

# IEEE 802.15.1 D0.6

# Letter Ballot Comments

Comment type (editorial, Editorial, technical, Technical) **T**

| Clause Number           | O        | Problem Specification  | Proposed Solution   |
|-------------------------|----------|--|---|
| Resolution Required     | Y        | Hole draft 0.6   | Revise errata parts of Bluetooth 1.0B spec.   |
| Comment Sequence Number | atp06    |  |   |
| Commenter Last Name     | Palin    |  |   |
| Resolution Required     | Y        | Bluetooth 1.0B changes need to be incorporated into the 802.15 draft. Since 1.0b was released in December after the letter ballot was prepared the draft needs to be returned to the task group to assess the range and impact of changes.   | Incorporate Bluetooth 1.0B specifications into 802.15 draft standard.   |
| Comment Sequence Number | bpk01    |  |   |
| Commenter Last Name     | Kraemer  |  |   |
| Resolution Required     | Y        | In the whole Draft0.6  | Rvise the errata parts as long as the specification is based on Bluetooth specification   |
| Comment Sequence Number | fxw28    |  |   |
| Commenter Last Name     | Watanabe |  |   |
| Resolution Required     | Y        | The Bluetooth specification from which IEEE P802-15/D0.6 draft is based on has been updated and revised since this IEEE P802-15/D0.6 draft was released for letter ballot 1 voting. The Bluetooth specification was updated from version 1.0A dated July 26, 1999 to version 1.0B dated December 1, 1999.. | All sections of the IEEE P802-15/D06 draft must be reviewed and revised as necessary to conform to the latest text and graphics provided in Bluetooth specification 1.0B. |
| Comment Sequence Number | mdm02    |  |   |
| Commenter Last Name     | McInnis  |  |   |

Comment type (editorial, Editorial, technical, Technical) **T**

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|-------------------------|--------|---|--------------------------|
| Resolution Required     | Y      | [Global]There are a number of variables referenced, with no defaults are other information -- -pageTO (page 98) -- -pagerespTO (page 101) -- -newconnectionTO (page 102) -- -inqrespTO (page 104) -- -inquiryTO (page 104) -- -holdTO (page 107) -- -supervisionTO (page 115) |                          |
| Comment Sequence Number | NG216  |   |                          |
| Commenter Last Name     | Golmie |   |                          |
| Resolution Required     | Y      | Spec is not completed   | Finish the spec          |
| Comment Sequence Number | pwk 17 |   |                          |
| Commenter Last Name     | Kinney |   |                          |
| Resolution Required     | Y      | There is no defined state of coexistence in this spec as required by the PAR  | Add required coexistence |
| Comment Sequence Number | pwk 18 |   |                          |
| Commenter Last Name     | Kinney |   |                          |
| Resolution Required     | Y      | Figures and Tables inconsistant with text   | Update                   |
| Comment Sequence Number | tms07  |   |                          |
| Commenter Last Name     | Siep   |   |                          |
| Clause Number 1.1       |        | Problem Specification   | Proposed Solution        |
| Resolution Required     | Y      | [2nd paragraph]The sentence, "Coexistence is defined as the trait of reducing the amount of mutual degradation to the lowest degree feasible.", is not appropriate, nor does it match the current one for 802.15 TG2  | Delete this sentence.    |
| Comment Sequence Number | NG006  |   |                          |
| Commenter Last Name     | Golmie |   |                          |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |          |   |   |
|-------------------------|----------|---|---|
| Resolution Required     | Y        | The definition of coexistence that includes the phrase "reduce the amount of mutual degradation to the lowest degree feasible" may not make commercial sense and is clearly not implemented in the 802.15.1 standard. It could clearly be reduced more. | Change definition.  |
| Comment Sequence Number | Sjs01    |   |   |
| Commenter Last Name     | Shellham |   |   |
| <b>Clause Number 2</b>  |          |   |   |
| Resolution Required     | Y        | All (7) Bluetooth references are inappropriate, as they are not available for reference.  | Delete these 7 Bluetooth references.  |
| Comment Sequence Number | NG007    |   |   |
| Commenter Last Name     | Golmie   |   |   |
| Resolution Required     | Y        | The entry AAL5, ITU 1663, 1994 is bogus.  | If AAL5, then ITU-T I.363.5, B-ISDN ATM Adaptation Layer specification: Type 5 AAL ,8/1996. -- If IETF 1663, then Internet Engineering Task Force, "PPP Reliable Transmission", RFC 1663, July 1994. -- If both, then make both changes |
| Comment Sequence Number | NG008    |   |   |
| Commenter Last Name     | Golmie   |   |   |
| Resolution Required     | Y        | Microsoft documents on PnP, Microsoft Corporation. Can these documents be found based on this description?  | Either delete this reference or make it more complete, if the documents are publicly available.   |
| Comment Sequence Number | NG009    |   |   |
| Commenter Last Name     | Golmie   |   |   |
| <b>Clause Number 3</b>  |          |   |   |
| Resolution Required     | Y        | The terms "m" and "M" should be defined, but should they be defined similarly as "k" and "K"  | Add -- m: A suffix meaning to multiply by .001 -- M: A suffix meaning to multiple by 1,000,000  |
| Comment Sequence Number | NG014    |   |   |
| Commenter Last Name     | Golmie   |   |   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |        |                     |  |
|-------------------------|--------|---------------------|--|
| Resolution Required     | Y      | No slave definition | Add -- Slave: An entity that has station functionality and other services via the wireless medium (WM) |
| Comment Sequence Number | NG017  |                     |  |
| Commenter Last Name     | Golmie |                     |  |

|                         |        |  |                          |
|-------------------------|--------|--|--------------------------|
| Resolution Required     | Y      | Missing definitions "Bluetooth channel", Bluetooth node, Bluetooth subsystem | Finish these definitions |
| Comment Sequence Number | pwk 06 |  |                          |
| Commenter Last Name     | Kinney |  |                          |

|               |     |                       |                   |
|---------------|-----|-----------------------|-------------------|
| Clause Number | 3.1 | Problem Specification | Proposed Solution |
|---------------|-----|-----------------------|-------------------|

|                         |        |                   |                   |
|-------------------------|--------|-------------------|-------------------|
| Resolution Required     | Y      | See above comment | See above comment |
| Comment Sequence Number | NG011  |                   |                   |
| Commenter Last Name     | Golmie |                   |                   |

|                         |          |            |          |
|-------------------------|----------|------------|----------|
| Resolution Required     | Y        | Incomplete | Complete |
| Comment Sequence Number | Sjs03    |            |          |
| Commenter Last Name     | Shellham |            |          |

|               |      |                       |                   |
|---------------|------|-----------------------|-------------------|
| Clause Number | 3.11 | Problem Specification | Proposed Solution |
|---------------|------|-----------------------|-------------------|

