**IEEE P802.15**

**Wireless Personal Area Networks**

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| Re: |  |
| Abstract | [text for resolution to CID #77 of Sponsor Ballot Recirculation #1] |
| Purpose | [to provide text for resolution CID #77] |
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**Text for resolution to CID #77 of Sponsor Ballot Recirculation #1**

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***Add two new fields in Figure 48naf Device announcement IE:***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Bit: 0** | **1** | **2-5** | **6-15** | **16-20** | **21-23** | **Variable** |
| Address Mode  | Addresses Pending | Reserved | Number of Addresses | Sequence Number | Page Number | Address List |

**Figure 48naf Device announcement IE**

***change following text in red of 5.2.4.36 Device Announcement IE as indicated by the text in blue:***

When Addresses Pending field is set to one, it means that there are more neighbor addresses to be sent by following beacon frames with a DA IE. When Addresses Pending field is set to zero, it means that there is no more neighbor address to be announced at this moment.

The Address Pending field shall be set to one when the set of neighbor addresses to be announced in multiple beacons. When Addresses Pending field is set to one, it ~~means~~ indicates that this IE contains a subset of the set of neighbor addresses known by the device and ~~there are~~ more neighbor addresses are to be sent ~~by~~in following beacon frames with a DA IE; the Sequence Number field shall be set to a value identifying the set of addresses to be announced and the Page Number field shall be set to 1 for the first subset of address and incremented by 1 for each subsequent subset of addresses. An increment in the Sequence Number indicates that a new set of neighbor addresses is being announced. The Sequence Number shall be incremented when any address in the set of neighbor addresses has been changed.

The Address Pending field shall be set to zero when the set of addresses to be announced is contained in a single DA IE.
When Addresses Pending field is set to zero, the Sequence Number and Page Number fields shall be set to zero.

***Add two new items (text in blue) in 6.2.24.1 MLME-DA.request primitive***

The semantics of this primitive are:

 MLME-DA.request (

 CoordAddrMode,

 CoordPANId,

 CoordAddress,

 DaSequenceNum,

 DaPageNum,

 DaAddrMode,

 DaAddrNum,

 DaAddrList

 )

The primitive parameters are defined in Table 44ze.

**Table 44ze—MLME-DA.request parameters**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid range** | **Description** |
| CoordAddrMode | Enumeration | SHORT\_ADDRESS,EXTENDED\_ADDRESS | The addressing mode of the coordinator to which this device is associated with. |
| CoordPANId | Integer | 0x0000 - 0xffff | The identifier of the PAN to which this device is associated with. |
| CoordAddress | Device address | As specified by the CoordAddrMode parameter | The address of the coordinator to which this device is associated with |
| DaSequenceNum | Integer | 0-31 | The sequence number of device annoucement |
| DaPageNum | Integer | 0-7 | The page number of DA IE transmitted in a round of device announcement |
| DaAddrMode | Enumeration | SHORT\_ADDRESS,EXTENDED\_ADDRESS | The addressing mode of the neighbors’ addresses to be transmitted |
| DaAddrNum | Integer | 0-2048 | The number of neighbors’ addresses to be transmitted |
| DaAddrList | Addresses list | As specified by the DaAddrMode parameter | The neighbors’ addresses list to be transmitted |

***Add two new items (text in blue) in* 6.2.24.3 MLME-DA.indication primitive**

The MLME-DA.indication primitive indicates reception of a beacon frame with a DA IE.

The semantics of this primitive are

 MLME-DA.indication (

 CoordAddrMode,

 CoordPANId,

 CoordAddress,

 DaSequenceNum,

 DaPageNum,

 AddrMode,

 Address,

 DaAddrNum,

 DaAddrMode,

 DaAddrList

 )

The primitive parameter is described in Table 44zg.

**Table 44zg—MLME-DA.confirm parameters**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid range** | **Description** |
| CoordAddrMode | Enumeration | SHORT\_ADDRESS,EXTENDED\_ADDRESS | The addressing mode of the coordinator to which the beacon transmitting device is associated with. |
| CoordPANId | Integer | 0x0000 - 0xffff | The identifier of the PAN to which the beacon transmitting device is associated with. |
| CoordAddress | Device address | As specified by the CoordAddrMode parameter | The address of the coordinator to which the beacon transmitting device is associated with |
| DaSequenceNum | Integer | 0-31 | The sequence number of device annoucement |
| DaPageNum | Integer | 0-7 | The page number of DA IE transmitted in a round of device announcement |
| AddrMode | Enumeration | SHORT\_ADDRESS,EXTENDED\_ADDRESS | The addressing mode of the beacon transmitting device |
| Address | Device address | As specified by the AddrMode parameter | The address of the beacon transmitting device |
| DaAddrNum | Integer | 0-1024 | The number of addresses included in the Address List field of a DA IE |
| DaAddrMode | Enumeration | SHORT\_ADDRESS,EXTENDED\_ADDRESS | The addressing mode of the addresses included in the Address List field of a DA IE, if DaAddrNum is not zero |
| DaAddrList | Device address | As specified by the DaAddrMode parameter | The addresses included in a DA IE, if DaAddrNum is not zero |