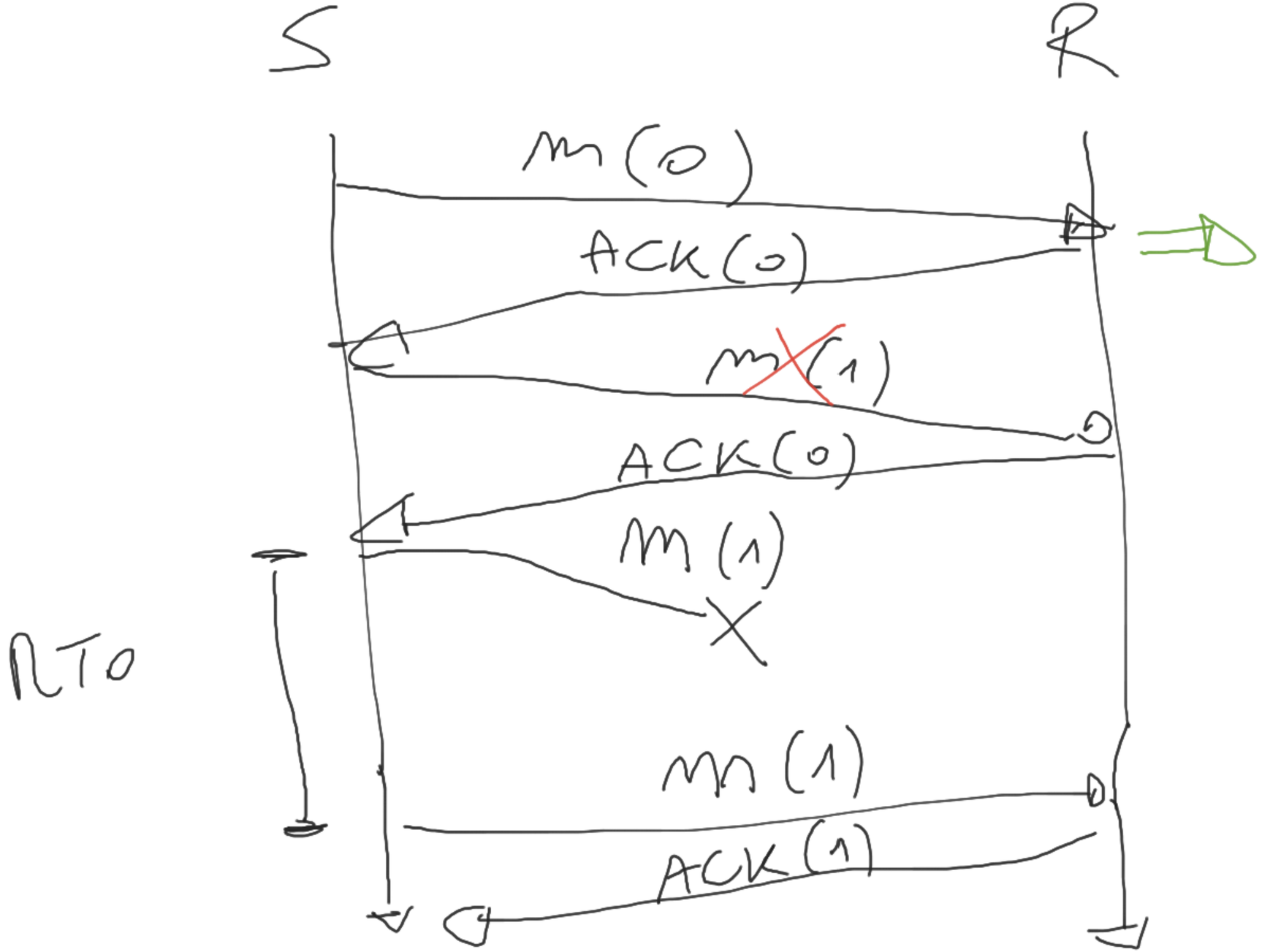
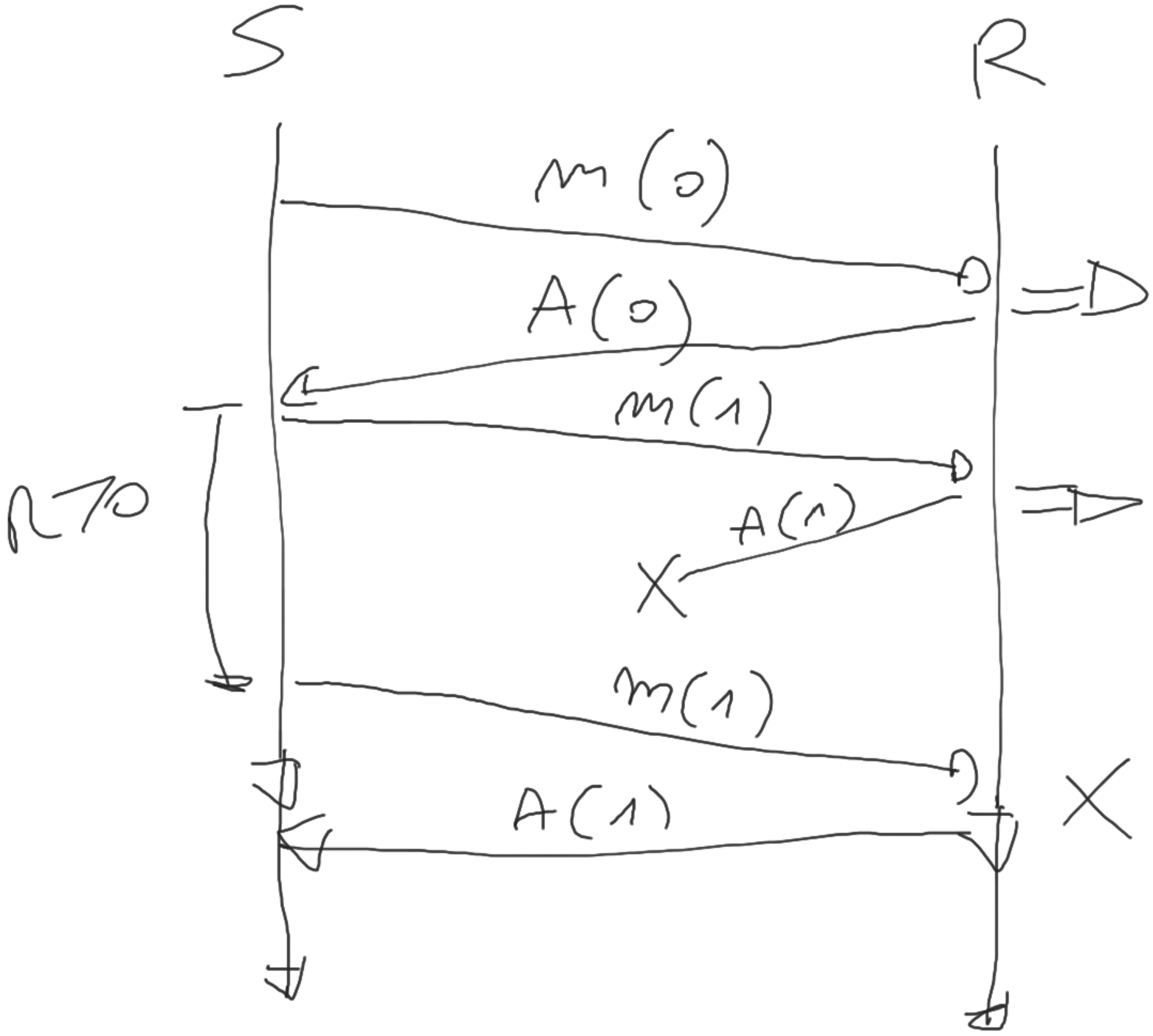
