IEEE P802.15
Wireless Personal Area Networks

Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)
Title	**TG3 SB1 comment resolution**
Date Submitted	[13 January, 2003]
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Re:	[]
Abstract	[This document is a record of comment resolutions for SB1.]
Purpose	[To provide a record of the comment resolution for SB1.]
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1. Comment resolution in Ft. Lauderdale

1.1 Monday, 13 January 2002

Meeting called to order at 1:14 pm EST.

PM/SPS-4 comments

CID 253 - Accept

CID 230 - Accept in principle, Resolve as indicated in CID 253

CID 258 - Accept in principle, Resolve as indicated in CID 253

CID 94 - Accept in principle, Resolve as indicated in CID 253

CID 316 - Accept in principle, Resolve as indicated in CID 253

CID 157 - Accept in principle, Resolve as indicated in CID 253

CID 220 - Accept in principle, Resolve as indicated in CID 253

CID 380 - Accept in principle, Resolve as indicated in CID 253

PM/SPS-4

CID 83 - Accept in principle, Delete item MLF 23.3 from Table E.4. In item MLF 23.2 Table E.4, remove “& - FD3” Remove item FD3 from Table E.1.

CID 84 - Accept in principle, Resolve as indicated in CID 83.

CID 259 - Accept in principle, Resolve as indicated in CID 83.

CID 317 - Accept in principle, Resolve as indicated in CID 83.

CID 381 - Accept in principle, Resolve as indicated in CID 83.

CID 221 - Accept in principle, Resolve as indicated in CID 83.

CID 95 - Accept in principle, Resolve as indicated in CID 83.

CID 231 - Accept in principle, Resolve as indicated in CID 83.

CID 158 - Accept in principle, Resolve as indicated in CID 83.

Misc PS issues:

CID 780 - ACCEPT IN PRINCIPLE. The terms power management and power save were used interchangeably but this is confusing. The TG has agreed to change all the occurances of 'power management' to be 'power save' for consistency.

CID 295 - ACCEPT IN PRINCIPLE. Add the CWB IE to the table with entries: 'shall ignore' for all three entries.

CID 296 - ACCEPT IN PRINCIPLE. Add the CWB IE to the table with entries: 'shall not request', 'shall not request', 'shall not send', 'shall not send'

CID 293 - Accept.

CID 128 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 293.

CID 122 - ACCEPT IN PRINCIPLE. Change the description to "The wake beacon interval is the number of superframes, including the current one, between wake beacons, {xref 8.13}. For example, a wake beacon interval of 8 indicates that the DEV is requesting a wake beacon every 8th beacon, {xref Figure 137}."

CID 44 - Accept.

CID 311 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 44.

CID 123 - Accept

CID 310 - ACCEPT IN PRINCIPLE. Add a reason code to 7.5.7.2 "Unique Wake Beacon Interval required." Add to 8.13.2.1 "The PNC may require that all PS sets have a unique Wake Beacon Interval. For example, the PNC may reject a request to create a PS set with a Wake Beacon Interval of 4 if there is a PS set that already has this value. If the DEV requires this Wake Beacon Interval, it may join the existing PS set."

CID 509 - Table: Do we rename PS mode as PM mode? Or do we use another name? DEV Mode? (DM)

CID 511 - Table: Rename some of the parameters? Resolve after CID 509.

CID 586 - Table: Resolve after CID 509

CID 503 - Accept

CID 818 - ACCEPT IN PRINCIPLE. Change "For a piconet that has pseudo-static CTAs, NbrOfChange-Beacons shall be at least four." to be "For a piconet that has pseudo-static CTAs, NbrOfChangeBeacons shall be at least {xref mMaxLostBeacons}."

CID 753 - ACCEPT IN PRINCIPLE. The CTA location does not change relative to the beacon and so the CTA does not change (CTAs only have meaning measured relative to the beacon). The location of the psuedo-static CTA relative to previous beacons will change, but the source and destination DEVs will be informed prior to that by the piconet parameter change IE. If there are pseudo-static CTAs, the piconet parameter IE will be sent at least mMaxLostBeacons prior to the change. Thus, even if the DEVs miss some of the announcements, they will either a) hear at least one of them or b) miss all but hear the first beacon with the new superframe duration. To clarify this, change "A PNC shall not change pseudo-static CTAs" to be "A PNC shall not change either the pseudo-static CTAs or the pseudo-static CTA blocks"

CID 71 - Table, resolution will be to add an MLME-PICONET-PARM-CHANGE.indicate that goes up to the other DEVs in the piconet after the change occurs. Add this to Figure 134. Change text in 10.3 to reflect the fact that the change of BSID value in the PIB occurs after the MLME-PICONET-PARM-CHANGE.request. Note: the BSID will become a read-only attribute. Need text for this.

