**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **Proposed comment resolution for CID R1231, R1232 of LB110** | |
| Date Submitted | 16 October 2015 | |
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| Re: | 802.15.10 Consolidated Comment Entry Form, CID R1231, R1232 | |
| Abstract | Provides a proposed resolution to CID R1231, R1232 | |
| Purpose | To be used by the technical editor to apply the necessary changes to the draft to resolve CID R1231, R1232 | |
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**Comment R1231**

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| **Commenter** | **Page** | **Clause** | **Line** | **Comment** | **Proposed change** |
| Verotiana Rabarijaona | 14 | 5.1.2.1 | 18 | A device may receive several EBs during a scan. | Modify Figure 6 and 7 to illustrate multiple response L2R-D IEs |

**Resolution: Revise**

* ***Replace Figure 6 with:***



* ***Modify 5.1.2.1 as follows:***

**5.1.2.1 Service discovery procedure**

If a device wishes to join an L2R mesh and is not associated to any PAN, it should perform an enhanced scan to find a PAN upon which the L2R mesh is built and associate with this PAN beforehand. The association procedure to a PAN is described in IEEE P802.15.4-D00.

The next higher layer of a joining device invokes the L2RLME-PAN-SCAN.request primitive to request the broadcast of an enhanced beacon request (EBR) with an empty L2R Discovery (L2R-D) IE, that is with an empty content. The L2R-D IE is defined in 6.2.1. The scan procedure is conducted on the channels indicated in L2RLME-PAN-SCAN.request primitive. The L2R-D IE is sent in an EBR with the Destination PAN Identifier and the Destination Address fields to 0xffff to discover all the existing L2R meshes. The L2RLME-SCAN.request primitive is described in 7.1.1.1.

When an FFD that can act as a coordinator and that belongs to an L2R mesh receives the EBR with the L2R-D IE, it replies with an EB with an L2R-D IE containing the address of the mesh root, the list of services and the security mode of the L2R mesh it belongs to. If the macAutoRequest in the MAC PIB is set to FALSE, the L2R sublayer is notified with an MLME-BEACON-NOTIFY.indication primitive upon receiving an EB frame. In this case, the L2R sublayer issues an L2RLME-PAN-SCAN.indication primitive to the next higher layer each receiving MLME-BEACON-NOTIFY.indication primitive from the MAC layer. After the scan is completed the L2R sublayer invokes the L2RLME-PAN-SCAN.confirm primitive with an empty ScanResultList. If macAutoRequest is set to TRUE, the L2R sublayer is notified of all the scan results with the MLME-SCAN.confirm primitive from the MAC layer at the end of the scan. The L2R sublayer invokes the L2RLME-PAN-SCAN.confirm primitive with the available coordinator candidates in the ScanResultList parameter. If the parameters of this primitive are invalid, INVALID\_PARAMETER is returned as the status. If the parameters are valid but no L2R mesh is found, NO\_DESIGNATED\_MESH is returned as the status. If any error occurs in MAC scan procedure, an error code of the MAC scan procedure is returned as the status. This procedure is illustrated in Figure 6. The L2RLME-PAN-SCAN.confirm and the L2RLME-PAN-SCAN.indication are described in 7.1.1.2 and 7.1.1.3 respectively.

After the discovery, the device associates with a PAN with at least one L2R mesh providing the desired service. The PAN selection is made by higher layers and is out of the scope of this recommended practice.

If a device is already associated with a PAN, it may also discover the potential L2R mesh(es) deployed within its PAN. In this case, the device sends the L2R-D IE on the channel of the current PAN within an EBR where the Destination PAN Identifier field is set to the current PAN ID and the Destination Address field is set 0xffff to allow a response from all potential neighbors. This procedure is illustrated in Figure 7.

* ***Replace Figure 7 with:***

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- ***Replace L2RLME-SCAN with L2RLME-PAN-SCAN in clause 7.1***

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| **Commenter** | **Page** | **Clause** | **Line** | **Comment** | **Proposed change** |
| Verotiana Rabarijaona | 16 | 5.1.2.2 | 15 | A device may receive several EBs during a scan. | Modify Figure 8 to illustrate multiple response TC IEs |

* ***Replace Figure 8 with***

