**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Wireless Personal Area Networks | |
| Title | **PAN ID Compression Table for Beacon, Data, Acknowledgement, Command frames** | |
| Date Submitted | 11 Feb 2015 | |
| Source | [Benjamin Rolfe] [BCA] [PO Box 798 Los Gatos CA 95031] | Voice: [+1-408-395-7207] Fax: [ ] E-mail: ben.rolfe @ ieee.org] |
| Re: | 802.15.4 Revision Preparation | |
| Abstract | Submission to Maintenance standing committee: Proposed revised format and content for the PAN ID compression table and other related things. | |
| Purpose | Promote useful work | |
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PAN ID Compression for Beacon, Data, Acknowledgement, Command frames

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| --- | --- | --- | --- | --- | --- | --- |
| Frame Version | Source Address | Destination Address | PAN ID Comp | Frame Types | Source PAN ID | Dest PAN ID |
| 0b00 or 0b01 | Not Present | Not Present | 0 | Acknowledgement | Not Present | Not Present |
| Not Present | Not Present | 1 | Not valid for any frame type | NA | NA |
| Not Present | Present | 0 | Beacon, Data, Acknowledgment, Command | Not Present | Present |
| Not Present | Present | 1 | Not valid for any frame type | NA | NA |
| Present | Not Present | 0 | Beacon, Data, Acknowledgment, Command | Present | Not Present |
| Present | Not Present | 1 | Not valid for any frame type | NA | NA |
| Present | Present | 0 | Beacon, Data, Acknowledgment, Command | Present | Present |
| Present | Present | 1 | Beacon, Data, Acknowledgment, Command | Not Present | Present |
| 0b10 | Not Present | Not Present | 0 | Beacon, Data, Acknowledgment, Command | Not Present | Not Present |
| Not Present | Not Present | 1 | Beacon, Data, Acknowledgment, Command | Not Present | Present |
| Not Present | Short or Extended | 0 | Beacon, Data, Acknowledgment, Command | Not Present | Present |
| Not Present | Short | 1 | Not valid for any frame | NA | NAA |
| Not Present | Extended | 1 | Beacon, Data, Acknowledgment, Command | Not Present | Not Present |
| Short or Extended | Not Present | 0 | Beacon, Data, Acknowledgment, Command | Present | Not Present |
| Short | Not Present | 1 | Not valid for any frame | NA | NA |
| Extended | Not Present | 1 | Beacon, Data, Acknowledgment, Command | Not Present | Not Present |
| Short or Extended | Short or Extended | 0 | Beacon, Data, Acknowledgment, Command | Present | Present |
| Short | Short | 1 | Beacon, Data, Acknowledgment, Command | Not Present | Present |
| Short | Extended | 1 | Beacon, Data, Acknowledgment, Command | Not Present | Present |
| Extended | Short | 1 | Beacon, Data, Acknowledgment, Command | Not Present | Present |
| Extended | Extended | 1 | Beacon, Data, Acknowledgment, Command | Not Present | Not Present |

Other related text

(DF3 Page 66 line 32):

If both destination and source addressing information is present, the MAC sublayer shall compare the destination and source PAN identifiers. If the PAN identifiers are identical, ]the PAN ID Compression field shall be set to one, and the source PAN identifier shall be omitted from the transmitted frame. If the PAN identifiers are different, the PAN ID Compression field shall be set to zero, and both Destination PAN Identifier and Source PAN Identifier fields shall be included in the transmitted frame. If only either the destination or the source addressing information is present, the PAN ID Compression field shall be set to zero, and the PAN identifier field of the single address shall be included in the transmitted frame.

Does it match the table/need updating?

And on page 68 line 20:

If the PAN ID Compression field is set to one and both destination and source addressing information is included in the frame, the MAC sublayer shall assume that the omitted Source PAN Identifier field is identical to the Destination PAN Identifier field.

Seems correct for all frames, but do we need to add something about if neither is present?

Page 182 line 17: