



IEEE 802.3 10GBASE-T Study Group
Objectives

Portonovo, Italy
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Objectives

- **Preserve the 802.3/Ethernet frame format at the MAC Client service interface**
- **Preserve min. and max. frame size of current 802.3 Std.**
- **Support full duplex operation only**
- **Support star-wired local area networks using point-to-point links and structured cabling topologies**
- **Support a speed of 10.000 Gb/s at the MAC/PLS service interface**
- **Select copper media from ISO/IEC 11801:2002, with any appropriate augmentation to be developed through work of 802.3 in conjunction with SC25/WG3**
- **Support Clause 28 auto-negotiation**
- **Support coexistence with 802.3af**
- **To not support 802.3ah (EFM) OAM unidirectional operation**
- **Meet CISPR/FCC Class A**

Objectives

- **Support operation over 4-conductor structured 4-pair, twisted-pair copper cabling for all supported distances and Classes**
- **Define a single 10 Gb/s PHY that would support links of:**
 - **At least 100 m on four-pair Class F balanced copper cabling**
 - **At least 55 m to 100 m on four-pair Class E balanced copper cabling**
- **Support a BER of 10^{-12} on all supported distances and Classes**