|                         |        |                   |                   |
|-------------------------|--------|-------------------|-------------------|
| Resolution Required     | Y      | See above comment | See above comment |
| Comment Sequence Number | NG012  |                   |                   |
| Commenter Last Name     | Golmie |                   |                   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |          |  |   |
|-------------------------|----------|--|---|
| Resolution Required     | Y        | Incomplete   | Complete  |
| Comment Sequence Number | Sjs04    |  |   |
| Commenter Last Name     | Shellham |  |   |
| Clause Number           | 3.15     | Problem Specification  | Proposed Solution   |
| Resolution Required     | Y        | Coverage cannot be defined per 2 devices   | => The area around a Bluetooth unit, where the field strength allows to set up Bluetooth connections. |
| Comment Sequence Number | tm02     |  |   |
| Commenter Last Name     | Mueller  |  |   |
| Clause Number           | 3.22     | Problem Specification  | Proposed Solution   |
| Resolution Required     | Y        | K?s: Units 1024 ?s. What kind of a term is this? Time is never referred to in this manner. | Delete this example.  |
| Comment Sequence Number | NG013    |  |   |
| Commenter Last Name     | Golmie   |  |   |
| Clause Number           | 3.33     | Problem Specification  | Proposed Solution   |
| Resolution Required     | N        | Connection is not defined, which might lead to misunderstandings here.                     | add: connection on Baseband level   |
| Comment Sequence Number | tm04     |  |   |
| Commenter Last Name     | Mueller  |  |   |
| Resolution Required     | Y        | Definition vague   | Needs a more precise definition   |
| Comment Sequence Number | Sjs05    |  |   |
| Commenter Last Name     | Shellham |  |   |
| Clause Number           | 3.39     | Problem Specification  | Proposed Solution   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                           |          |  |   |
|---------------------------|----------|--|---|
| Resolution Required       | Y        | TS 07.10 DLCI is not referenced in this document and therefore is out-of-the-blue  | Delete 3.39 as it is not used in the specification.                                   |
| Comment Sequence Number   | NG016    |  |   |
| Commenter Last Name       | Golmie   |  |   |
| <b>Clause Number 3.44</b> |          |  |   |
|                           |          | <b>Problem Specification</b>   | <b>Proposed Solution</b>  |
| Resolution Required       | Y        | The term BSS is used, but is not defined in Clause 4, so definition has no meaning.  | Either -- -Delete SS definition; -- -Spell out what BSS is; or -- -Add it to Clause 4 |
| Comment Sequence Number   | NG018    |  |   |
| Commenter Last Name       | Golmie   |  |   |
| <b>Clause Number 3.8</b>  |          |  |   |
|                           |          | <b>Problem Specification</b>   | <b>Proposed Solution</b>  |
| Resolution Required       | Y        | Bluetooth Channel has no definition. One must be defined. Since Bluetooth is not consistent within itself, no definition can be provided to resolve the comment  | No single nor contradicting definition is available to resolve this comment.          |
| Comment Sequence Number   | NG010    |  |   |
| Commenter Last Name       | Golmie   |  |   |
| Resolution Required       | Y        | Incomplete   | Complete  |
| Comment Sequence Number   | Sjs02    |  |   |
| Commenter Last Name       | Shellham |  |   |
| <b>Clause Number 5.3</b>  |          |  |   |
|                           |          | <b>Problem Specification</b>   | <b>Proposed Solution</b>  |
| Resolution Required       | Y        | [2nd paragraph]The last statement about a "... consistently low error rate." Is this true? From a RF layer this is certainly not true, from a BB layer, also this is not true. Maybe from a higher layer (i.e. above L2CAP) it might be true, but then that is not a physical channel. | Change "a consistently" to "an expected"  |
| Comment Sequence Number   | NG048    |  |   |
| Commenter Last Name       | Golmie   |  |   |

Comment type (editorial, Editorial, technical, Technical) **T**

| Clause Number <b>5.3.1</b> |                | Problem Specification  | Proposed Solution   |
|----------------------------|----------------|--|---|
| Resolution Required        | <b>N</b>       | In wired LANs an address does relate to any physical location, and the location of the devices could be changed as long as they are connected to the wire.                     | Remove the sentence. Better yet, remove the whole subsection. |
| Comment Sequence Number    | <b>hxa11</b>   |  |   |
| Commenter Last Name        | <b>Alborzi</b> |  |   |
| Clause Number <b>5.3.2</b> |                | Problem Specification  | Proposed Solution   |
| Resolution Required        | <b>N</b>       | Items 7 and 8 on the list are specific to Bluetooth, and should not be mentioned here.   | Remove Items 7 and 8.   |
| Comment Sequence Number    | <b>hxa12</b>   |  |   |
| Commenter Last Name        | <b>Alborzi</b> |  |   |
| Resolution Required        | <b>N</b>       | WPAN devices can also be used for broader coverage areas. While the clause mentions the contrary. Refer to 5.4.2.  | Remove the last paragraph.                                    |
| Comment Sequence Number    | <b>hxa13</b>   |  |   |
| Commenter Last Name        | <b>Alborzi</b> |  |   |
| Resolution Required        | <b>Y</b>       | Item number 7 states that WPANs use a connection-oriented TDMA Scheme. This might be true for this (Bluetooth) specification, but is not true in general (future) about WPANs. | Delete item 7 completely                                      |
| Comment Sequence Number    | <b>NG050</b>   |  |   |
| Commenter Last Name        | <b>Golmie</b>  |  |   |
| Resolution Required        | <b>Y</b>       | Item number 8 states that WPANs use FFH & TDD. This might be true for this (Bluetooth) specification, but is not true in general (future) about WPANs.                         | Delete item 8 completely                                      |
| Comment Sequence Number    | <b>NG051</b>   |  |   |
| Commenter Last Name        | <b>Golmie</b>  |  |   |
| Clause Number <b>5.4</b>   |                | Problem Specification  | Proposed Solution   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                            |                 |   |  |
|----------------------------|-----------------|---|--|
| Resolution Required        | <b>Y</b>        | 721kb/s   | 723.2 kb/s   |
| Comment Sequence Number    | <b>atp02</b>    |   |  |
| Commenter Last Name        | <b>Palin</b>    |   |  |
| Resolution Required        | <b>Y</b>        | p.32 721 kb/s   | 723.2 kb/s   |
| Comment Sequence Number    | <b>fxw25</b>    |   |  |
| Commenter Last Name        | <b>Watanabe</b> |   |  |
| Resolution Required        | <b>Y</b>        | [last paragraph]There is a reference to see, but see what?  | No suggestions because it cannot be determined what we are to see. |
| Comment Sequence Number    | <b>NG055</b>    |   |  |
| Commenter Last Name        | <b>Golmie</b>   |   |  |
| Resolution Required        | <b>Y</b>        | I think it is in appropriate to say that the WPAN uses circuit switched channels. I think a more accurate statement is that it uses connection-oriented packet-switched channels. | Rewrite  |
| Comment Sequence Number    | <b>Sjs06</b>    |   |  |
| Commenter Last Name        | <b>Shellham</b> |   |  |
| <b>Clause Number 5.4.1</b> |                 | <b>Problem Specification</b>  | <b>Proposed Solution</b>   |
| Resolution Required        | <b>N</b>        | A unit can participate in more than one piconet. Hence it synchronizes to the piconet partially.  | 2nd paragraph, change "All units" to "All active units"            |
| Comment Sequence Number    | <b>hxa17</b>    |   |  |
| Commenter Last Name        | <b>Alborzi</b>  |   |  |
| <b>Clause Number 5.4.2</b> |                 | <b>Problem Specification</b>  | <b>Proposed Solution</b>   |



