**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | Suggested changes for comment resolution | |
| Date Submitted | July 2016 | |
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| Re: | TG8 draft text for comment resolution for 802.15.8 | |
| Abstract | This is the work in progress text of the MAC component for IEEE 802.15.8 group for PAC. | |
| Purpose | This document provides the details of draft text to IEEE 802.15.8 | |
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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. | |
| Patent Policy | The contributor is familiar with the IEEE-SA Patent Policy and Procedures:  <http://standards.ieee.org/guides/bylaws/sect6-7.html#6> and  <http://standards.ieee.org/guides/opman/sect6.html#6.3>.  Further information is located at <http://standards.ieee.org/board/pat/pat-material.html> and  <http://standards.ieee.org/board/pat>. | |

# [This is draft text to resolve comment submitted to TG8]

Comment #209

Cap "acknowledgment" in Figure 6. See also Figure 7



**Figure 6—Peering message sequence chart**



**Figure 7—Message sequence chart for de-peering initiated by a PD.**

Comment #380

Replace ‘targeted PDs’ by something else

Comment #382

Do not ACK to a broadcast

* + - 1. One-to-many peering procedure

One-to-many peering occurs between an initiator PD (I-PD) and a number of responder PDs (R-PDs). The result of one-to-many peering is that the I-PD is peered with each one of the R-PDs. One-to-many peering does not deal with peering between R-PDs. As illustrated in Figure 35, a one-to-many peering procedure shall contain the following steps.

1. An I-PD’s higher layer triggers one-to-many peering procedure with an MLME-PEERING.request to its MAC layer (i.e. I-PD’s MAC layer) by including a list of targeted PDs.
2. I-PD’s MAC receiving the higher layer’s MLME-PEERING.request broadcasts the Peering request command with the list of targeted PDs.
3. Each of the targeted R-PDs’ MAC layers (i.e. the MAC layers of #*i* R-PD, #*j* R-PD, and #*k* R-PD), that receives the Peering request command, sends MLME-PEERING.indication to its higher layer*.*
4. Each of the higher layers receiving the MLME-PEERING.indication, respectively, conducts authentication and authorization if requested.
5. Each of the higher layers receiving MLME-PEERING.indication, respectively, decides either to accept the peering request or not and indicates it to its MAC layer accordingly with an MLME-PEERING.response.
6. Each of the targeted R-PDs’ MAC layers, respectively, sends a Peering response command to the I-PD’s MAC layer as directed by its higher layer.
7. The I-PD’s MAC layer sends an Immediate ACK upon receiving a peering response.
8. If a R-PD does not receive an Immediate ACK after sending a Peering response command, it re-sends the Peering response command to the I-PD’s MAC layer.
9. A R-PD stops sending the Peering response command if it does not receive an Immediate ACK after sending the Peering response command three times.
10. The I-PD’s MAC layer sends the MLME-PEERING.confirm to its higher layer.
11. The one-to-many peering is completed if all targeted R-PDs’ responses are received. Otherwise, the I-PD’s higher layer updates the list of targeted PDs by deleting the responded R-PDs and repeat step b) through step k), if the list of targeted PDs is updated less than two times. The I-PD’s higher layer terminates the one-to-many peering after updating the list of targeted PDs two times no matter non-responded R-PDs exist or not.





Figure 35—One-to-many peering procedure message sequence chart

Comment #383, #384

Replace ‘dotted boxes’ by termination.



Figure 34—One-to-one peering procedure message sequence chart



Figure 37—One-to-one de-peering procedure message sequence chart





Figure 38—One-to-many de-peering procedure message sequence chart





Figure 39—One-to-many de-peering message sequence chart