

**IEEE P802.15**  
**Wireless Personal Area Networks**

Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)	
Title	<b>TG3 LB19 comment resolution</b>	
Date Submitted	[9 September, 2002]	
Source	[James P. K. Gilb] [Apparent Technologies] [9921 Carmel Mountain Rd. #247, San Diego, CA 92129]	Voice: [858-538-3903] Fax: [858-538-3903] E-mail: [gilb@ieee.org]
Re:	[]	
Abstract	[This document is a record of comment resolutions for LB19.]	
Purpose	[To provide a record of the comment resolution for LB19.]	
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Release	The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15.	

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## 1. Opening report

### 1.1 Status at opening in Monterrey

**Table 1—Ballot resolution as of opening of Monterrey meeting**

Type	LB19
T (technical)	72
TR (Technical required)	326
T and TR	398
E (editorial)	153
Total	551

### 1.2 Process for comment resolution

- a) Add topic category to comments
- b) Identify hot button topics
- c) Schedule resolution of hot button topics
- d) Begin resolution by topic of comments
  - 1) Write resolutions if possible
  - 2) Table issues that need more work
  - 3) Add to hot topics if necessary
- e) Resolve hot button topics
- f) Get all text written and posted
- g) Hold BRC meeting if required

### 1.3 Editing process

- a) Put editorial edits into draft (already started)
- b) Send clauses to editors
- c) Integrate results
- d) Post interim revision of the draft for review.
- e) Final edits
- f) Post for letter ballot

## 2. Comment resolution in Monterey

### 2.1 Hot topic issues

CTRB - fixed vs. variable length format?

Monday 3:30 pm

Bit order

Monday 7:00 pm

Probe - possible error code?

Monday 7:00 pm after bit order

PNService IE - use probe instead of command?

Monday 7:00 pm after probe

Notifying DEVs of new CTA - Directed vs. in beacon (previously resolved by BRC as directed)

Tuesday Morning, 8:00 am.

Open/association MTS - Do we still need them?

Tuesday 1:00 pm

Security modes - Do we have 2 or 3 modes?

ACL/PIB

Wednesday 8:00 am

PM/SPS - SPS mandatory or optional?

Wednesday 1:00 pm

### 2.2 Monday resolution

ACK

272 - Accept

274 - ACCEPT IN PRINCIPLE. On line 36, change "Dly-ACK request bit" with "Dly-ACK policy and the DlyACK request bit", same change on line 48.

289 - Accept

233 - REJECT. The ACK serves the purpose of telling the transmit state machine if it was successful in getting the frame. The response is used to close the process at the DME level.