Comment type (editorial, Editorial, technical, Technical) **T**

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|-------------------------|---------|--|--|
| Resolution Required     | Y       | The statement "These are high capacity systems." is not true. A scatternet is made from individual piconets. The capacity is not aggregated in a piconet. In fact if interpiconet traffic is supported, it is a lower capacity than a single piconet | Delete this sentence.  |
| Comment Sequence Number | NG057   |  |  |
| Commenter Last Name     | Golmie  |  |  |
| Clause Number           | 5.4.3   | Problem Specification  | Proposed Solution  |
| Resolution Required     | Y       | The definitions here are not the same as in clause 3   | Align the definitions.   |
| Comment Sequence Number | NG060   |  |  |
| Commenter Last Name     | Golmie  |  |  |
| Clause Number           | 5.4.4   | Problem Specification  | Proposed Solution  |
| Resolution Required     | N       | The connections to AP can be from SSTAs as well. The figure only shows connections from the MSTAs in each piconet.   | Change the figure, for example draw a connection between AP and Peer 1 of Piconet A. The Piconet B should also contain Peer 3/2 as well. |
| Comment Sequence Number | hxa18   |  |  |
| Commenter Last Name     | Alborzi |  |  |
| Clause Number           | 5.4.5   | Problem Specification  | Proposed Solution  |
| Resolution Required     | Y       | Bulleted list has 6 items, while the text in 5.4.6 states 9. Which is correct?   | Align text and bullet items based on whichever is the correct one.   |
| Comment Sequence Number | NG062   |  |  |
| Commenter Last Name     | Golmie  |  |  |
| Resolution Required     | Y       | Reference to "distribution system services" although no distribution system was defined.   | Remove reference to "distribution system", as 802.15.1 does not define one.  |
| Comment Sequence Number | smb06   |  |  |
| Commenter Last Name     | Baatz   |  |  |

Comment type (editorial, Editorial, technical, Technical) **T**

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|-------------------------|---------|---|---|
| Resolution Required     | Y       | I don't understand the term "distribution"  | suggestion to explain (or define in clause 3)   |
| Comment Sequence Number | tm06    |   |   |
| Commenter Last Name     | Mueller |   |   |
| Clause Number           | 5.4.6   | Problem Specification   | Proposed Solution   |
| Resolution Required     | Y       | Reference to "distribution system" and ESS (Extended Service Set) although these terms where not defined. | Remove references to "distribution system" and ESS, as 802.15.1 does define neither distribution system nor extended service set.   |
| Comment Sequence Number | smb07   |   |   |
| Commenter Last Name     | Baatz   |   |   |
| Resolution Required     | Y       | I cannot figure out, what the terms, which have been introduced here, actually mean.                      | Rewrite: It should be clear to somebody familiar with Bluetooth, what the mapping is. If we copy the core from Bluetooth, I suggest to go even further and use the BT terminology directly. |
| Comment Sequence Number | tm07    |   |   |
| Commenter Last Name     | Mueller |   |   |
| Clause Number           | 5.5.2   | Problem Specification   | Proposed Solution   |
| Resolution Required     | Y       | This section recommends a HCI, yet HCI is not part of this specification.                                 | Delete this or make the HCI mandatory and include it as part of the specification.  |
| Comment Sequence Number | NG066   |   |   |
| Commenter Last Name     | Golmie  |   |   |
| Resolution Required     | Y       | Stack is not correct: Link Management Protocol is not a separate horizontal layer.                        | Draw a figure according to Figure 1 with adding LMP (or add it directly to figures 1 and 2)   |
| Comment Sequence Number | tm08    |   |   |
| Commenter Last Name     | Mueller |   |   |
| Clause Number           | 5.5.4   | Problem Specification   | Proposed Solution   |

Comment type (editorial, Editorial, technical, Technical) **T**

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|-------------------------|----------------|---|---|
| Resolution Required     | <b>N</b>       | ... known as scatternet .... This is misleading, because first place, 802.15 supports one piconet, which is by definition not a scatternet.   | delete "known as scatternet".   |
| Comment Sequence Number | <b>tm10</b>    |   |   |
| Commenter Last Name     | <b>Mueller</b> |   |   |
| Resolution Required     | <b>N</b>       | page 36, line 7: FEC can be used for data and voice packets.  | Split sentence to FEC => all packet.ARQ => only ACL data  |
| Comment Sequence Number | <b>tm11</b>    |   |   |
| Commenter Last Name     | <b>Mueller</b> |   |   |
| Resolution Required     | <b>Y</b>       | ..identical hardware and software interface..   | Not nessessary (depending on profile)   |
| Comment Sequence Number | <b>atp03</b>   |   |   |
| Commenter Last Name     | <b>Palin</b>   |   |   |
| Resolution Required     | <b>Y</b>       | Clause does not make clear how the 48-Bit BT device address relates to the IEEE 802 address scheme (24-Bit OUI, Group/Individual addresses, Universally/Locally administered addresses) | Clarify the term "derived from the IEEE 802" (page 37). State which properties are derived and which are not. |
| Comment Sequence Number | <b>smb05</b>   |   |   |
| Commenter Last Name     | <b>Batz</b>    |   |   |
| Resolution Required     | <b>Y</b>       | p 36, 1st paragraph, last sentence is wrong!  | SCO links can be established and removed arbitrarily during a session.  |
| Comment Sequence Number | <b>tm12</b>    |   |   |
| Commenter Last Name     | <b>Mueller</b> |   |   |
| Resolution Required     | <b>Y</b>       | p. 36, 2nd paragraph, last sentence: SCO links are defined only for audio   | remove "Typically"  |
| Comment Sequence Number | <b>tm13</b>    |   |   |
| Commenter Last Name     | <b>Mueller</b> |   |   |