Recessed at 3:47 pm EST for potential TG3 official business.

Called to order for comment resolution at 3:50 pm EST.

CID 510: Jay to check all of the xrefs to make sure that they point to the correct location. Due Tuesday afternoon at 3:30 pm.

CID 513: REJECT. The participation of the PNC DME is not required to respond to this command as required by the draft standard. Thus the .indication and .response primitives are not required in this instance.

CID 43: ACCEPT IN PRINCIPLE: “Add NumberOfPiconets to describe how many PiconetDescriptionSet fields are specified. Add a parameter for the "NumberOfPSStructureSet" to specify how many PSStructure-Set fields are specified. Add needs a NumberOfDEVInfoFields, 'type: integer, valid range: 2 to mMaxNum-ValidDEVs', add mMaxNumValidDEVs to table 64 with a value of 256-3-10 = 243, add text to 7.2.3 ‘The maximum number of valid DEVs, mMaxNumValidDEVs includes the PNC and the NbrIDs but not the reserved IDs, the BcstID, McstID or the UnassocID.’, Add to 7.5.4.2, page 145, line 20, change ‘broadcast and multicast ID.’ to be ‘the BcstID, the UnassocID, the McstID or the reserved IDs, {xref 7.2.3}.’ in 8.3.3, change ‘In addition, the PNC shall send the piconet information for each of the DEVs that are a member of the piconet at least once every mBroadcastDEVInfoDuration via a PNC information command.’ to be ‘In addition, the PNC shall send the piconet information for each of the DEVs once every mBroadcastDEVInfo-Duration via a PNC information command. When the PNC broadcasts this command, the PNC shall include all DEVs that are associated in the piconet, including the DEV personality of the PNC, as well as an entry for the PNCID.’, in 8.2.3, page 164 line 38 following ‘to the chosen PNC capable DEV.’ add ‘In the PNC information command, the PNC shall include all DEVs that are associated in the piconet, including the DEV personality of the PNC, as well as an entry for the PNCID.’ and a re-definition of the DEV InfoSet as follows:

Name:Piconet Decription Set
Type: Set of PiconetDescriptions as defined in Table 6.
Valid Range: a set containing zero or more instances of a PiconetDescription
Description: The PiconetDescriptionSet is returned to indicate the results of the scan request.

Name: DEVInfoSet
Type: A set of DEVInfo fields as defined in {xref 7.5.4.2}.
Valid Range: a set containing 3 to mMaxNumbValidDEV instances of fixed length DEVInfo fields.
Description: The DEVInfoSet is returned to indicate the results of a PNCInfo request.

Name: ACLRecordSet
Type: A set of ACLRecords as defined in {xref 7.5.4.4}
Valid Range: a set containing 0 or more instances of variable length ACLRecords. The maximum number of instances depends on the size of the records, {xref pMaxFrameSize} and the length of the secure command security fields, {xref 7.3.3.2}
Description: The ACLRecordSet is returned to indicate the results of a ACLInfo request.”

CID 514: REJECT. The participation of the PNC DME is not required to respond to this command as required by the draft standard. Thus the .indication and .response primitives are not required in this instance.

CID 515: REJECT. The participation of the PNC DME is not required to respond to this command as required by the draft standard. Thus the .indication primitive is not required in this instance.

CID 516: ACCEPT IN PRINCPLE. Replace the first sentence with ‘The DME is informed of the PS mode change to ACTIVE.’

CID 588: ACCEPT IN PRINCIPLE. Change 'PS mode' to be 'SPS and/or PSPS mode' and change this in figure 144, also on page 216 line 4, page 217 line 19 and page 281, line 13.

CID 593: ACCEPT IN PRINCIPLE. Change "number PS set structures" to "number of current PS sets", and "The PS set structure" to "Each PS set structure". Change 'Number of supported PS sets' to be 'Maximum Supported PS Sets' in Figure 92 and the following text. Also replace where it occurs in clause 8. Add a new field, "Number of Current PS Sets" with definition, 'The Number of Current PS Sets field is a count of the number of PS set structures in this command as well as the number of currently active PS sets in the piconet.'

