

## SELECTIVE REPEAT

$$R = 2 \cdot 10^6 \text{ bps}$$

$$T_{\text{ow}} = 5 \mu$$

$$C = 6 \cdot 10^8 \text{ bps}$$

$$W_s = 5$$

$$W_c = 5$$

$$SS = 1460 \text{ byte}$$

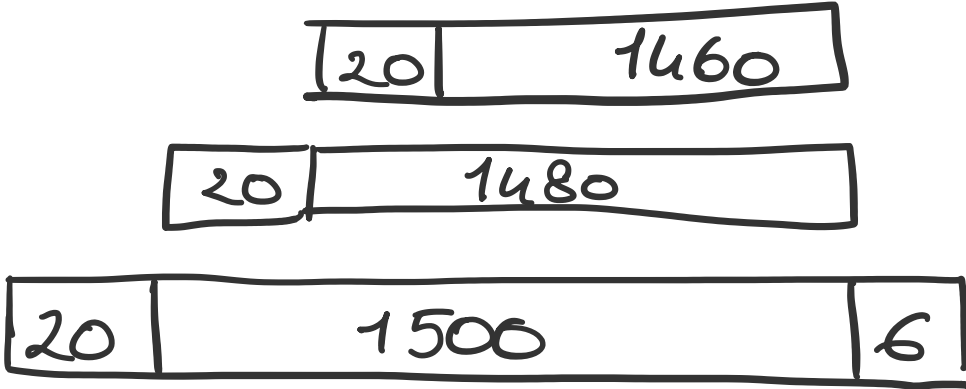
$$ACK = 84 \text{ byte}$$

$$T_{\text{out}} = 110 \cdot 10^{-3} \mu$$

$$d = 3 \cdot 10^3 \text{ m}$$

$$v_p = 2,7 \cdot 10^7 \text{ m/s}$$

Numero di trame (totale livello datalink)



Comincio col calcolare il tempo di propagazione

$$T_p = \frac{L}{C} = \frac{1526 \cdot 8}{6 \cdot 10^8} = 2,03 \cdot 10^{-3}$$

Calcolo il tempo di ritardo

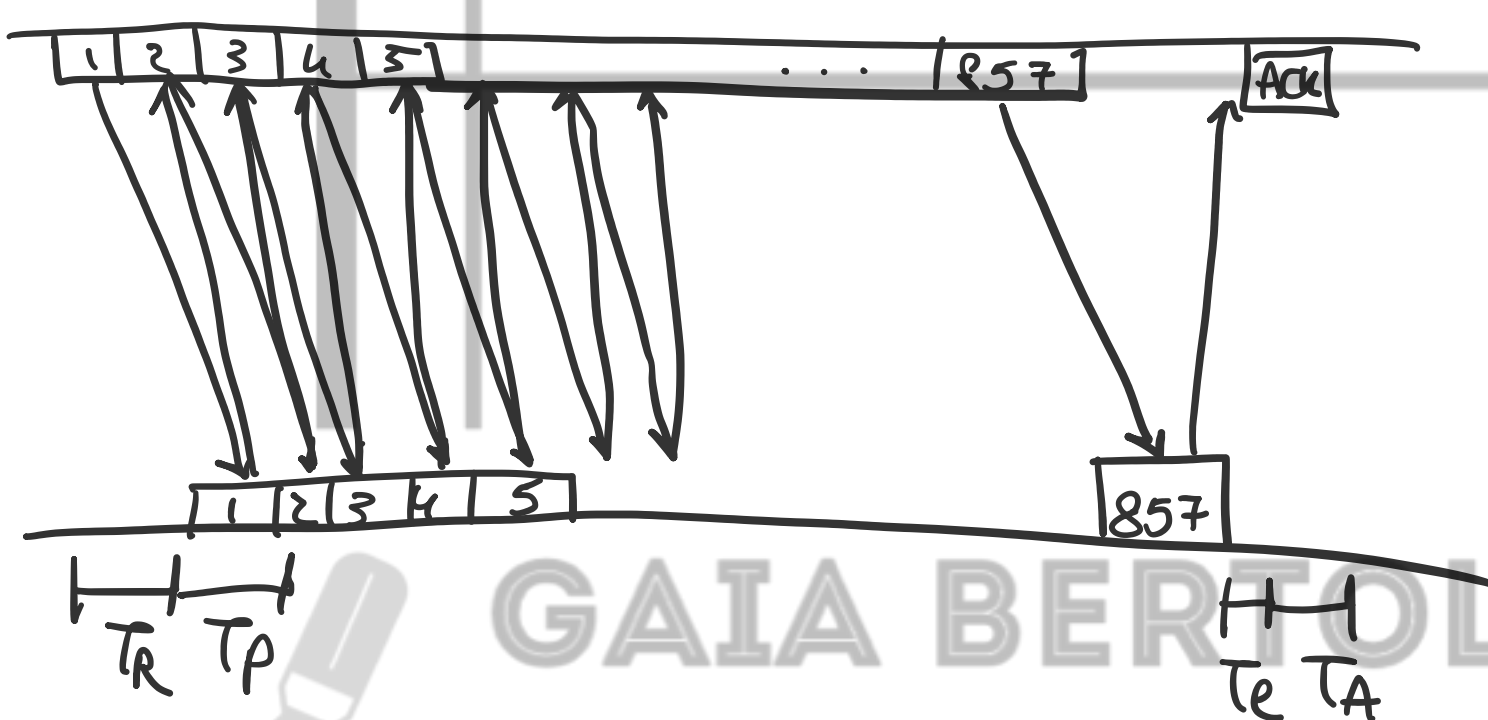
$$T_R = \frac{\text{distanza}}{\text{velocità}} = \frac{3 \cdot 10^3}{2,7 \cdot 10^7} = 0,1 \mu$$

