC 9.2.4 P 231 L 20 # 15  
Barr, John Motorola

Comment Type T Comment Status X

Since the new PNC must authenticate with all of the DEVs in the piconet. It must allocate time for this to happen. If the PNC does not allow commands in the CAP, then the PNC SHALL set up CTAs for authentication.

SuggestedRemedy

Change 'should' to 'shall' and note that this is only necessary when commands are not allowed in the CAP.

Proposed Response Response Status O

Cl 09 SC 9.2.6 P 231 L 51 # 16  
Barr, John Motorola

Comment Type T Comment Status X

A DEV must associate in order to be assigned DEVID and CTAs.

SuggestedRemedy

Change 'should' to 'shall'

Proposed Response Response Status O

Cl 09 SC 9.2.8 P 233 L 2122 # 17  
Barr, John Motorola

Comment Type E Comment Status X

Looks like period separated from last word in sentence ending on line 21.

SuggestedRemedy

Remove blank between period and last word in sentence ('key').

Proposed Response Response Status O

Cl 09 SC 9.3.1 P 229 L 36 # 241  
Shvodian, William XtremeSpectrum

Comment Type TR Comment Status X

The fact that a public key is in the ACL is not what provides that the public key belongs to the intended DEV. The trust is established by the fact that the DEV can respond to the challenge and prove that it has the private key that accompanies the public key in the ACL. The fact that the public key and dev address are in the ACL provides the authorization that the DEV should be allowed into the piconet, provided it can authenticate by proving that it has the private key.

SuggestedRemedy

Change to: In order to use a public key to achieve mutual authentication, it is necessary to trust that the received public key belongs to the intended DEV. This trust shall be indicated by a certificate or by a DEV responding successfully to a challenge, proving that it has the private key that corresponds to the public key in the ACL. the key's representation in an ACL or by the DEV verifying a digital certificate at the time of authentication.

Proposed Response Response Status O

Cl 09 SC Figure 1543 P L # 242  
Shvodian, William XtremeSpectrum

Comment Type TR Comment Status X

It needs to be made clear if authentication is required for a neighbor piconet. If so, a separate table is needed for neighbor authentication where the sym\_keys\_D are not passed.

SuggestedRemedy

Create a table for neighbor authentication.

Proposed Response Response Status O



P802.15.3 Draft 14 Comments

Cl 10 SC P L # 243  
 Shvodian, William XtremeSpectrum  
 Comment Type E Comment Status X  
 Why are raw keys called manual certificates for ECMQV  
 SuggestedRemedy  
 Be consistent and call them goth raw or manual  
 Proposed Response Response Status O

Cl 10 SC 10.2.2 P 285 L 1315 # 18  
 Barr, John Motorola  
 Comment Type TR Comment Status X  
 When mode 2 was removed, implementation of any of the defined security suites for the remaining security mode is required. This sentence limits the suites to the non-certificate security suites which was not the intention of the BRC when this was accepted.  
 SuggestedRemedy  
 Change "ECMQV manual, NTRUEncrypt raw 1, or RSA-OAEP raw 1" with "ECMQV manual, ECMQV implicit, ECMQV X.509, NTRYEncrypt raw 1, RSA-OAEP Raw 1, or RSA-OAEP X.509 1"  
 Proposed Response Response Status O

Cl 10 SC 10.3.5.1 P 296 L 47 # 19  
 Barr, John Motorola  
 Comment Type E Comment Status X  
 The MLME commands and frame formats imply that ChallengeResponse is defined with a fixed length for all security suites. ChallengeResponse was left out of Table 105.  
 SuggestedRemedy  
 Add ChallengeResponse to Table 105 with proper Length, Value, and Description from other portions of clause 10 or by definition by Rene Struik.  
 Proposed Response Response Status O

Cl 10 SC 10.4.2 P L # 245  
 Shvodian, William XtremeSpectrum  
 Comment Type T Comment Status X  
 It looks like certificate use has been added for Ntru and RSA. Why are these not listed as sub-suites in Table 95 as they are for ECMQV  
 SuggestedRemedy  
 Be consistent. Either add sub-suites for Ntru and RSA or delete them for ECMQV.  
 Proposed Response Response Status O

Cl 10 SC 4.1.1 P 300 L 15 # 200  
 Rasor, Gregg Motorola  
 Comment Type TR Comment Status X  
 The previous draft was changed to specify a "new" encryption scheme for NTRUEncrypt, referencing EESS #1, ees251ep3. The current draft specification is supposed to represent a guide to implementers that will stand the test of time as a standard if approved. It is a fact that the evolving NTRUEncrypt scheme has been proven vulnerable to attacks that completely render the encryption useless. Additionally, the immature, relatively untested and unreviewed nature of this cryptographic scheme exposes the proposed standard to early obsolescence in this unproven element.  
 SuggestedRemedy  
 Completely remove the NTRUEncrypt security suite from the draft specification until such time that the evolving NTRUEncrypt scheme is stable enough for reliable commercial deployment.  
 Proposed Response Response Status O

