

1 Twisted Pair 100 Mbit/s Ethernet Objectives

- Preserve the IEEE 802.3/Ethernet frame format at the MAC client service interface.
- Preserve minimum and maximum frame size of the current IEEE 802.3 standard.
- Support full duplex operation only.
- Support a speed of 100 Mbit/s at the MAC/PLS service interface.
- Maintain a bit error ratio (BER) of less than or equal to 10^{-10} at the MAC/PLS service interface.
- Support 100 Mbit/s operation in automotive & industrial (~~industrial~~) environments (e.g. EMC, temperature, ~~voltages~~).
- Define ~~optional~~ startup procedure which enables the time from power_on=FALSE to valid data to be less than 100ms/200ms (w/o speed discovery)
- Support of optional speed discovery for one pair systems (→ work for 1000BASE-T1, CFI required)
- Operation clock (accuracy, jitter???)