Recessed for dinner at 5:30 pm EST.

Meeting called to order at 6:41 pm EST

CID 824 - ACCEPT. Renumber 18.x as 17.x and update the rest of the numbers in the table accordingly.

CID 138 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 298.

CID 298 - ACCEPT

CID 719 - ACCEPT

CID 394 - PM renaming, table resolve after CID 509

CID 388 - Table, is there another way to do this.

CID 91 - Gilb to write interoperability text

CID 154 - Reject using old text, JPKG to do this.

CID 237 - ACCEPT IN PRINCIPLE. Add parameter to MLME-CREATE-ASIE.request:"ASIE-index", integer type, range is application specific, definition: 'Used to uniquely identify an ASIE.'

CID 168 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 237.

CID 238 - ACCEPT IN PRINCIPLE. Add parameter to MLME-CREATE-ASIE.confirm: "ASIE-index" (note type, range and definition defined in CID 237.)

CID 169 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 238.

CID 170 - ACCEPT IN PRINCIPLE. Add the ASIE index to the MLME's as indicated in CIDs 237 and 238.

CID 173 - Withdrawn, 13 January 2003.

CID 816 - ACCEPT IN PRINCIPLE. This field is no longer used (and hasn't existed for at least 3 drafts). Delete the sentences "If the application data identifier field was set to "0" in the request, the MAC shall assign a new application data identifier that is different from that assigned to other current ASIEs. The "0" value application data identifier shall not be assigned to any ASIE. If the requested application data identifier belongs to an existing ASIE, the MAC shall modify the persistence of that ASIE, and reply with the same application data identifier in the indicate. If the repeat field an existing ASIE is set to "0", the PNC shall terminate the existing ASIE."

CID 297 - ACCEPT.

CID 125 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 297.

CID 401 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 297.

CID 403 - ACCEPT IN PRINCIPLE. After a DEV gains membership in the piconet, i.e. after it associates if authentication is not required or after it authenticates if authenticationis required, the PNC broadcasts the PNC info command that contains not only the DEVID and DEV addresses of every DEV in the piconet, it also contains their capabilities. The complete list of DEVs in the piconet might make the beacon too long, so the standard uses the broadcast of the PNC info command, which can be fragmented, to communicate the list of DEVs in the piconet. This is described in 8.3.3. No change is required for the draft because this functionality is already provided.

CID 404 - ACCEPT IN PRINCIPLE. "Change the "Valid range" of "ResultCode" as follows: SUCCESS, TIMEOUT. Change the corresponding "Description" to 'Indicates if the primitive completed successfully or timed out.' In line 47, change "the result of the attempted association" to 'the reason why the attempted association failed as indicated in the association response command or indicates that the association was successful.'

CID 406 - REJECT. The list of active DEVs in the piconet is passed to the DME via the MLME-PNC-INFO.confirm, see also the resolution of CID 403. This MLME is used to notify DEVs that are already in the piconet that a new DEV has joined. The DEVs that are already in the piconet should already have the membership information, if not they can request in a directed frame from the PNC using the PNC Info Request command.

CID 555 - ACCEPT IN PRINCIPLE. This IE is only used to notify the existing members of the piconet about a new member that has just joined. DEVs that join the piconet after this DEV will find out about the existing DEVs in the piconet when the PNC broadcasts the PNC Info command after the new DEV joins the piconet. See also the resolution of CID 403. No change required for the draft since the requested capability is provided by the PNC Info command.

CID 453 - ACCEPT IN PRINCIPLE. In Figure 49 change "Capabilities" to "Overall Capabilities" and in lines 14-15 change "The capabilities" to "the Overall Capabilities"

CID 627 - ACCEPT IN PRINCIPLE. Change the name to mAssocRespConfirmTime which is defined in 8.15, Table 64.

CID 629 - REJECT. The PNC info command provides the requested functionality as described in 8.3.3. Thus the DEV association IE does not need to be expanded. See also the resolution of CID 403.

CID 75 - ACCEPT.

