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 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 (w/o speed discovery)

➔ Support of optional speed discovery for one pair systems (➔ work for 1000BASE-T1, CFI required)

1