Comment type (editorial, Editorial, technical, Technical) **T**

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|-------------------------|---------|---|---|
| Resolution Required     | Y       | p.36, 3rd paragraph: Access code is part of MAC       | change reference  |
| Comment Sequence Number | tm14    |   |   |
| Commenter Last Name     | Mueller |   |   |
| Resolution Required     | Y       | p. 36, 5th paragraph:ARQ is not an alternative to FEC | State clearly that ARQ is performed for every ACL connection.FEC is applied to SCO and ACL  |
| Comment Sequence Number | tm15    |   |   |
| Commenter Last Name     | Mueller |   |   |
| Clause Number           | 5.5.5   | Problem Specification                                 | Proposed Solution   |
| Resolution Required     | Y       | There is no MLME in the architecture.                 | Include the material into 5.5.4   |
| Comment Sequence Number | tm17    |   |   |
| Commenter Last Name     | Mueller |   |   |
| Clause Number           | 5.5.6   | Problem Specification                                 | Proposed Solution   |
| Resolution Required     | Y       | As there is no MLME, there is no MLME_SAP either      | ??  |
| Comment Sequence Number | tm18    |   |   |
| Commenter Last Name     | Mueller |   |   |
| Resolution Required     | Y       | The list of "services" needs investigation.           | If group management is included (which is only related to Broadcast), then at least configuration (QoS) should be mentioned as well. Other services from LMP might be considered as well. |
| Comment Sequence Number | tm19    |   |   |
| Commenter Last Name     | Mueller |   |   |
| Clause Number           | 6       | Problem Specification                                 | Proposed Solution   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |           |  |  |
|-------------------------|-----------|--|--|
| Resolution Required     | Y         | This clause is not as technically complete, accurate and/or clear as the latest approved and published specification from the Bluetooth SIG. | To maintain proper fidelity to the Bluetooth specification, this clause shall be modified (ideally: replaced and edited if necessary) to adequately mirror the related parts of the latest approved and published specification and/or errata comments from the Bluetooth SIG. |
| Comment Sequence Number | ccb01     |  |  |
| Commenter Last Name     | Bisdikian |  |  |
| Resolution Required     | Y         | Clause 6 does not reflect the updates of BT Spec 1.0 B   | Incorporate corrections and clarifications highlighted in BT Spec 1.0 B  |
| Comment Sequence Number | smb03     |  |  |
| Commenter Last Name     | Batz      |  |  |
| Resolution Required     | Y         | Errata from Bluetooth spec 1.0B are not included. This may lead to lack in interoperability  | incorporate the changes from Bluetooth spec 1.0B   |
| Comment Sequence Number | tm20      |  |  |
| Commenter Last Name     | Mueller   |  |  |
| Resolution Required     | Y         | Bluetooth spec 1.0B obsoletes this Clause  | Incorporate Bluetooth spec 1.0B  |
| Comment Sequence Number | tms01     |  |  |
| Commenter Last Name     | Siep      |  |  |
| Clause Number 6.1       |           | Problem Specification  | Proposed Solution  |
| Resolution Required     | Y         | Note under Japan indicates Q2, 1999.   | If a decision has been agreed to remove this note with the agreement. If not, remove the date since it is already passed.  |
| Comment Sequence Number | NG074     |  |  |
| Commenter Last Name     | Golmie    |  |  |
| Clause Number 6.2       |           | Problem Specification  | Proposed Solution  |

Comment type (editorial, Editorial, technical, Technical) **T**

|                              |                |  |  |
|------------------------------|----------------|--|--|
| Resolution Required          | <b>N</b>       | Spain's upper guard band is not correct  | Change 26 MHz to 4 MHz   |
| Comment Sequence Number      | <b>hxa26</b>   |  |  |
| Commenter Last Name          | <b>Alborzi</b> |  |  |
| Resolution Required          | <b>N</b>       | In calculation of the guard bands the bandwidth of RF channels are not considered. | Considering that the RF channel number is the center frequency of each channel and a bandwidth of 1MHz for each channel, lower and upper guard bands should be adjusted by 0.5 MHz. e.g. USA's guard bands will be 1.5 MHz and 3 MHz |
| Comment Sequence Number      | <b>hxa27</b>   |  |  |
| Commenter Last Name          | <b>Alborzi</b> |  |  |
| Resolution Required          | <b>Y</b>       | Note 2 indicates Q2, 1999  | If a decision has been agreed to remove this note with the agreement. If not, remove the date since it is already passed.  |
| Comment Sequence Number      | <b>NG075</b>   |  |  |
| Commenter Last Name          | <b>Golmie</b>  |  |  |
| <b>Clause Number 6.3</b>     |                | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |
| Resolution Required          | <b>N</b>       | The step sizes in power control can be implemented non-uniformly.                  | Change the 4th sentence to: The power steps shall form a monotonic sequence, with a fixed step size of either 2, 4 or 8 dB.  |
| Comment Sequence Number      | <b>hxa30</b>   |  |  |
| Commenter Last Name          | <b>Alborzi</b> |  |  |
| Resolution Required          | <b>N</b>       | The step sizes in optional power control can be implemented non-uniformly          | Add the clause:The   |
| Comment Sequence Number      | <b>hxa31</b>   |  |  |
| Commenter Last Name          | <b>Alborzi</b> |  |  |
| <b>Clause Number 6.3.2.1</b> |                | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                            |                |  |  |
|----------------------------|----------------|--|--|
| Resolution Required        | <b>N</b>       | The pseudo random data pattern is not specified.   | Specify one if possible.   |
| Comment Sequence Number    | <b>hxa32</b>   |  |  |
| Commenter Last Name        | <b>Alborzi</b> |  |  |
| Resolution Required        | <b>N</b>       | Ambiguity in case of devices with power calss 1, and their transmit power in adjacent channels. FCC requires 20 dB less, and the standard requires less than -20dBm. Which one is correct? | Add the clause:"Adjacent channel Radiation of devices in power class 1 and 2 should comply with that of table 4"   |
| Comment Sequence Number    | <b>hxa34</b>   |  |  |
| Commenter Last Name        | <b>Alborzi</b> |  |  |
| <b>Clause Number 6.4.2</b> |                | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |
| Resolution Required        | <b>Y</b>       | Co-channel interference specification is tentative (see Note 1) and will not be available for another 12 months (18 months after the Bluetooth spec was released).                         | It appears that the co-channel interference tolerance specification will not be available until after the standard is finalized. How can the standard be approved when the actual number is not known? |
| Comment Sequence Number    | <b>rge09</b>   |  |  |
| Commenter Last Name        | <b>Eckard</b>  |  |  |
| <b>Clause Number 6.4.3</b> |                | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |
| Resolution Required        | <b>Y</b>       | 24 exceptions are permitted which are dependent upon the given receive channel frequency and are centred at a frequency which is an integer multiple of 1 MHz.                             | Specify the either the exception frequencies or the relationship between the receive channel and the exceptions.   |
| Comment Sequence Number    | <b>pwk 14</b>  |  |  |
| Commenter Last Name        | <b>Kinney</b>  |  |  |
| <b>Clause Number 6.4.4</b> |                | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |
| Resolution Required        | <b>Y</b>       | The paragraph implies, in the first sentence, that the three conditions must be met for compliance then states that the system must full fill one of the three alternatives.               | Clarify the actual requirements.   |
| Comment Sequence Number    | <b>rge10</b>   |  |  |
| Commenter Last Name        | <b>Eckard</b>  |  |  |
| <b>Clause Number 6.4.5</b> |                | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                              |                  |  |  |
|------------------------------|------------------|--|--|
| Resolution Required          | <b>Y</b>         | No spec defining the maximum signal strength before device destruction   | Add a signal strength, eg +20 dBm, where, up to this value, no destruction will take place   |
| Comment Sequence Number      | <b>pwk 15</b>    |  |  |
| Commenter Last Name          | <b>Kinney</b>    |  |  |
| <b>Clause Number 7</b>       |                  |  |  |
| Resolution Required          | <b>Y</b>         | This clause is not as technically complete, accurate and/or clear as the latest approved and published specification from the Bluetooth SIG. | To maintain proper fidelity to the Bluetooth specification, this clause shall be modified (ideally: replaced and edited if necessary) to adequately mirror the related parts of the latest approved and published specification and/or errata comments from the Bluetooth SIG. |
| Comment Sequence Number      | <b>ccb02</b>     |  |  |
| Commenter Last Name          | <b>Bisdikian</b> |  |  |
| Resolution Required          | <b>Y</b>         | Clause 7 does not reflect the updates of BT Spec 1.0 B   | Incorporate corrections and clarifications highlighted in BT Spec 1.0 B  |
| Comment Sequence Number      | <b>smb04</b>     |  |  |
| Commenter Last Name          | <b>Baatz</b>     |  |  |
| Resolution Required          | <b>Y</b>         | Errata from Bluetooth spec 1.0B are not included. This may lead to lack in interoperability  | incorporate the changes from Bluetooth spec 1.0B   |
| Comment Sequence Number      | <b>tm21</b>      |  |  |
| Commenter Last Name          | <b>Mueller</b>   |  |  |
| Resolution Required          | <b>Y</b>         | Bluetooth spec 1.0B obsoletes this Clause  | Incorporate Bluetooth spec 1.0B  |
| Comment Sequence Number      | <b>tms02</b>     |  |  |
| Commenter Last Name          | <b>Siep</b>      |  |  |
| <b>Clause Number 7.2</b>     |                  |  |  |
| <b>Problem Specification</b> |                  |  |  |
| <b>Proposed Solution</b>     |                  |  |  |



