IEEE P802.15

**Wireless Personal Area Networks**

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| Project | TG6 Body Area Networks | |
| Title | Resolution of TG6 Draft D0 comments: S7-514, S7-513, S7-512, S7-511, S-509, S7-538, S7-506, S7-270 | |
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| Re: | Proposed Resolution of D0 comments: S7-514, S7-513, S7-512, S7-511, S-509 (and S7-538, S7-506, S7-270) | |
| Abstract |  | |
| Purpose |  | |
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Proposed Resolution of D0 comments: S7-514, S7-513, S7-512, S7-511, S-509 (and S7-538, S7-506, S7-270)

**S7-514: Section 7.8.3, Page 97, Line 13-14**

* Comment: If at all, first frame is transmitted without payload, it should not be called emergency frame. Because, emergency frame is transmitted with payload.
* Commentators proposed resolution: Suggest a different name to the first frame transmitted.
* Must be satisfied: Yes
* Resolution: Accept
* Proposed change: Called the first frame as Alarm frame. Create an Alarm frame subtype and add to the table 3.

**S7-513: Section 7.8.3, Page 98, Line 5-6**

* Comment: Ambiguity on line 5 and 6. Line 5 and 6 are not well does not fit in the flow of Medical event report section and not well connected to the rest of the section.
* Commentators proposed resolution: Rewrite line 5 and 6
* Must be satisfied: Yes
* Resolution: Accept
* Proposed change: Added sentence “In some cases, when hub is operational, multiple retries of Alarm frame from a node may collide with the frames transmitted from the hub.” to connect line 5-6 with rest of the section and maintain the flow.

**S7-512: Section 7.8.3, Page 98**

* Comment: In the figure 78, change the "frame" to "emergency frame"
* Commentators proposed resolution: Change the figure
* Must be satisfied: Yes
* Resolution: Accept
* Proposed change: The underlying figure is with Jin-Meng. Please change the first frame name to the alarm frame and other frames to Emergency frame, in the figure 78.

**S7-511: Section 7.8.3, Page 98**

* Comment: The figure 78 does not reflect that multiple emergency frames can be transmitted on the same channel before moving to the next channel.
* Commentators proposed resolution: Change the figure
* Must be satisfied: Yes
* Resolution: Accept
* Proposed change: The underlying figure is with Jin-Meng. Please show multiple Emergency (alarm) frames are transmitted in one channel before moving to the next channel.

**S7-509: Section 7.8.3, Page 97, Line 19**

* Comment: It is mentioned that emergency device shall try sending emergency signal untill it receives I-ACK or "Pauses its transmission". Rather than just saying "Pauses its transmission", we should mention the conditions under which device pauses its transmission.
* Commentators proposed resolution: The complete behavior of the device should be mentioned after all the channels are exhausted
* Must be satisfied: Yes
* Resolution: Accept
* Proposed change: Added sentence “When channels in the channel order list are exhausted without receiving an expected I-Ack frame, the node may pause its transmission or select the channel order list again to transmit the Alarm frame” to the section elaborate the node behavior.

**7.8.3 Medical implant event report**

When not transmitting, a hub should stay on receive mode in the channel selected according to its channel order list communicated to the nodes connected with it. A node connected with a hub may transmit frames reporting a medical implant event in its next scheduled bilink allocation interval, if available, following a Poll or T-Poll frame granting an immediate polled allocation to it by the hub.

The node may also transmit such frames anytime as illustrated in Figure 78. In particular, the node should transmit an Alarm frame with the Ack Policy field set to I-Ack, in the first channel of the channel order list last communicated to it by the hub. It should retry the frame for up to pMICSNodeAlarmRetries times on this channel upon failing to receiving an expected acknowledgment. If it still receives no acknowledgment, it should retry the Alarm frame in the next MICS channel on the channel order list, and again in another channel at pMICSFrameSpace after the end of its last frame transmission, until it receives an expected I-Ack frame. When channels in the channel order list are exhausted without receiving an expected I-Ack frame, the node may pause its transmission or select the channel order list again to transmit the Alarm frame.

After receiving an I-Ack frame, it should proceed to transmit the Emergency frames (with incremental sequence numbers) containing frame payloads generated from the medical implant event. The node shall set to one the More Data field in the MAC header of these Emergency frames except the last one, and shall set to zero the More Data field in the MAC header of that last frame to indicate the end of the medical event report transfer. On receiving an Emergency frame with More Data field set to one from the node, the hub should not initiate its own frame transactions with this node or another one until it has received all Emergency frames as indicated by the More Data field value.

In some cases, when hub is operational, multiple retries of Alarm frame from a node may collide with the frames transmitted from the hub. After retrying a frame for up to pMICSHubMaxRetries without receiving an expected response, the hub should enter the receive mode to receive possible Alarm frames.