

Interpretation Number: 1-11/02 (1000BASE-X Auto-negotiation)
Topic: 1000BASE-X Auto-negotiation
Relevant Clause: 37
Classification: Unambiguous

Interpretation Request

We have a query regarding autonegotiation (clause 37) on IEEE 802.3 compliant 1000BASE-X interfaces. We are looking at the 2002 revision of the Standard.

We would like to know the expected Standards compliant behaviour of an entity (A) that supports clause 37, and is connected to another peer entity (B) that does not support clause 37 or has auto-negotiation disabled. Will the entity (A) in the above example, fall back to half duplex (HD) operation, if supported.

Interpretation for IEEE std 802.3-2002

The standard clearly states in the second paragraph of subclause 37.2.5.1.1 Control register (Register 0), "When manual configuration is in effect at a local device, manual configuration should also be effected for the link partner to ensure predictable configuration."

Hence, if this recommendation is not followed and a link has manual configuration in effect at a local device but not at the link partner, or the reverse, the resultant link configuration can not be predicted.