Changes to clause 98 to implement 85ms link fail inhibit timer per Fitzgerald_3dg_01_11132024.pdf slide 7

G. Zimmerman 6/20/2025

Add 98.5.2 to the draft, with definition of link fail inhibit timer, and editing instruction:

98.5.2 State diagram timers

Change definition for link fail inhibit timer to add 100BASE-T1L as shown:

link_fail_inhibit_timer_[HCD]

Timer for qualifying a link_status=FAIL indication or a link_status=OK indication when a specific technology link is first being established. A link will be considered "failed" only if the link_fail_inhibit_timer_[HCD] has expired and the link has still not gone into the link_status=OK state. The expiration time of the link_fail_inhibit_timer_[HCD] shall be dependent on the selected PHY type. For all PHY types, except 10BASE-T1L, 100BASE-T1L, and 10BASE-T1S, this timer shall expire 97 ms to 98 ms after entering the AN GOOD CHECK state. For a 10BASE-T1L PHY, this timer shall expire 3030 ms to 3090 ms after entering the AN GOOD CHECK state. For a 10BASE-T1L PHY, this timer shall expire 85 ms after entering the AN GOOD CHECK state. For a 10BASE-T1S PHY, this timer shall expire 400 ms to 405 ms after entering the AN GOOD CHECK state.

Add 98.6 PICS to the draft:

98.6 Protocol implementation conformance statement (PICS) proforma for Clause 98, Auto-Negotiation for Single Differential-Pair Media

98.6.3 Major capabilities/options

Insert new row to table after *10T1S (unchanged rows not shown) as shown:

Item	Feature	Subclause	Value/Comment	Status	Support
*100T1L	100BASE-T1L	98.5.2		0	Yes[]
	PHY type				No[]

98.6.9 State diagram and variable definitions

Change table to change row SD19, and add new row SD 20a after row SD20 (unchanged rows not shown) as shown:

Item	Feature	Subclause	Value/Comment	Status	Support			
SD19	link_fail_inhibit_timer_[HCD]	98.5.2	Expire 97 to 98	!10T1L <u>*</u>	Yes[]			
			ms after entering	!100T1L *	N/A[]			
			the AN GOOD	!10T1S:M				
			CHECK state					
SD20a	link_fail_inhibit_timer_[HCD]	98.5.2	Expire 85 ms	100T1L:M	Yes[]			
	for 100BASE-T1L PHY		after entering the		N/A[]			
			AN GOOD					
			CHECK state					