



## TR-42 – Engineering Committee on User Premises Telecommunications Infrastructure

**Date:** June 11, 2004

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**From:** Bob Jensen, Chair TIA TR-42

**Subject:** TR-42 Liaison Response to IEEE 802.3

Thank you for your request for feedback on the cabling objectives identified in the March liaison letter to TR-42. In the June 2003 liaison we had informed IEEE of our plans to characterize balanced cabling as specified in ISO/IEC 11801 Ed2:2002, up to 625 MHz.

The purpose of this letter is to inform the IEEE 802.3an that TIA TR-42 has completed its initial investigation work, which provides the basis for the feedback requested in the March liaison. This work is documented in draft 1 of proposed PN-3-0134 TSB-155 (attached).

Our initial findings are that category 6 channels as specified in ANSI/TIA/EIA-568-B.2-1 should meet the Class E ISO/IEC 11801 Ed2:2002 channel specifications extrapolated up to 625 MHz except for the parameters of NEXT loss and PSNEXT loss. NEXT loss measurements and PSNEXT loss calculations of category 6 channels may not meet the Class E ISO/IEC 11801 Ed2:2002 channel specifications when extrapolated beyond 330 MHz. The equations for the NEXT loss and PSNEXT loss parameters provided in draft TSB-155 adequately characterize the measured performance beyond 330 MHz.

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The guidelines in draft 1 of PN-3-0134 TSB-155 are intended to provide additional information on the extended frequency transmission performance of category 6 cabling from 250 MHz up to 625 MHz. It also describes the crosstalk coupling between adjacent 4-pair category 6 cabling channels referred to as alien crosstalk and provides additional guidelines for field test equipment and field test methods. We look forward to your feedback.

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