REQUESTED REVISION:
STANDARD: IEEE Std 802.3ah-2004
CLAUSE NUMBER: 30.11.2.1
CLAUSE TITLE: PME attributes
PROPOSED REVISION TEXT:

30.11.2.1.10 aTCCRCErrors
ATTRIBUTE
APPROPRIATE SYNTAX:
Generalized nonresettable counter. This counter has a maximum increment rate of 19 230 counts per second for 10 Mb/s implementations.

BEHAVIOUR DEFINED AS:
A count of TC-CRC errors. Increment the counter by one for each TC-CRC error detected by the 64/65-octet receive function (see 61.3.3.3 and Figure 61-19). If a Clause 45 MDIO Interface to the PCS is present, then this attribute will map to the TC CRC error register (see 45.2.6.11).

RATIONALE FOR REVISION:
ITU-T Study Group 15 are adding an EFM-style packet mode (64/65-octet encapsulation) to their xDSL PHYs. They will be needing something to manage it too, and they are currently looking at Clauses 30 and 45 of IEEE Std 802.3. In doing this, they noticed that there is no Clause 30 object to count the TC-CRC errors --- we need an extra object in the PME capability for that purpose. It seems that it has been overlooked, as we do have a coding violations counter in the PME capability.

IMPACT ON EXISTING NETWORKS:
Existing PME implementations that do not have the aTCCRCErrors attribute in their MIB will continue to operate normally, even when the peer equipment does have the aTCCRCErrors attribute in its MIB. The management protocol (outside the scope of IEEE Std 802.3) must ensure that a proper reply is provided when non-existing MIB attributes are requested. The variable retrieval mechanism of Clause 57 has a specific variable indication code for unsupported attributes.