Comment type (editorial, Editorial, technical, Technical) **T**

|                               |                  |  |  |
|-------------------------------|------------------|--|--|
| Resolution Required           | <b>N</b>         | A master can be a slave in more than one piconet.  | Change the sentence in last paragraph of the 7.2 "In addition, a master in one piconet can be a slave in another piconet" to "In addition, a master in one piconet can be a slave in other piconets" |
| Comment Sequence Number       | <b>hxa40</b>     |  |  |
| Commenter Last Name           | <b>Alborzi</b>   |  |  |
| Resolution Required           | <b>Y</b>         | 4th Paragraph: The Bluetooth system consists of a radio unit, a link control unit, ... Comment: Where is the link control unit specified? The link control unit is indirectly specified in various sections of Clause 7.2. However, it is not specified in one concise subclause as to what its functions are. | Consequently, I recommend that a subclause 7.2.x or clause 7.X be added to the current specification to rectify this short coming.   |
| Comment Sequence Number       | <b>ADH01</b>     |  |  |
| Commenter Last Name           | <b>Heberling</b> |  |  |
| Resolution Required           | <b>Y</b>         | 4th Paragraph, 1st sentence: The Bluetooth system consists of a radio unit, ... and host terminal interface functions, ... Comment: Where are the Host terminal functions specified? Do these correspond to the Host Controller Interface specification?   | Either delete the reference to the <host terminal interface functions> or provide a Clause that describes what these functions are.  |
| Comment Sequence Number       | <b>ADH02</b>     |  |  |
| Commenter Last Name           | <b>Heberling</b> |  |  |
| <b>Clause Number 7.2.1.3</b>  |                  | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |
| Resolution Required           | <b>N</b>         | Indicate the length of a cycle in time units.  | Add to the last sentence of first paragraph: ", or 83886.08 seconds (23 hours, 18 minutes, and 6.08 seconds)."   |
| Comment Sequence Number       | <b>hxa42</b>     |  |  |
| Commenter Last Name           | <b>Alborzi</b>   |  |  |
| <b>Clause Number 7.2.10.3</b> |                  | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |
| Resolution Required           | <b>N</b>         | Page 92, 2nd sentence: The BlueTooth clock is derived from a free running native clock which is never adjusted and is never turned off. Comment: So the BT clock is never turned off, even when power is turned off?   | Please clarify.  |
| Comment Sequence Number       | <b>ADH81</b>     |  |  |
| Commenter Last Name           | <b>Heberling</b> |  |  |
| <b>Clause Number 7.2.10.4</b> |                  | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |            |   |  |
|-------------------------|------------|---|--|
| Resolution Required     | Y          | Page 94, first paragraph, last sentence:<br>Comment: reference is made to the link<br>controller. Where is this formally defined?   | Please provide a section that describes the link<br>controller's functions.        |
| Comment Sequence Number | ADH83      |   |  |
| Commenter Last Name     | Heberling  |   |  |
| Clause Number           | 7.2.10.6.1 | Problem Specification   | Proposed Solution  |
| Resolution Required     | Y          | Reference to Appendix VII of what?  | Clarify so that it is clear whether it is or is not part of<br>this specification. |
| Comment Sequence Number | NG101      |   |  |
| Commenter Last Name     | Golmie     |   |  |
| Clause Number           | 7.2.10.6.2 | Problem Specification   | Proposed Solution  |
| Resolution Required     | Y          | Page 96, 3rd paragraph, first sentence: If the<br>correlator exceeds the trigger ...Comment: Is the<br>correlator a requirement of the specification? Or<br>is it an implementation detail? | Please clarify the purpose of the correlator.                                      |
| Comment Sequence Number | ADH88      |   |  |
| Commenter Last Name     | Heberling  |   |  |
| Clause Number           | 7.2.10.6.3 | Problem Specification   | Proposed Solution  |
| Resolution Required     | Y          | Reference to Appendix VII on page 983 of what?<br>Bluetooth?  | Clarify so that it is clear whether it is or is not part of<br>this specification. |
| Comment Sequence Number | NG103      |   |  |
| Commenter Last Name     | Golmie     |   |  |
| Clause Number           | 7.2.10.7.2 | Problem Specification   | Proposed Solution  |
| Resolution Required     | Y          | Page 103, first paragraph, 2nd sentence: ... for at<br>least 18 slots. Comment: Does this mean Master-<br>>Slave slots?   | Please clarify.  |
| Comment Sequence Number | ADH98      |   |  |
| Commenter Last Name     | Heberling  |   |  |

