**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 discovery definition and changes in one-to-one de-peering procedure |
| Date Submitted | March 2016 |
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| Re: | TG8 draft text for discovery definition and changes in one-to-one de-peering procedure 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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# [This is draft text for definition of discovery and one-to-one de-peering procedure TG8]

* 1. Discovery

Discovery is a procedure for a PD to detect other PDs in the surroundings. To do that, a PD can send a dedicated message to particular PDs or a non-dedicated message. Other PDs receiving this message can respond or do not respond depending on whether the sending PD requests a response or not. The sending PD shall detect the response if it requests a response. In addition, a PD can detect other surrounding PDs only by receiving discovery messages from other PDs.

* + - 1. One-to-one de-peering procedure

As illustrated in Figure 41, a one-to-one De-peering procedure may contain the following steps.

1. A PD’s Higher Layer (i.e. PD1’s Higher Layer) triggers De-peering procedure with a MLME-DE-PEERING.request to its MAC (i.e. PD1’s MAC).
2. The MAC receiving the Higher Layer’s de-peering request (i.e. PD1’s MAC) sends the de-peering request message to the targeted PD’s MAC (i.e. PD2’s MAC).
3. The targeted PD’s MAC (i.e. PD2’s MAC) receives the De-peering request message and sends ACK/NACK message to the PD requesting de-peering (i.e. PD1’s MAC*).*
4. The targeted PD’s MAC (i.e. PD2’s MAC), sends the received MLME-DE-PEERING.indication message to its Higher Layer (i.e. PD2’s Higher Layer).
5. *Optional*: the Higher Layer receiving the De-peering request (i.e. PD2’s Higher Layer) decides either to accept the De-peering request or not and indicates it by sending MLME-DE-PEERING.response to the MAC (i.e. PD2’s MAC) accordingly.
6. *Optional*: the targeted PD’s MAC (i.e. PD2’s MAC) sends De-peering response message to the PD requesting de-peering (i.e. PD1’s MAC) as directed by the Higher Layer.
7. *Optional*: the PD’MAC receiving the De-peering response message (i.e. PD1’s MAC) sends ACK/NACK message to the target PD (i.e. PD2’s MAC).
8. *Optional*: the PD’MAC receiving the De-peering response message (i.e. PD1’s MAC) sends the MLME-DE-PEERING.confirm message to its Higher Layer (i.e. PD1’s Higher Layer).
9. *Optional:* the link between PD1 and PD2 is disconnected.



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



Figure 41—One-to-one de-peering procedure message sequence chart

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