

Dr.-Ing. Walter P. von Pattay
Secretary - ISO/IEC JTC 1 / SC 25/WG 3

Thank you for your recent liaison letter of July 5, 2004, document number N712, on the subject of optical fiber attenuation and return loss. You specifically requested guidance on attenuation of short channels and return loss as they relate to the support of IEEE 802.3z and IEEE 802.3ae.

In general, the sum of all impairments will decrease as link length is reduced. This results in increased power margin that could be employed to overcome additional attenuation or insertion loss. However, the insertion loss of connecting hardware is often mode selective, which can increase modal noise for laser-based transmission systems. Connection points also can increase reflections that can contribute additional noise by interaction with the laser transmitter and receiver. These complications require careful study in order to provide good guidance.

IEEE 802.3 does not currently have an active project to investigate these items. Creation of a project requires the participation of people willing to drive this work. Persons interested in addressing these topics are invited to participate in the IEEE 802.3 standardization process. The next meeting of IEEE 802.3 is scheduled for November 15 to 18, 2004 in San Antonio, TX. For more information please see <http://grouper.ieee.org/groups/802/3/>. If any of your participants are interested in driving an activity in this area in 802.3, please have them contact me.

Sincerely,

Bob Grow – Chair IEEE 802.3