

Edinburgh, UK, 20-22 May 2002

SOURCE: IEEE® EFM Task Force  
TITLE: Communication to ITU-T Q4/15 from IEEE P802.3ah Ethernet in the First Mile Task Force  
REFERENCE: Communication Statement from ITU-T SG15 to IEEE P802.3ah sent 10 May 2002

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### COMMUNICATION STATEMENT

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APPROVAL: Agreed to at IEEE 802.3ah EFM interim meeting, Edinburgh, UK, 22 May 2002  
FOR: Information and Action  
DEADLINE: July 8, 2002  
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The IEEE P802.3ah Ethernet in the First Mile (EFM) task force appreciates the communication sent from the ITU-T SG15, informing us of its intent to add the PTM-TC currently contained in Annex H/G.993.1 to other DSL Recommendations

In that regard, we would like you to examine one aspect of this interface. It appears to us that, in the receiver, the Reed-Solomon decoder may have one of three results: 1.) successfully correct all errors in a codeword, 2.) detect that there are uncorrectable errors in a codeword, and 3.) fail to detect that the received codeword contains errors.

In all three cases, the data bytes from the codeword are forwarded up through the  $\hat{a}$ -interface. In the case of 2.), this may result in the PTM-TC forwarding packets up through the  $\hat{a}$ -interface derived from data that are known to the R-S decoder to contain errors. There is a small, but nonzero, chance that these errors will not be caught by the PTM-TC CRC.

Thus, we request that Q4/15 examine the possibility of improving the link robustness, by making use of the knowledge that the received codeword contains uncorrectable errors. For example, packets derived from such codewords may be labeled with the RX\_Err signal at the  $\hat{a}$ -interface.

The EFM task force looks forward to a continuing dialog and cooperation with the participants of the Q4/15 effort.