Comment type (editorial, Editorial, technical, Technical) **T**

| Clause Number           | 7.2.10.8.4 | Problem Specification  | Proposed Solution   |
|-------------------------|------------|--|---|
| Resolution Required     | Y          | Page 109, first paragraph, 2nd line: ... . At this stage, only the polling technique has been defined. ...Comment: For this standard to be complete the other access techniques must be defined.   | Please provide normative descriptions of the random access procedure.               |
| Comment Sequence Number | ADH114     |  |   |
| Commenter Last Name     | Heberling  |  |   |
| Clause Number           | 7.2.10.8.5 | Problem Specification  | Proposed Solution   |
| Resolution Required     | N          | Page 112, first paragraph, 2nd sentence: Due to the stringent TDD scheme, slaves can only communicate with the master and not to other slaves. Comment: Why? HiperLan2 solved this problem. Why can't BT enable a direct mode between peers? |   |
| Comment Sequence Number | ADH117     |  |   |
| Commenter Last Name     | Heberling  |  |   |
| Clause Number           | 7.2.10.9.1 | Problem Specification  | Proposed Solution   |
| Resolution Required     | Y          | Page 113, first paragraph, last line: ... degradation of performance results as is common in frequency-hopping spread spectrum systems. Comment: This is an insufficient explanation.  | Please provide more technical detail.   |
| Comment Sequence Number | ADH119     |  |   |
| Commenter Last Name     | Heberling  |  |   |
| Clause Number           | 7.2.11.1   | Problem Specification  | Proposed Solution   |
| Resolution Required     | Y          | Page 117, Figure 56 Hop selection scheme in CONNECTION state: Comments: Diagram needs to be more illustrative of what the text is trying to describe.  | Please provide more graphical detail to better illustrate the Hop selection scheme. |
| Comment Sequence Number | ADH120     |  |   |
| Commenter Last Name     | Heberling  |  |   |
| Clause Number           | 7.2.12.4.1 | Problem Specification  | Proposed Solution   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |            |   |  |
|-------------------------|------------|---|--|
| Resolution Required     | Y          | [& 7.2.12.4.2]Refers to a website. What/which website?  | List the URL and link to which it refers.  |
| Comment Sequence Number | NG111      |   |  |
| Commenter Last Name     | Golmie     |   |  |
| Clause Number           | 7.2.12.4.2 | Problem Specification   | Proposed Solution  |
| Resolution Required     | Y          | The term "64 ksamples/s" is not correct or is it? -- There are 8000 samples/second or -- 64,000 bits/second if samples equal 8 bits.  |  |
| Comment Sequence Number | NG112      |   |  |
| Commenter Last Name     | Golmie     |   |  |
| Clause Number           | 7.2.2.2    | Problem Specification   | Proposed Solution  |
| Resolution Required     | N          | Mention the fact that in the worst case SCO links should be resynchronized before CLK27 switches back to its initial value at the time of SCO link establishment. This could be happen anytime between one half of cycle time to a full cycle time. (around 11 hours to 23 hours). Not doing so may result in interference with another SCO link. |  |
| Comment Sequence Number | hxa44      |   |  |
| Commenter Last Name     | Alborzi    |   |  |
| Clause Number           | 7.2.3.4.1. | Problem Specification   | Proposed Solution  |
| Resolution Required     | Y          | The ID is not a packet as defined in this section. Make this distinction, so its placement and importance is clearly understood.  | Add -- This ID packet is really not a packet as listed here, since it does not carry a packet header identifying it as one of the sixteen packet types. However, it carries information that is interpreted as a special type of packet received, which is acted upon similarly to true packets. |
| Comment Sequence Number | NG088      |   |  |
| Commenter Last Name     | Golmie     |   |  |
| Clause Number           | 7.2.4.3    | Problem Specification   | Proposed Solution  |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |           |  |  |
|-------------------------|-----------|--|--|
| Resolution Required     | Y         | Page 72, 1st paragraph, 1st sentence: With an automatic repeat request scheme, ....  | Change to: During an automatic repeat request scheme, DM packets, DH packets, and the data field of DV packets are transmitted and retransmitted until either a positive acknowledgement is returned by the destination receiver, the number of transmission retries is exceeded, or a Retransmission timer times out. |
| Comment Sequence Number | ADH60     |  |  |
| Commenter Last Name     | Heberling |  |  |
| Resolution Required     | Y         | Page 72, 1st paragraph, 2nd sentence: ... , so called piggy backing.   | Please clarify the meaning of this sentence fragment, or delete from the sentence.   |
| Comment Sequence Number | ADH61     |  |  |
| Commenter Last Name     | Heberling |  |  |
| Resolution Required     | Y         | Page 72, 1st paragraph, 4th –6th lines:<br>Comment: Where is the CRC added? Is it added to Packet types that already have a CRC?   | Please clarify.  |
| Comment Sequence Number | ADH62     |  |  |
| Commenter Last Name     | Heberling |  |  |
| Clause Number 7.2.4.3.2 |           | Problem Specification  | Proposed Solution  |
| Resolution Required     | N         | The time out for ARQN scheme should be specified in standard.  |  |
| Comment Sequence Number | hxa45     |  |  |
| Commenter Last Name     | Alborzi   |  |  |
| Resolution Required     | Y         | Page 75, 2nd paragraph, change bar section: ...<br>. The SEQN bit is not necessarily inverted. ...<br>Comment: This section needs to be clarified. In addition, the text suggests seeing Clause 7.2.4.3.3 for a better understanding of how the SEQN bit is set. Then in Clause 7.2.4.3.3 , the last sentence suggests reading Clause 7.2.4.3.2 to understand how the SEQN bit is set. | Please clarify.  |
| Comment Sequence Number | ADH72     |  |  |
| Commenter Last Name     | Heberling |  |  |
| Clause Number 7.2.5     |           | Problem Specification  | Proposed Solution  |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |                  |   |  |
|-------------------------|------------------|---|--|
| Resolution Required     | <b>N</b>         | The forward error checking schemes used do not overcome burst errors of more than one bit. The FEC should be changed to helpReduce the burst errors without retransmission. | The 1/3 FEC should be changed such that the repeated bits are separated enough. For example instead of sending each bit three times, each pack of 18 bits will be repeated three times. This simply allows for having burst errors of up to 18 bits, without a major change in complexity. This is specially important for the header of packets. A similar modification could be done for 2/3 error checking as well. |
| Comment Sequence Number | <b>hxa47</b>     |   |  |
| Commenter Last Name     | <b>Alborzi</b>   |   |  |
| <hr/>                   |                  |   |  |
| Clause Number           | <b>7.2.6.3</b>   | Problem Specification   | Proposed Solution  |
| Resolution Required     | <b>Y</b>         | Page 80, 2nd paragraph, first sentence: Isochronous data channel is supported by timing start packets properly at higher levels. ...  | Please provide clarification.  |
| Comment Sequence Number | <b>ADH77</b>     |   |  |
| Commenter Last Name     | <b>Heberling</b> |   |  |
| <hr/>                   |                  |   |  |
| Clause Number           | <b>7.2.8</b>     | Problem Specification   | Proposed Solution  |
| Resolution Required     | <b>Y</b>         | Page 81, 2nd paragraph: The Tx and Rx routines described in section 7.2.8.1 and 7.2.8.2 are of an informative character only. ...   | Please provide a normative definition for these two sections   |
| Comment Sequence Number | <b>ADH78</b>     |   |  |
| Commenter Last Name     | <b>Heberling</b> |   |  |
| <hr/>                   |                  |   |  |
| Clause Number           | <b>7.3.3.1</b>   | Problem Specification   | Proposed Solution  |
| Resolution Required     | <b>Y</b>         | When a command is refused the reason given must be understood by the other station  | Add a table or matrix defining all responses permitted by a command  |
| Comment Sequence Number | <b>pwk 16</b>    |   |  |
| Commenter Last Name     | <b>Kinney</b>    |   |  |
| <hr/>                   |                  |   |  |
| Clause Number           | <b>7.3.3.13</b>  | Problem Specification   | Proposed Solution  |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |            |   |   |
|-------------------------|------------|---|---|
| Resolution Required     | Y          | States only UTF-8 coding, while on page 280 UCS-2 is also allowed   | Align text  |
| Comment Sequence Number | NG133      |   |   |
| Commenter Last Name     | Golmie     |   |   |
| Clause Number           | 7.3.3.2.3  | Problem Specification   | Proposed Solution   |
| Resolution Required     | Y          | States only twice as long, while in clause indicates as a footnote any number greater than 1.   | Make appropriate alignments   |
| Comment Sequence Number | NG126      |   |   |
| Commenter Last Name     | Golmie     |   |   |
| Clause Number           | 7.3.3.21.4 | Problem Specification   | Proposed Solution   |
| Resolution Required     | Y          | Procedure is not correct. If the master can only accept the received parameters from the slave, how or why would the slave not accept its own parameters. | Delete the sentence "When receiving this message the slave replies with LMP_not_accepted if it does not accept the new parameters."   |
| Comment Sequence Number | NG135      |   |   |
| Commenter Last Name     | Golmie     |   |   |
| Clause Number           | 7.3.3.9    | Problem Specification   | Proposed Solution   |
| Resolution Required     | Y          | Infinite number of timing accuracy levels with can be specified by either master or slave.  | Quantize timing accuracy levels   |
| Comment Sequence Number | pwk 19     |   |   |
| Commenter Last Name     | Kinney     |   |   |
| Clause Number           | 7.4.1      | Problem Specification   | Proposed Solution   |
| Resolution Required     | Y          | The statement "For ACL links, use of the AUX1 packet on the ACL link is prohibited." Is in error. The AUX1 packet is only defined for use on ACL link.    | Change to "For L2CAP, use of the AUX1 packet is prohibited. -- Or delete this sentence and modify the next sentence as "The AUX1 packet type supports no data integrity checks (no CRC)." |
| Comment Sequence Number | NG143      |   |   |
| Commenter Last Name     | Golmie     |   |   |