Cl 10 SC Table 102, 103, 104 P 291 L 24 # 244  
 Shvodian, William XtremeSpectrum  
 Comment Type E Comment Status X  
 What is the purpose of listing DEV Address as a separate line item in the ECC Certificate frame object format? The definition of DEV address is consistent throughout the draft. Listing it here is redundant, and as some would say say, evil.  
 SuggestedRemedy  
 Remove DEV address fdom these tables.  
 Proposed Response Response Status O

P802.15.3 Draft 14 Comments

Cl 11 SC 2.7.1 P L # 68  
gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type TR Comment Status X

Table-120:Definition of MIFS and BIFS: Since MIFS is less than SIFS, make them same as SIFS. The channel time saving by the use of MIFS is very little given the probability of its use, but this is another unnecessary IFS that the MAC has to deal with and it is not optional. Making MIFS same as SIFS adds to uniformity at the lowest level of MAC. If the committee is so bent on saving channel time, please explore putting back the chaining of commands and similar options where the saving is huge and not just a few (at most 10+) microseconds.

SuggestedRemedy

Change MIFS to SIFS in the draft

Proposed Response Response Status O

Cl 11 SC 2.7.1 P L # 69  
gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type TR Comment Status X

Table-120:PLEASE summarise all PHY parameters (aCCADetectTime, aPHYSIFSTime etc.) in a table at one place instead of spreading them all around the PHY clause (something on the lines of Table-64, for MAC, is very desirable from implementors' view). Although Table-65 provides a list of PHY parameters in a table, the values have to be searched through in those referred clauses, which can easily be avoided.

SuggestedRemedy

Create a summary table of PHY parameters instead of spreading them all over the PHY clause(s).

Proposed Response Response Status O

Cl C SC C.1.4 P 366 L 27 # 20  
Barr, John Motorola

Comment Type E Comment Status X

Market suitability criteria seems to be incomplete.

SuggestedRemedy

Change "The protocols have been reviewed by" to "The protocols have been reviewed by (whomever reviewed these protocols)"

Proposed Response Response Status O

Cl E SC P L # 72  
gubbi, RAJUGOPAL BROADCOM, CORP

Comment Type E Comment Status X

Are the references to draft standards allowed? I thought IEEE allowed references only to the already existing standards. Please check.

SuggestedRemedy

Proposed Response Response Status O

Cl E SC Table E.3 P 392 L 11 # 176  
Heberling, Allen XtremeSpectrum

Comment Type E Comment Status X

Missing the clause xref for the Non-secure beacon.

SuggestedRemedy

Please make the requested change.

Proposed Response Response Status O

Cl E SC Table E.3 P 392 L 51 # 175  
Heberling, Allen XtremeSpectrum

Comment Type TR Comment Status X

[PM/CWB] Delete the CWB entry from the table. It is not needed. The use of the CWB IE in the wake beacon only works if the sleeping SPS DEV hears the wake beacon and in that case the SPS DEV doesn't need the CWB IE. And in the other case it doesn't matter, because it can't use the info in the CWB IE because it didn't hear it. The simpler solution is to implement the following rule for item 3 in clause 8.13.2.3, P219, L3, and for a combined item 2 & 3 in clause 8.6.4, P198, L41: - If the DEV is in PSPS or SPS mode, the announcement shall be made in aMinBeaconInfoRepeat subsequent beacons starting with the system or SPS wake beacon.(solution by KO)

SuggestedRemedy

Make the requested deletion.

Proposed Response Response Status O

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**Cl E**      **SC Table E.4**                      **P 397**      **L 16**                      # **177**  
Heberling, Allen                                      XtremeSpectrum

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

[PM/SPS-4] Delete MLF23.3 I don't have a problem with making Hibernate, PSPS and 1 SPS set mandatory. However, I do get heartburn when 4 SPS sets are mandated. A 15.3 DEV can support up to 252 streams yet we only mandate that a DEV support at least 1 isochronous stream. We leave it optional as to how many more streams a DEV or a PNC capable DEV may handle.

*SuggestedRemedy*

Make the requested change.

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

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**Cl E**      **SC Table E.4**                      **P 397**      **L 16**                      # **208**  
Roberts, Richard                                      XtremeSpectrum

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

Delete MLF23.3 I don't have a problem with making Hibernate, PSPS and 1 SPS set mandatory. However, I do get heartburn when 4 SPS sets are mandated. A 15.3 DEV can support up to 252 streams yet we only mandate that a DEV support at least 1 isochronous stream. We leave it optional as to how many more streams a DEV or a PNC capable DEV may handle.

*SuggestedRemedy*

Make the requested deletion.

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

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**Cl E**      **SC Table E.5**                      **P 395**      **L 50**                      # **117**  
Heberling, Allen                                      XtremeSpectrum

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

[CTA/isoch] support of pseudostatic streams are not mandatory, while support for an isochronous stream (would imply dynamic) is./KO

*SuggestedRemedy*

Add two subrequirements to MLF13. 13.1 dynamic isochronous stream, 8.4.4.1, M 13.2 pseudo-static isochronous steam, 8.4.4.1, O

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

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