

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

Submission Title: [CID1500 SUNTurnaroundTime supplement]

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Re: []

Abstract: [To provide the supplement rationale behind CID1500 concerning SUNTurnaroundTime and CCA duration]

Purpose: [Contribute to the 15.4g SUN standardization process.]

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SUNTurnaroundTime & CCA Duration

Table 75ag— CCA duration

779–787MHz Band:	512 us
868–870MHz Band:	1024 us
902–928MHz Band:	512 us
(950–958MHz Band:	512 us)
2400–2483.5MHz Band:	512 us

Table 30—PHY constants (*aSUNTurnaroundTime*)

RX-to-TX or TX-to-RX	
maximum turnaroundtime	1 ms

aSUNTurnaroundTime \gg or \approx CCA duration

CID1500 was going to suggest, it may better to hold

aSUNTurnaroundTime \leq CCA duration if actually possible.

Rationale of $aSUNTurnaroundTime \ll CCA \text{ duration}$

Because,

- on which the integrity of channel clearance may based on
- the quick CCA, RX-TX switch, TX and Channel Release should have been the rationale of Low Power operation of entire 15.4
- In the case of Frequency Channel Hopping with CSMA-CA, the slot time may be limited.

Above are just the clarification of CID1500.

Thank you