

Proposed Liaison Response to ISO/IEC SC25 WG3 3N 713

The 802.3 Working group considered your request for comments on the electromagnetic requirements contained in the most recent version of the "MICE" table presented at our meeting in Portland Oregon the week of July 12th, 2004. Discussion at the opening 802.3 plenary indicated that adding or changing the electromagnetic performance requirements beyond those already specified by IEEE 802.3-2002 and amended by IEEE 802.3aj-2003 (maintenance) is a significant undertaking that would require considerable development effort and extensive testing in order to validate performance. It was suggested that the appropriate process to do this work would be to hold a CFI "Call for Interest" as outlined in IEEE 802.3 rules (www.ieee802.org/3/rules, section 4.2). A CFI identifies the market need and provides the technical justification for a study group to develop a PAR "Project Authorization Request".

It is noted that electromagnetic performance is not strictly a cabling or an equipment parameter, but relates to the complex interaction of equipment with attached cabling. The characteristics that need to be studied include the output voltage and impedance balance of the transmitter and the common mode and alien crosstalk noise rejection of the receiver. The contribution by Alan Flatman in ISO/IEC JTC 1/SC 25/WG 3(Bordeaux/Flatman)045 highlighted some specific clauses in the IEEE 802.3 standard that relate to electromagnetic performance and that would need to be studied for the industrial environment.

It is recommended that a group of industry experts present a CFI at a future IEEE 802.3 plenary meeting. If it is determined that there is sufficient interest to form a study group, the group of experts should also be prepared to participate in and/or or to lead the development effort in an 802.3 study group. Plenary meetings are scheduled for 15-18 November 2004 and 14-17 March 2005.

It is understood that there is growing market for Ethernet applications in industrial environments and we look forward to a Call for Interest as a necessary first step in the development process.

Sincerely,