Example-1

- A home computer is connected to an ISP server through 56 K bps modem. Given a frame size of 5600 bits, compute P-Delay and T-Delay for the link. Assume speed of signal = 2/3 C and length of the link is 5 K metres.

- T-delay = 5600 (bits)/ 56 000 (bps) = 100 m sec
- P-delay = 5 (km)/200000 (km/s) = 0.025 m sec
- Latency = 100.025 m sec

Example-2

- Now for the previous question, assume a countrywide optical broadband link of length 1000 kms and bandwidth 100 M bps. Given a frame size of 5600 bits, compute P-Delay and T-Delay for the link. Assume speed of signal is C.

- T-delay = 5600 (bits)/ 100 000 000 (bps) = 0.056 m sec
- P-delay = 1000 (km) /300000 (km/s) = 3.33 m sec
- Latency = 3.386 m sec