Comment type (editorial, Editorial, technical, Technical) **T**

| Clause Number <b>7.4.1.2</b>   |               | Problem Specification  | Proposed Solution                |
|--------------------------------|---------------|--|----------------------------------|
| Resolution Required            | <b>Y</b>      | 1 bit sequence number is insufficient for higher layer applications, requires wait states until the highest layer acknowledges the latest packet | Increase number of sequence bits |
| Comment Sequence Number        | <b>pwk 20</b> |  |                                  |
| Commenter Last Name            | <b>Kinney</b> |  |                                  |
| Clause Number <b>7.4.1.3</b>   |               | Problem Specification  | Proposed Solution                |
| Resolution Required            | <b>Y</b>      | Dashed item two seems to state something in conflict with that stated in clauses 7.4.2.4.2 and 7.4.3.1.5 on retransmission by L2CAP              |                                  |
| Comment Sequence Number        | <b>NG144</b>  |  |                                  |
| Commenter Last Name            | <b>Golmie</b> |  |                                  |
| Resolution Required            | <b>Y</b>      | Last dashed item seems to state something in conflict with that stated in the last dashed item of clause 7.4.1.1                                 |                                  |
| Comment Sequence Number        | <b>NG145</b>  |  |                                  |
| Commenter Last Name            | <b>Golmie</b> |  |                                  |
| Clause Number <b>7.4.2.4</b>   |               | Problem Specification  | Proposed Solution                |
| Resolution Required            | <b>Y</b>      | Clause refers to HCI   | See previous comment on HCI      |
| Comment Sequence Number        | <b>NG146</b>  |  |                                  |
| Commenter Last Name            | <b>Golmie</b> |  |                                  |
| Clause Number <b>7.4.3.1.4</b> |               | Problem Specification  | Proposed Solution                |



Comment type (editorial, Editorial, technical, Technical) **T**

|                               |        |  |  |
|-------------------------------|--------|--|--|
| Resolution Required           | Y      | Are the events L2CA_DataRead and L2CA_DataWrite the same as the events L2CA_ReadData and L2CA_WriteData in sections 7.4.7.8 and 7.4.7.7? If so why are the names not aligned? If not, what are the differences?  |  |
| Comment Sequence Number       | NG153  |  |  |
| Commenter Last Name           | Golmie |  |  |
| <b>Clause Number 7.4.4.2</b>  |        |  |  |
|                               |        | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |
| Resolution Required           | Y      | Minimum MTU is 670 octets while clause 7.4.6.1 states 672.   | Align with whichever is correct  |
| Comment Sequence Number       | NG163  |  |  |
| Commenter Last Name           | Golmie |  |  |
| Resolution Required           | Y      | HCI is again referenced  |  |
| Comment Sequence Number       | NG164  |  |  |
| Commenter Last Name           | Golmie |  |  |
| <b>Clause Number 7.4.5.10</b> |        |  |  |
|                               |        | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |
| Resolution Required           | Y      | [&7.4.5.11]Information request does not contain a data field, but the Information Response states that it may return the same data as was received.  | Correct which ever is correct (i.e. add data field to Request or remove from Response)   |
| Comment Sequence Number       | NG172  |  |  |
| Commenter Last Name           | Golmie |  |  |
| <b>Clause Number 7.4.5.11</b> |        |  |  |
|                               |        | <b>Problem Specification</b>   | <b>Proposed Solution</b>   |
| Resolution Required           | Y      | Does the term, unsuccessful, in the text equate to the term, Not supported, in the Table 81? The decision should be based on what is being considered for use in the reserved values, otherwise, future compatibility or interoperability can not be expected. | Suggest using unsuccessful, if only a boolean value will ever be used. Suggest using not supported, if other possibilities are being considered that might return a data part. |
| Comment Sequence Number       | NG174  |  |  |
| Commenter Last Name           | Golmie |  |  |

