

IEEE P802.3da Objectives

1. Define performance characteristics of a mixing segment for 10Mb/s multidrop single balanced pair networks supporting up to at least 16 nodes, for up to at least 50m reach.
2. Maintain a bit error ratio (BER) at the MAC/PLS service interface of less than or equal to 10^{-10} on the new mixing segment.
3. Specify an optional PLCA node ID allocation method
4. ~~Support interoperability with Clause 147 multidrop~~ Define a physical layer specification which maintains compatibility with Clause 147 multidrop PHYs on some specified mixing segments.
5. Support optional Time Synchronization Service Interface (TSSI)
6. ~~Select a single MDI connector~~ Delete (candidate to delete or replace with a softer requirement)

IEEE P802.3da Objectives - continued

- ~~7. Specify improvements for Energy Efficient Ethernet compared to current 10Mb/s multidrop single balanced pair networks Support energy efficient operation for 10Mb/s multidrop networks~~
8. Support operation in the noise environments for building, industrial, and transportation applications
9. Specify optional plug-and-play power distribution over the mixing segment
- ~~10. PSE shall only energize the mixing segment when at least one PD is connected Delete~~
11. Support addition and removal of a node or set of nodes to a continuously operating powered mixing segment Specify device characteristics necessary to enable addition and removal of a DTE to a powered mixing segment with a quantified power interruption