

Project: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

Submission Title: [LB50 comment resolution related to subclause 5.6.5]

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Re: [Response to LB50 comments]

Abstract: [This document describes a LB50 comment resolution related to subclause 5.6.5]

Purpose: [Proposal to resolve LB50 comments]

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LB50 comment resolution related to subclause 5.6.5

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CID 180, 181

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
180	James Gilb	5	5.6.5.1	18	23	"Non beacon ... in 7.6.1.5" is not correct. They can use either Aloha or CSMA/CA (the correct names).	Just say that either can be used. Better still, list the 4 methods by the correct name in a dashed list, cross reference the section (7.6.1.5) and delete the rest of this subclause.
181	James Gilb	5	5.6.5.1	18	31	"Beacon-enabled ... beacon transmission." is not correct as they can use either slotted aloha or slotted CSMA/CA (the correct names).	Just say that either can be used. Better still, list the 4 methods by the correct name in a dashed list, cross reference the section (7.6.1.5) and delete the rest of this subclause.

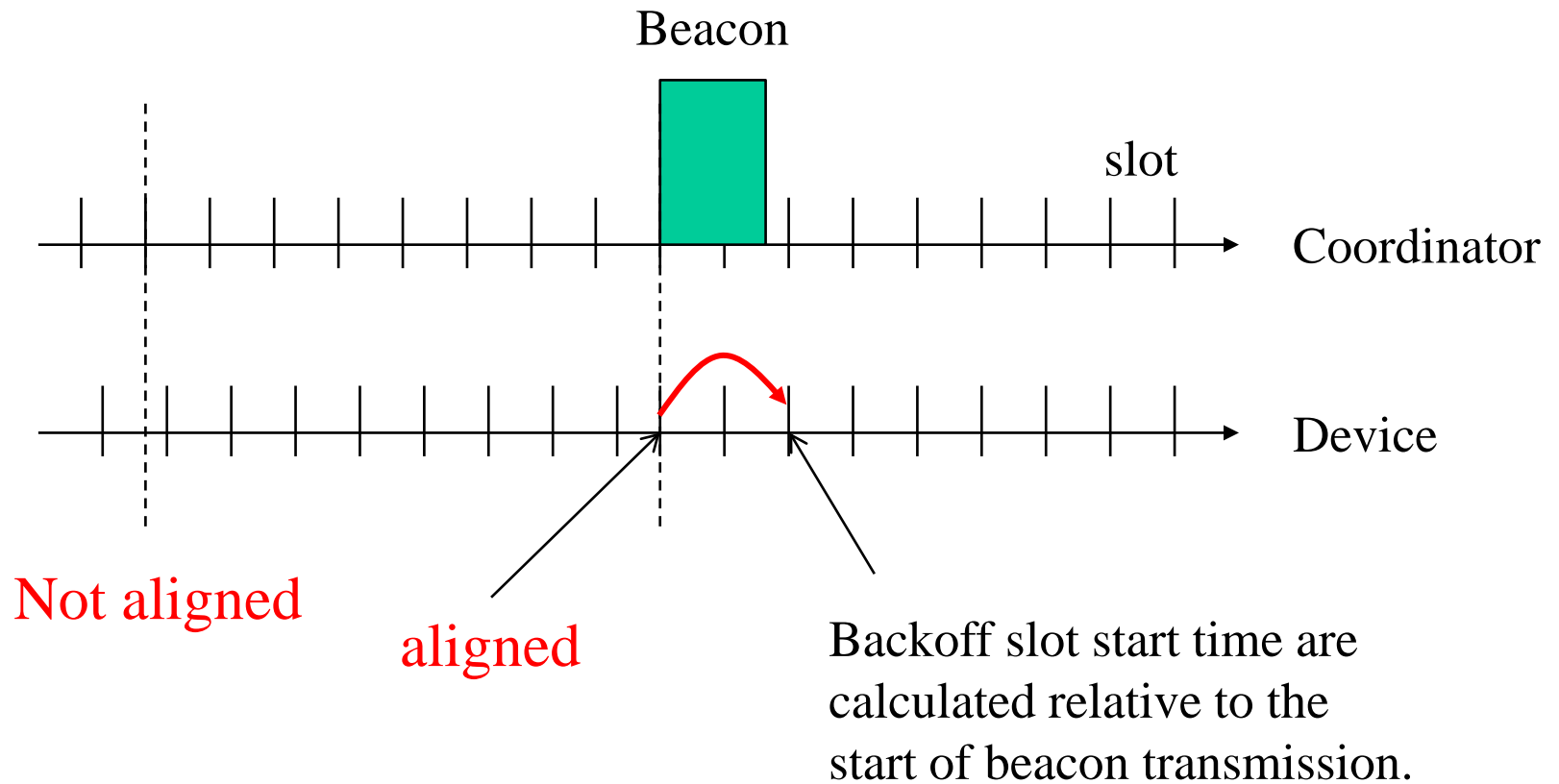
- Resolution/Instruction to editor
 - Accept in principle, see CID 133

