

**IEEE**  
**802 IEEE 802.3 CSMA/CD (Ethernet) Working Group**

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Re: IEEE P802.3an Update

The IEEE 802.3 Working Group thanks you for your recent liaison letter related to the work occurring in TIA TR42.7 TSB-155 D1.0 and augmented Category 6 cabling. The IEEE P802.3an Task Force appreciates the efforts that have been made and looks forward to receiving more information.

Based on proposals selected during our July meeting, the IEEE P802.3an Task Force lowered the upper bound of the frequency range from 625 MHz to 500 MHz and adopted the NEXT, PSNEXT and Return Loss channel equations specified in TIA TR42.7 TSB-155 D1.0. The Task Force also adopted ISO/IEC 11801:2002 (Edition 2.0) Class F insertion loss and the following PSANEXT equations for augmented Category 6 cabling as per the IEEE P802.3an augmented Class E objective:

Channel Power Sum Alien Near End Crosstalk (PSANEXT) shall meet:

$PSANEXT \geq 60 - 10\log(f)$ ,  $1 \leq f \leq 100$  MHz

$PSANEXT \geq 60 - 15\log(f)$ ,  $100 < f \leq 500$  MHz

IEEE 802.3 requests continued feedback and guidance on the parameters that have been selected. One area of investigation that we would appreciate feedback on is alien crosstalk length scaling as it relates to our power backoff objective.

Sincerely,

Robert M. Grow  
Chair, IEEE 802.3 Working Group