**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 Resolutions for Flowchart Comments CID #R109, R110** | |
| Date Submitted | 4 July 2015 | |
| Source | [Charlie Perkins],  [Futurewei],  [2330 Central Expressway,  Santa Clara,  CA 95050] | Voice: [+1-408-330-4596]  Fax: [+1-408-330-5088]  E-mail: [charliep@computer.org] |
| Re: | 802.15.10 Consolidated Comment Entry Form, CIDs #R109, R110 | |
| Abstract | Provides a proposed resolution to CIDs #R109, R110 | |
| Purpose | To be used by the technical editor to apply the necessary changes to the draft to resolve CIDs #R109, R110 | |
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**Comments CIDs #R109, R110**

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| --- | --- | --- | --- | --- | --- | --- |
| CID | Name | Page | Sub-clause | Line # | Comment | Proposed Change |
| R109 | Charlie Perkins | 38 | 5.4.1.3 | 38 | Lower-right "Forward packet" can also fail… | Lower-right "Forward packet" box needs a Failed arrow |
| R110 | Charlie Perkins | 38 | 5.4.1.3 | 41 | MAC layer function boxes can be coalesced | If convenient, move two center procedure up vertically |

**Resolution: AiP**

**CIDs #R109, R110:** The following revised flow diagram consolidates similar functions and improves the accuracy of the control flow.

* ***Replace Figure 20 as follows:***



**CID 377**: The definition for ETX is unclear.

* ***Add a new Section 5.2.2.1:***

**5.2.2.1 ETX link metric**

The ETX metric of a link is the estimated average number of transmissions required to successfully send a packet (each packet smaller than MTU) over that link, until an acknowledgement is received. The ETX metric is additive; in other words, the ETX metric of a path is the sum of the ETX metrics for each link on the path.

**CID 378**: The units of measurement for ETX should have much finer granularity.

* ***Insert the following text at the end of the description for ETX in Table 11:***

“, measured in units of .001”

**CIDs 379, 380, and R195.** The unit of measurement for ETT is milliseconds, and the numerical representation for the unit should be a 16 bit (unsigned) integer, allowing for ETT up to over a minute. Although the meaning of ETT might be more precisely conveyed by the name “Expected Delivery Time”, the acronym ETT is already well-known in the literature and so it should be kept.

* ***Modify the Type field for ETT in Table 11 to be Integer instead of Float. Modify the length field to be 2 instead of 4.***

**CID R196**: A single Metric ID allocation in Table 11 for Vendor-Specific may be insufficient. Utilize the next octet as a subtype field.

* ***Renumber the type of the Vendor specific Metric ID to be 15, so that it is preceded by all other allocated Metric IDs.***
* ***Insert the following text as the description for Vendor specific in Table 11:***

“The next one or two octets identify the exact type of vendor-specific Metric. If the most significant bit of the first octet of the value is ‘0’, then the type field is 8 bits long, otherwise the type field is 16 bits long. The length of the metric is determined by this 8 or 16 bit type field.”

* ***Insert the following figure to illustrate the description for Vendor specific subtype:***