Calcolo il numero di trame da trasferire

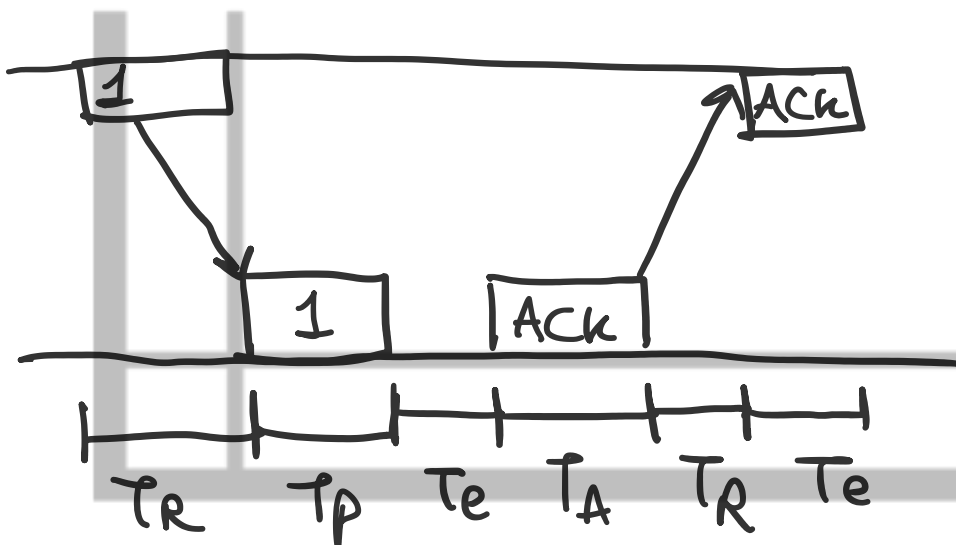
$$N = \frac{f}{SS} = \frac{2 \cdot 10^6 \cdot 5}{1460 \cdot 8} = 857$$

x 5 secondi

Per quanto riguarda lo schema SR!