CID 630 - ACCEPT IN PRINCIPLE. Change 'ack with' to 'Imm-ACK with'. (2 places) The association IE is sufficient for this process as the PNC info command will be used to update the new DEV with the complete membership in the piconet as described in 8.3.3. See also the resolution of CID 403.

CID 634 - REJECT. The association IE serves two purposes. The first is to tell other DEVs in the piconet that a new DEV has joined. The second, perhaps more important purpose is that this IE is used to complete the association process for the requesting DEV. When the DEV receives this IE in the beacon, it knows that it has successfully associated.

CID 643 - ACCEPT.

CID 642 - REJECT. DEVs that remain associated already know the members of the piconet (or they can find out by requesting this information from the PNC with the PNC info command). They do need to know when a DEV is disassociated and the association IE provides this information.

CID 644 - ACCEPT IN PRINCIPLE. Change "ack" and "ACK" to "Imm-ACK", and "ASSOCIATE-INFO" to "ASSOCIATION-INFO" As indicated in the resolution of CID 642, the association IE is sufficient to

inform the DEVs in the piconet that a DEV has disassociated from the piconet. See also the resolution of CID 403.

CID 42 - ACCEPT IN PRINCIPLE. Define mAssocRespConfirmTime to be 4*mMaxSuperframeDuration.

CID 314 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 42.

CID 142 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 42.

CID 378 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 42.

CID 256 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 42.

CID 218 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 42.

CID 155 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 42.

CID 228 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 42.

CID 92 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 42.

CID 712 - REJECT. The source DEV finds out information about the CTA in channel time request process. Some of the information is sent by the source to the PNC with the channel time request command and some of the information is passed back by the PNC to the source DEV with the channel time response command. The only DEV not involved in the negotiation is the destination and so it is the only intended target of this information element.

CID 77 - ACCEPT IN PRINCIPLE. Change 'If the CAP is present in the superframe, ...' to be 'If the CAP is present in the superframe and the PNC allows data in the CAP, ...'.

CID 146 - ACCEPT.

CID 279 - ACCEPT.

CID 291 - ACCEPT.

CID 126 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 291.

CID 277 - ACCEPT IN PRINCIPLE. Resolve as indicated in CID 291.

CID 650 - ACCEPT. See also CID 291.

CID 493 - REJECT. The MAC/MLME does not perform any measurements, rather the DME responds via MLME-CHANNEL-STATUS.respone primitive with the numbers that it has been collecting over a previous measurement window size.

CID 492 - REJECT. These parameters are not coming from the requestor, rather the DME is keeping track of the channel status so that it can compute channel time requests and to determine which PHY data rates to use.

CID 554 - ACCEPT IN PRINCIPLE. Change to 'The stream index, 7.2.5, indicates the stream corresponding to the channel time allocation.'

CID 561 - ACCEPT IN PRINCIPLE. Change "about certain characteristics of the CTAs" to "of certain characteristics of a CTA". An allocated CTA would be an allocated channel time allocation, which would be redundant.

CID 476 - Tabled, M. Schrader to write a definition for SPS and ACTIVE CTAs

1.1.1 Waking up HIBERNATE mode DEVs

PM/Wakeup CID 262, CID 98, CID 384, CID 224, CID 234, CID 320, CID 161, CID 99, CID 235, CID 385, CID 321, CID 225, CID 162, CID 263, CID 255, CID 260, CID 382, CID 318, CID 96, CID 222, CID 232, CID 159, CID 97, CID 319, CID 261, CID 160, CID 233, CID 223, CID 383, CID 100, CID 386, CID 322, CID 163, CID 236, CID 226

Allow DEV to request CTAs with HIBERNATE DEV. PNC allows or rejects and responds with the channel time response command but doesn't allocate until the HIBERNATE DEV changes mode to ACTIVE. If it accepted, use Reason Code "Success, target DEV in HIBERNATE mode" When the DEV wakes up, begin allocating the CTAs as normal with a CTA status IE to notify people.

2. Status summary

2.1 Status at opening of Ft. Lauderdale

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Table 1—Ballot resolution at opening of Ft. Lauderdale meeting

Type	SB1
T (technical)	447
E (editorial)	379
Total	826

2.2 Status at closing in Ft. Lauderdale

Table 2—Ballot resolution as of close of Ft. Lauderdale meeting

Type	SB1	SB1 (after resolution)	Unresolved as of 17 January, 2002
T (technical)	447		
E (editorial)	379		
Total	826		