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310 - Accept	1
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312 - Accept	3
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270 - Accept	5
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215 - Accept	7
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526 - Proposed resolution, pending more text: "1) This is fixed by referencing both "Dly-ACK policy and Dly-ACK request bit" being set. 2) The FCSL is now notified in the MAC-ISoch-DATA.confirm as indicated in CID 310. 3) Same resolution as 1). 4) Move the sentence "The destination DEV may change the max burst value in each Dly-ACK frame." to the end of the previous paragraph that ends "... max num (sp) frames, as provided in the Dly-ACK frame 7.3.2.2." (note spelling error). 5) Change "souce" to "source" 6) Add a sentence that says "The FCSL would then notify the DME that the Dly-ACK negotiation failed. The DME then knows that a modification of the channel time allocation might be required." 7) Some more text? Jay to write suggested new text to clarify, due Tuesday by 1:00 pm. 8 ) Jay to write suggested text, due Tuesday by 1:00 pm."	9
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523 - Accept	19
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195 - Accept in principle: ACCEPT IN PRINCIPLE. Add the text for clause 6 and clause 8 from Clause 2.2.7 of 02/273r17 to describe the use of the ASIE.	21
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347 - Accept in principle: ACCEPT IN PRINCIPLE. Add the text for clause 6 and clause 8 from Clause 2.2.7 of 02/273r17 to describe the use of the ASIE.	24
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331 - Accept in principle: ACCEPT IN PRINCIPLE. Add the text for clause 6 and clause 8 from Clause 2.2.7 of 02/273r17 to describe the use of the ASIE.	27
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217 - Accept	30
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318 - ACCEPT IN PRINCIPLE. Change to UnassocID and change the acronym list to be UnassocID - unassociated ID.	32
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530 - ACCEPT. Change from "Before a DEV has completed the association process, all frames between the PNC and the DEV shall be exchanged either in the CAP of the superframe or in an association MTS." to be "Before a DEV has completed the association process, all frames sent to the PNC by the DEV shall be exchanged either in the CAP of the superframe or in an association MTS."	35
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Add additional sentence at the end of the first paragraph "For association using MTS, the association response command is sent in an MTS with PNCID as source and UnassocID as destination."	40
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34 - Accept	43
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35 - Accept in principle: ACCEPT IN PRINCIPLE. Insert the PiconetServicesInquiry field (values: enumeration; REQUEST, NOREQUEST; Requests that the PNC sends the services information about the piconet as described in {xref AssociationRequest}) into the table. The capability field is still used.	45
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133 - ACCEPT IN PRINCIPLE. Insert the PiconetServicesInquiry field (values: enumeration; REQUEST, NOREQUEST; Requests that the PNC sends the services information about the piconet as described in {xref AssociationRequest}) into the table. The capability field is still used.	49
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149 - Accept.	53
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- 411 - Accept 1
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- 425 - Can we remove the application data ID? Ask M. Schrader. Table until response, AI for JPKG to contact him. 3
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- 426 - Can we remove the DEVID? Ask M. Schrader. Table until response, AI for JPKG to contact him. 6
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- 414 - 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. 8
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- 417 - ACCEPT IN PRINCIPLE. Delete the capability field, change the name of the Association status field to be "DEV characteristic". In the new DEV characteristic field, put in a 1 bit Association status field that is 0 for disassociated and 1 for associated, a 5 bit "Supported data rates" with an xref to where defined in 7.11 (or where this goes in the future) and 2 reserved bits. Check in other places where Association status field is defined to see if they need to be changed to match. 12
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- 418 - ACCEPT IN PRINCIPLE. DEVs are not required to authenticate to other DEVs in a piconet. They are only required to authenticate with the PNC in a secure piconet. However, this status is not useful here, therefore it will be removed as valid value as indicated in the resolution of CID 417. 18
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- 415 - ACCEPT IN PRINCIPLE. This is already required in 8.3.1, page 164, lines 50-51 where the PNC repeats it at least aMinBeaconInfo which has a value of 4. 22
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- 419 - ACCEPT IN PRINCIPLE. Move DEV address to the first position in this IE and in the PNC info command's DEV record on page 139, figure 64. 25
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- 33 - ACCEPT IN PRINCIPLE. Delete the three sentences. In 8.3.4 change the last sentence in the paragraph on page 167, line 1 to be 'Similarly, if the beacons from the PNC are not received by the DEV for longer than the ATP, the DEV shall consider itself disassociated from the piconet and may try to associate again. The DEV notifies the DME that the ATP expired using the MLME-ATP-EXPIRED.ind primitive.' Keep MLME-SYNCH.{request,confirm} as they are used for the association process. Delete figure 119. Rename MLME-SYNCH-LOST as MLME-ATP-EXPIRED. Add text to 8.3.1 that indicates that the DEV needs to perform an MLME-SYNCH prior to starting the association process. {Ed. note: Generate the text}. 28
