

Paketverlust

Aufgabe 1

$$L_1 = t_x + t_{prop} = \frac{250 \cdot 8b}{20'000'000bps} + 10ms = 0,1ms + 10ms = 10,1ms$$

$$L_2 = t_x + t_{prop} = \frac{2000b}{4'000'000bps} + 10ms = 0,5ms + 10ms = 10,5ms$$

$$L_3 = t_x + t_{prop} = \frac{2000b}{800'000bps} + 1ms = 2,5ms + 1ms = 3,5ms$$

$$L_4 = t_x + t_{prop} = \frac{2000b}{80'000'000bps} + 10ms = 0,025ms + 10ms = 10,025ms$$

$$t_Z = L_1 + L_2 + L_3 + L_4 = 10,1ms + 10,5ms + 3,5ms + 10,025ms = 34,125ms$$

Aufgabe 2

$$T_{E2E}(35) = T_{E2E}(1) + (35 - 1) \cdot \frac{2000b}{800'000bps} = 34,125ms + 34 \cdot 0,0025s = 34,125ms + 34 \cdot 2,5ms = \underline{119,125ms}$$

Aufgabe 3

$$L = 250B$$