HSSG Objectives (1 of 2)

• Preserve the 802.3/Ethernet frame format at the MAC Client service interface.
• Meet 802 Functional Requirements, with the possible exception of Hamming Distance.
• Preserve minimum and maximum FrameSize 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.
• Specify an optional Media Independent Interface (MII).
• Support proposed standard P802.3ad (Link Aggregation)
• Support a speed of 10.000 Gb/s at the MAC/PLS service interface
HSSG Objectives (2 of 2)

Define two families of PHYs
- A LAN PHY, operating at a data rate of 10,000 Gb/s
- A WAN PHY, operating at a data rate compatible with the payload rate of OC-192c/SDH VC-4-64c

Define a mechanism to adapt the MAC/PLS data rate to the data rate of the WAN PHY

Provide Physical Layer specifications which support link distances of:
- At least 300 m over installed MMF
- At least 65 m over MMF
- At least 2 km over SMF
- At least 10 km over SMF
- At least 40 km over SMF

Support fiber media selected from the second edition of ISO/IEC 11801 (802.3 to work with SC25/WG3 to develop appropriate specifications for any new fiber media).