CID 182, 183

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
182	James Gilb	5	5.6.5.1	18	31	"aligned with the start of beacon transmission." is not completely correct.	Change to "backoff slot start times are calculated relative to the start of beacon transmission."
183	James Gilb	5	5.6.5.1	18	31	"The backoff slots .. aligned to the coordinator." is a repeat as the previous sentence just said that they are aligned to the beacon.	Delete the sentence.

- Original sentence
 - Beacon-enabled PANs use a slotted random channel access mechanism, where the backoff slots are aligned with the start of the beacon transmission. The backoff slots of all devices within one VLC WPAN are aligned to the coordinator.
- Suggested remedy is correct, but original sentence is also correct.
 - “aligned with” means the timing align between a coordinator and devices
 - All device within one VLC WPAN align with the coordinator’s timing whenever device receives the beacon frame.
 - After receiving the beacon frame and alignment, Device may be start backoff algorithm. Backoff slot start times will **be calculated relative to** the start of beacon transmission.

CID 182, 183 cont.



CID 182, 183 cont.

- Subclause 7.6.1.5 Random access algorithm (P.175)
 - In slotted random access, the backoff period boundaries of every device in the WPAN shall be aligned with the superframe slot boundaries of the coordinator, i.e., **the start of the first backoff period of each device is aligned with the start of the beacon transmission.**
- Resolution/Instruction to editor
 - CID 182: Reject
 - Original sentence is more inclusive.
 - CID 183: Accept, do as suggested remedy

CID 184

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
184	James Gilb	5	5.6.5.2	18	42 45	The paragraph "if the originator ... was successful." is unnecessary. The originator is allowed to do anything it wishes if the ACK fails. The standard does not require it to do anything (or least it shouldn't). The behavior is not only application dependent, it is dependent on the current state of the originator.	Delete the paragraph, it is not necessary.

- Original sentence
 - If the originator does not receive an acknowledgment after some period, it assumes that the transmission was unsuccessful and retries the frame transmission. If an acknowledgment is still not received after several retries, the originator can choose either to terminate the transaction or to try again. When the acknowledgment is not required, the originator assumes the transmission was successful.

CID 184 cont.

- Resolution/Instruction to editor
 - Accept in principle
 - remove the action of the originator when the Ack fails and change sentence
 - If the originator does not receive an acknowledgment after some period, it assumes that the transmission was unsuccessful ~~and retries the frame transmission. If an acknowledgment is still not received after several retries, the originator can choose either to terminate the transaction or to try again.~~ When the acknowledgment is not required, the originator assumes the transmission was successful.

CID 195a

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
195a	James Gilb	5	5.6.5.3	19	1	The sentence says way too much for an overview.	Change the subclause to say "In order to detect bit errors, a cyclic redundancy check is included in the MSDU, as defined in 7.2.1.9. Really, 5.6.5 should be three paragraphs, not three subclauses. This is supposed to be an overview.

- Resolution/Instruction to editor
 - Accept the change of a sentence as suggested remedy
 - “In order to detect bit errors, a cyclic redundancy check is included in the MAC frame, as defined in 7.2.1.9 and in the PHY header, as defined in 6.4.1.5”
 - Reject the merge of subclauses
 - because three subclauses explain the different way for successful delivery.

CID 175

CID	Name	Clause	Subclause	Page	Line	Comment	Suggested Remedy
175	Soo-Young Chang	5	5.6.5.1	18	25	What happens if the carrier sense mechanism is not active?	Need to explain what will happen if the carrier sense mechanism is not active.

- Resolution/Instruction to editor
 - Accept in principle
- Need to discussion
 - Is the carrier sense possible in VLC?