Comment type (editorial, Editorial, technical, Technical) **T**

| Clause Number <b>8</b>       |                | Problem Specification   | Proposed Solution   |
|------------------------------|----------------|---|---|
| Resolution Required          | <b>Y</b>       | Section Not Complete.   | Service Primitives and Protocol Services need to be defined in more detail. Service Primitives and Protocol Services need to be extracted from the new Bluetooth specification (1.0B) or newly defined. |
| Comment Sequence Number      | <b>mdm12</b>   |   |   |
| Commenter Last Name          | <b>McInnis</b> |   |   |
| Resolution Required          | <b>Y</b>       | The SAPs deal only with data transfer, but that is not enough for interoperability          | add control interfaces  |
| Comment Sequence Number      | <b>tm25</b>    |   |   |
| Commenter Last Name          | <b>Mueller</b> |   |   |
| Resolution Required          | <b>Y</b>       | SAPs deal only with data transfer   | add control interfaces  |
| Comment Sequence Number      | <b>tms05</b>   |   |   |
| Commenter Last Name          | <b>Siep</b>    |   |   |
| Clause Number <b>8.1</b>     |                | Problem Specification   | Proposed Solution   |
| Resolution Required          | <b>Y</b>       | The architecture is not up to date. Therefore, the SAPs mentioned do not exist in this way. | Reflect new architecture (PHY & MAC specifications)   |
| Comment Sequence Number      | <b>tm22</b>    |   |   |
| Commenter Last Name          | <b>Mueller</b> |   |   |
| Resolution Required          | <b>Y</b>       | The architecture is not up to date.   | Update to new architecture  |
| Comment Sequence Number      | <b>tms03</b>   |   |   |
| Commenter Last Name          | <b>Siep</b>    |   |   |
| Clause Number <b>8.2.1.1</b> |                | Problem Specification   | Proposed Solution   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                              |         |  |   |
|------------------------------|---------|--|---|
| Resolution Required          | Y       | This mainly deals with Baseband, but what should be in is the service offered by L2CAP.      | delete and replace by L2CAP service interface |
| Comment Sequence Number      | tm23    |  |   |
| Commenter Last Name          | Mueller |  |   |
| <b>Clause Number 8.2.2</b>   |         |  |   |
|                              |         | <b>Problem Specification</b>   | <b>Proposed Solution</b>                      |
| Resolution Required          | Y       | The SAPs are not the same as in the bluetooth spec. This may cause Interoperability problems |   |
| Comment Sequence Number      | tm24    |  |   |
| Commenter Last Name          | Mueller |  |   |
| Resolution Required          | Y       | The SAPs are not the same as in the bluetooth spec   | Update to new SAP specification               |
| Comment Sequence Number      | tms04   |  |   |
| Commenter Last Name          | Siep    |  |   |
| <b>Clause Number 8.2.2.3</b> |         |  |   |
|                              |         | <b>Problem Specification</b>   | <b>Proposed Solution</b>                      |
| Resolution Required          | Y       | Where are these primitives defined in clause 7?  |   |
| Comment Sequence Number      | NG204   |  |   |
| Commenter Last Name          | Golmie  |  |   |
| <b>Clause Number A</b>       |         |  |   |
|                              |         | <b>Problem Specification</b>   | <b>Proposed Solution</b>                      |
| Resolution Required          | Y       | Section Not complete.  | PICS proforma needs to be provided.           |
| Comment Sequence Number      | mdm13   |  |   |
| Commenter Last Name          | McInnis |  |   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                          |         |   |  |
|--------------------------|---------|---|--|
| Resolution Required      | Y       | Missing   | Provide for review.  |
| Comment Sequence Number  | rge19   |   |  |
| Commenter Last Name      | Eckard  |   |  |
| Resolution Required      | Y       | No protocol implementation conformance statements defined | Add PICS proforma  |
| Comment Sequence Number  | smb01   |   |  |
| Commenter Last Name      | Baatz   |   |  |
| Resolution Required      | Y       | PICS Proforma not present                                 | Use Bluetooth Test Spec  |
| Comment Sequence Number  | tms06   |   |  |
| Commenter Last Name      | Siep    |   |  |
| Clause Number <b>A.1</b> |         | Problem Specification                                     | Proposed Solution  |
| Resolution Required      | Y       | PICS Proforma is empty                                    | Please see the Bluetooth PICS proforma for Radio, Baseband, LMP and L2CAP (attached as a separate document). |
| Comment Sequence Number  | tm26    |   |  |
| Commenter Last Name      | Mueller |   |  |
| Clause Number <b>B</b>   |         | Problem Specification                                     | Proposed Solution  |
| Resolution Required      | Y       | Formal Description of MAC Operation is not provided.      | Formal Description of MAC Operation needs to be provided.  |
| Comment Sequence Number  | mdm14   |   |  |
| Commenter Last Name      | McInnis |   |  |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |               |         |                     |
|-------------------------|---------------|---------|---------------------|
| Resolution Required     | <b>Y</b>      | Missing | Provide for review. |
| Comment Sequence Number | <b>rge20</b>  |         |                     |
| Commenter Last Name     | <b>Eckard</b> |         |                     |

|                         |              |  |                                      |
|-------------------------|--------------|--|--------------------------------------|
| Resolution Required     | <b>Y</b>     | No formal description of MAC operation is included | Add SDL description of MAC Operation |
| Comment Sequence Number | <b>smb02</b> |  |                                      |
| Commenter Last Name     | <b>Baatz</b> |  |                                      |

|                         |                |                 |                |
|-------------------------|----------------|-----------------|----------------|
| Resolution Required     | <b>Y</b>       | Clause is empty | remove or fill |
| Comment Sequence Number | <b>tm27</b>    |                 |                |
| Commenter Last Name     | <b>Mueller</b> |                 |                |

| Clause Number <b>B1</b> |              | Problem Specification          | Proposed Solution  |
|-------------------------|--------------|--------------------------------|--------------------|
| Resolution Required     | <b>Y</b>     | [Annex B,C] SDL-models missing | Include SDL-models |
| Comment Sequence Number | <b>atp05</b> |                                |                    |
| Commenter Last Name     | <b>Palin</b> |                                |                    |

| Clause Number <b>C</b>  |                | Problem Specification                                | Proposed Solution   |
|-------------------------|----------------|--|---|
| Resolution Required     | <b>Y</b>       | Formal Description of PHY Operation is not provided. | Formal Description of PHY Operation needs to be provided. |
| Comment Sequence Number | <b>mdm15</b>   |  |   |
| Commenter Last Name     | <b>McInnis</b> |  |   |

Comment type (editorial, Editorial, technical, Technical) **T**

|                         |                  |  |  |
|-------------------------|------------------|--|--|
| Resolution Required     | <b>Y</b>         | Missing  | Provide for review.  |
| Comment Sequence Number | <b>rge21</b>     |  |  |
| Commenter Last Name     | <b>Eckard</b>    |  |  |
| Resolution Required     | <b>Y</b>         | Clause is empty  | remove or fill   |
| Comment Sequence Number | <b>tm28</b>      |  |  |
| Commenter Last Name     | <b>Mueller</b>   |  |  |
| Clause Number <b>D</b>  |                  | Problem Specification  | Proposed Solution  |
| Resolution Required     | <b>Y</b>         | This clause is not as technically complete, accurate and/or clear as the latest approved and published specification from the Bluetooth SIG. | To maintain proper fidelity to the Bluetooth specification, this clause shall be modified (ideally: replaced and edited if necessary) to adequately mirror the related parts of the latest approved and published specification and/or errata comments from the Bluetooth SIG. |
| Comment Sequence Number | <b>ccb03</b>     |  |  |
| Commenter Last Name     | <b>Bisdikian</b> |  |  |