Title: Draft comment resolutions for comments pertaining to reference plane and message time stamp point

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Reference: (1) Initial draft comment resolution contained in http://www.ieee802.org/1/files/private/as-drafts/d1/802-1AS-d1-0-pdis-sort-by-comment-id.pdf (2) discussion in AVB timing phone call of September 23, 2007 (3) discussion with Alan Bartky, September 26, 2007.

1. Comments 23, 28, 202, 214, 215. See reference (1) for text of comments.

Based on the discussion of reference (2), it is proposed that the response to all these comments be Accept in Principle. The proposed text for the response is (the detailed text will be written in comment 23, and referenced in the others):

ACCEPT IN PRINCIPLE. Group comments 23, 28, 202, 214, 215. In the discussion of time stamp generation in 7.6 and 8.4.3 (or wherever this material may be moved, and also wherever else time stamp generation is discussed or referenced, e.g., as indicated in comments 28 and 202), the following changes will be made: (1) the term PHY will be used to designate the lower layers just above the interface to the physical medium (i.e., wire), and the reference plane will be defined as the interface between the PHY and the physical medium, (2) the MII and GMII will not be mentioned or referred to, (3) the "time stamp measurement plane" will be defined as the place in the protocol stack where the time stamp is actually referenced to, (4) ingress and egress latencies will be defined as differences between the time stamp measurement plane and reference plane on ingress and egress, respectively, using the sign conventions of 8.4.3, (4) the ingress and egress latencies will be made available to the higher layers in addition to the time stamps via variables (these can be static variables that might be set and read via a MIB, or dynamic variables passed from the PHY; both will be allowed by the standard), and (5) the state machine operations will be expressed in terms of the time stamp measurements relative to the time stamp measurement plane and the ingress and egress latencies (it is likely that

one of the early actions of a relevant state machine after its invocation will be to combine the time stamp and ingress or egress latency to obtain the time stamp value referenced to the reference plane.

2. Comments 150, 151, 152, 153. Based on the discussion of reference (3), it is proposed that the response of all these comments be Accept in Principle (the main concern of these comments was that the text not imply that this general timestamp mechanism cannot be used for time stamping Ethernet frames for other applications that might need time stamps). The proposed text for the response is (the detailed text will be written in comment 150, and referenced in the others):

ACCEPT IN PRINCIPLE. Group comments 150, 151, 152, 153. The sentence on page 74, lines 10 and 11, will be changed to read:

Note that while it is necessary for this standard to time stamp only those Ethernet frames that contain PTP event messages, the message time stamp point is defined for every Ethernet frame.

The sentence on page 74, line 29 will be changed to read:

The above process occurs for every Ethernet frame; however, for this standard only those Ethernet frames that contain PTP event messages need to be time stamped.