## Comment discussion: Medium Delay (C #11164)

Howard Heck

IEEE P802.3ck Task Force June 30,2020

## Comment #11164

Comm entID	Comme nterNam e	Claus e	Ŧ	Subclause	Page	Line	Comm entTyp e	Comment	SuggestedRemedy
11164	Palkert, Tom	162		162.5	140	18	т	[Comment resubmitted from Draft 1.1. 162.5, P135, L18] One way delay thru medium of 14ns is insufficient for DAC delay times.	Change value back to 20 ns

- Affected sub-clause: 162.5
  - "It is assumed that the one-way delay through the medium is no more than 14 ns."
- History
  - D1.0: Inherited 20ns value from CL136.
  - D1.0, C#243: accepted at 01/2020 interim meeting, changed to 14ns.
  - D1.2: C#11164 proposes changing value back to 20ns.

## D1.0 Comment 243

C/ 162	SC 162.5	P129	L45	# 243
Ran, Adee	e	Intel		
Comment	Туре Т	Comment Status A		

The assumed maximum one way delay through the medium was 20 ns in clause 136, where the longest medium was a 3 meter cable. Now with 2 meters the number should be scaled down to 14 ns.

There is a motivation for decreasing the assumed cable medium delay - it would allow more delay in the PMD, which is currently left with only 20.96 ns. This can help with some PMD implementations, with no penalty to upper layers which still assume 40.96 ns as in previously defined PHYs.

This can also be applied to the specifications of backplane PMDs. Although the physical length of the backplane is not specified, the existing medium delay matches the delay for cable assemblies, and the same numbers were used in previous backplane/cable PMDs. So a similar change should be made in 163.5.

These changes should also be applied in the new rows in tables 80-5 and 116-5.

## SuggestedRemedy

ACCEPT.

Change the maximum delay through the medimum from "20 ns" to "14 ns" here, in 163.5, and in the new rows in tables 80-5 and 116-5.

```
Response Response Status C
```