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- 18 - Accept 36
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- 37 - ACCEPT IN PRINCIPLE. Add a second MLME-ASSOCIATE.ind to the MSC after the second association request command. Add the OrigID to the MLME-ASSOCIATE.ind and put a definition in the table that says it is either the UnassocID or the DEVID that was just assigned by the PNC. Add DEVID=UnassocID to the first MLME-ASSOCIATE.ind and DEVID=0xzz to the second one. 38
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- 439 - Accept. 43
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- 53 - ACCEPT IN PRINCIPLE. Delete aDEVIDReuseTime. Change 'However, the reallocation of the same DEVID by PNC shall be at least aDEVIDReuseTime after the disassociation of the DEV that was allocated the same DEVID.' to be 'After the PNC sends a disassociation command to a DEV, the PNC shall not reuse the same DEVID of that DEV until at least two times the ATP duration for that DEV has passed.' Add to the ATP discussion in disassociation 'The PNC shall send a disassociation command to a DEV that sends a frame after its ATP has expired.' 45
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- 437 - ACCEPT IN PRINCIPLE. Add that the units are in milliseconds here and in 7.5.1.2. 52
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- 43 - ACCEPT. Double check to make sure that all of the IEs that need to be there are in Table 39 (e.g. PSPS status and SPS status). 1  
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- 38 - REJECT. Although in some cases it may help to have the CTAs last so that a DEV can shutdown early if it has not decoded a CTA assigned to that DEV within MaxProcessedCTAs. However, with the CTAs first, the DEVs have more time to react to the channel time allocations and the CTAs start in a known location. 4  
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- 405 - REJECT. Although in some cases it may help to have the CTAs last so that a DEV can shutdown early if it has not decoded a CTA assigned to that DEV within MaxProcessedCTAs. However, with the CTAs first, the DEVs have more time to react to the channel time allocations and the CTAs start in a known location. 8  
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- 413 - ACCEPT. Double check to make sure that all of the IEs that need to be there are in Table 39. 12  
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- 406 - ACCEPT IN PRINCIPLE. Change the figure 9 title to be 'Piconet synchronization parameters field format.' Change the sentence 'All beacons include the piconet synchronization parameter field.' to be 'All beacons include the piconet synchronization parameter field, as shown in the frame formats for the non-secure, {xref} and secure beacons, {xref}.' 14  
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- 94 - Accept. 19  
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- 192, 345 - Table, everyone to ask for help. 21  
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- 281 - Accept 23  
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- 467 - REJECT. The PNC DEV-Address is no longer used to distinguish the piconet, instead BSID identifies the piconet (with the PNID). However, many parts of the standard refer to the Parent PNC DEV-Address and these will be changed to refer to the Parent BSID. 25  
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- 433 - REJECT. The overlapping PNID element is only used to report PNIDs. The PNC is required to change its PNID if an overlapping piconet is found that uses the same one. However, the PNC is not required to change its BSID. The actual number of piconets using the PNID is not important, rather it is simply the existence of at least one piconet with that PNID that matters. Furthermore, this IE is sent even if only a frame and not the beacon is detected on another channel. In this case, the DEV doesn't know the BSID. 29  
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- 242 - ACCEPT IN PRINCIPLE. Change this sentence frag.: <from> "...remove the parent PNC DEV address element from ..." <to> "...remove the parent BSID IE from ..." 35  
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- 238 - ACCEPT IN PRINCIPLE. Change this sentence frag.: <from> "...remove the parent PNC DEV address element from ..." <to> "...remove the parent BSID IE from ..." 38  
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- 408 - ACCEPT IN PRINCIPLE. After the sentence ending "... the CAP of the current superframe." add "The CAP command bit applies to all commands except for the association request command, which is covered by the CAP association bit." 41  
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- 67 - Accept. 45  
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- 74 - ACCEPT IN PRINCIPLE. Add a new timing parameter called BIFS = SIFS + aCCADetectTime and use it instead of RIFS in the backoff procedure. Add BIFS - backoff interframe spacing to the acronyms clause. Modify clause 11 to match this new usage. 47  
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- 451 - 'When the DestID of this command is PNCID, the values in the command shall correspond to all frames exchanged by the DEV with other DEVs in the piconet. When the DestID of this command is a non-PNC DEVID, the values in the command shall correspond to the frames exchanged between the requesting DEV and the target DEV.' 51  
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### 3. Status at closing in Monterrey

**Table 2—Ballot resolution as of close of Monterrey meeting**

Type	LB19	Unresolved as of 13 September, 2002
T (technical)	55	?
TR (Technical required)	325	?
T and TR	380	?
E (editorial)	133	?
Total	513	?

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