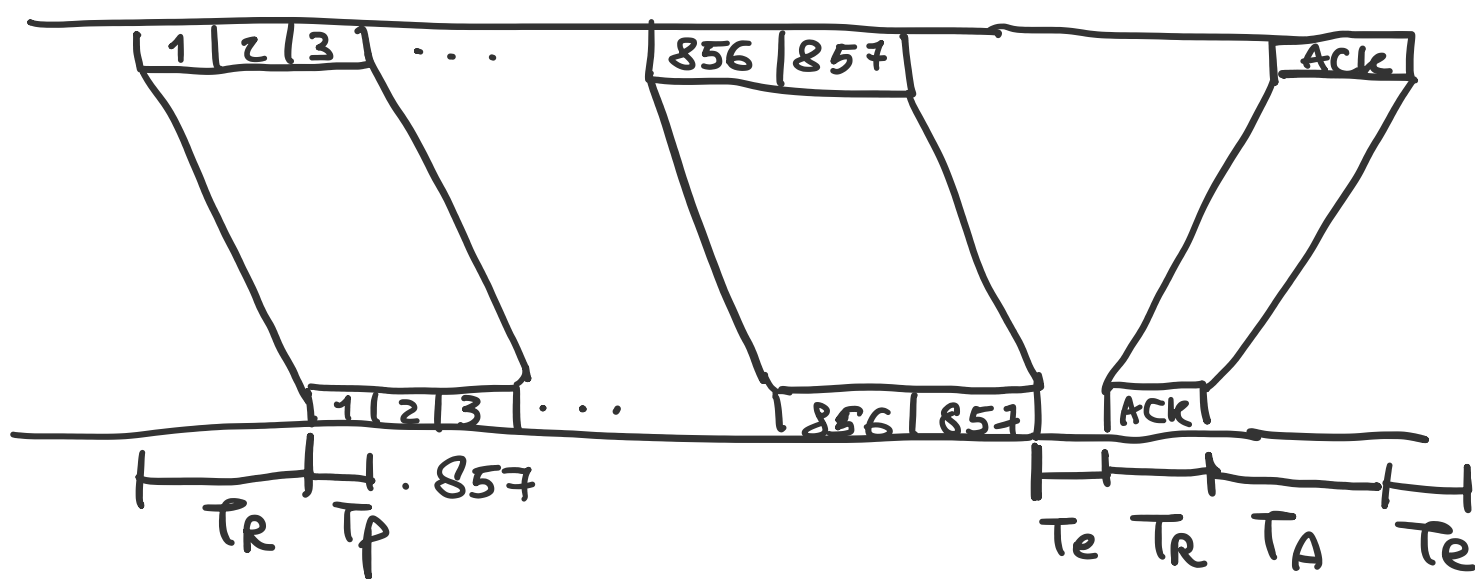


$$T_A = \frac{L}{C} = \frac{84 \cdot 8}{600000} = 0,00112 \mu$$



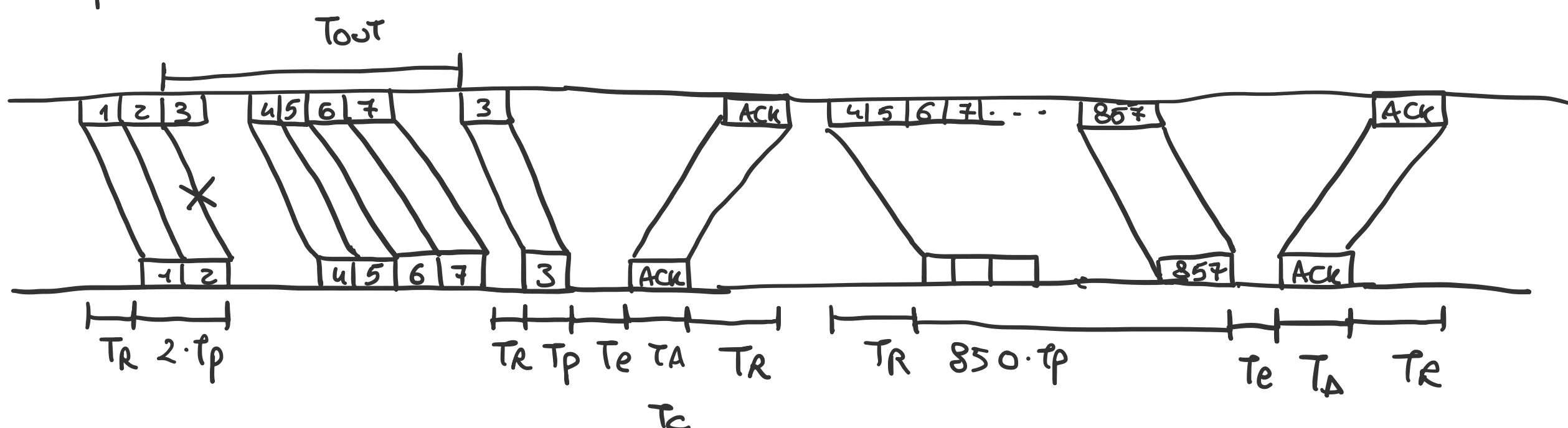
$$T_c = 2 \cdot T_R + T_p + 2 \cdot T_e + T_A = 0,02169$$

$$D = 856 \cdot T_p + T_c = 17,44129 \mu$$



$$857 \cdot T_p + 2 \cdot T_R + T_A + 2 \cdot T_e$$

Si perde l'ack sulla terza trama!



$$D_1 = 2 \cdot T_p + T_c + T_{\text{out}} + 2 \cdot T_R + T_p + T_A$$

Dopo averlo

$$D_2 = (857 - 7) T_p + 2 \cdot T_R + T_p + T_A$$

GO BACK N