**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 Resolutions for CID 171** | |
| Date Submitted | 27 July 2015 | |
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| Re: | Proposed comment resolutions related to the 802.15.10 Consolidated Comment Entry Form, CID 171 | |
| Abstract | This document provides a proposed comment resolutions for the comments which are related to the security section of D1 of 802.15.10 | |
| Purpose | To propose | |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. | |
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**Comment #171**

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| --- | --- | --- | --- | --- | --- |
| **Commenter** | **Page** | **Clause** | **Line** | **Comment** | **Proposed change** |
| Tero Kivinen | 22 | 5.2.1 | 20 | There is no text how this sequence number is incremented, or whether it can wrap around etc. For the text it looks like it is static number that will never change... I would assume it would be incremented every time something changed in the network, but I have no idea what kind of changes trigger incrementing it, and who updates this. | Specify how sequence number is used. |

**Resolution: AiP**

Modify the description of the sequence number of MTT table and add text to explain how sequence number is used.

* ***Modify the text after table 1 in the clause 5.2.1 as follows:***

The L2R mesh tree formation is achieved through the propagation of the TC IEs initiated by the mesh root. The mesh root broadcasts TC IE with the sequence number 0xf0 (or any value from 0xf0 to 0xff) when it starts mesh tree. The sequence number is incremented each time the mesh root broadcasts TC IE. The sequence number is wrapped around to 0x00 after 0xff or 0xef is used as described below.

* 0xf0 – 0xff: These values are used when the mesh root is initialized. The SN is wrapped around to 0x00 after 0xff is used.
* 0x00 – 0xef: These values are used for other than initial phase. The SN is wrapped around to 0x00 after 0xef is used.

All of devices are able to detect that the tree root is in initial phase when it receives a TC IE with SN for initialization (0xf0 – 0xff). If a device receives the TC IE with SN 0xf0 – 0xff after it receives the one with SN 0x00 – 0xef, it should clear MTT and NT related the mesh root ID which the TC IE indicates and initializes them with the received TC IE since the mesh root has been reset. The use of the SN 0xf0 – 0xff in the mesh root may be optional.

* ***Modify the description of the sequence number in table 1 as follows:***

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Valid Range** | **Description** |
| Sequence number | Integer | 0x00 - 0xff | Set and incremented only by the mesh root. Same value is used for sending TC IE as in received one on other nodes than the mesh root. ~~Set by the mesh root and incremented each sending TC IE by the mesh root. and propagated. Used to know the latest tree information.~~  0xf0 – 0xff: Used only when the mesh tree (re)starts  0x00 – 0xef: Normal usage  Detail usage of the sequence number is described in 5.2.1 |

* ***Modify the text in the clause 6.2.2.5 as follows:***

Replace “The Sequence Number field contains the sequence identifier of the TC IE.” to “The Sequence Number field contains the sequence identifier of the TC IE. The usage is described in 5.2.1.”