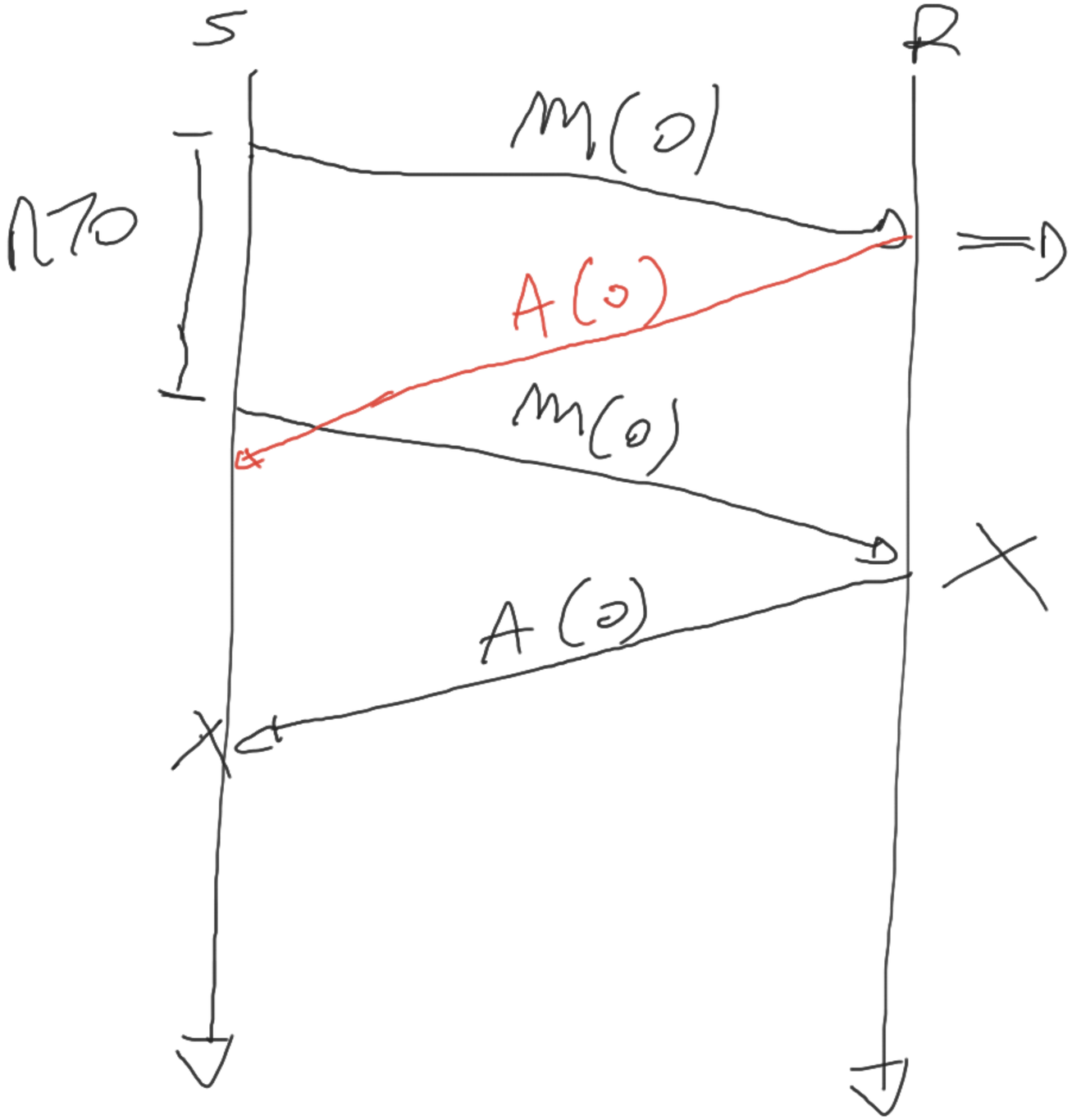
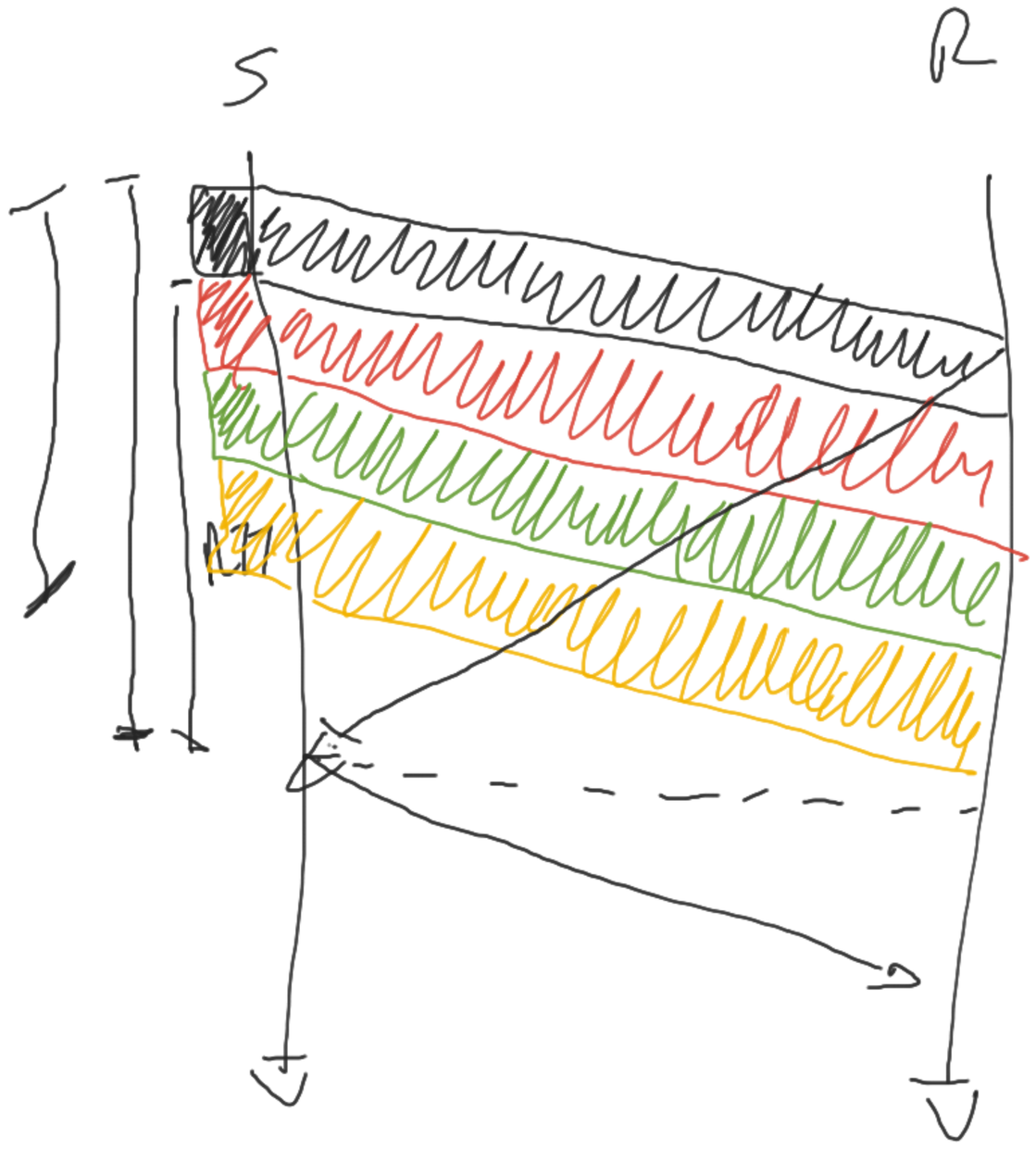

S
R
m(0)
ACK(0)
m(1)
ACK(0)
m(1)
RTO
m(1)
ACK(1)

(1) PERDITA DELL' ACK(1)

(2) RTO PRESTATO


S
R
m(0)
A(0)
m(1)
RTO
A(1)
m(1)
A(1)


S
R
M(0)
RTO
A(0)
M(0)
X
A(0)
X

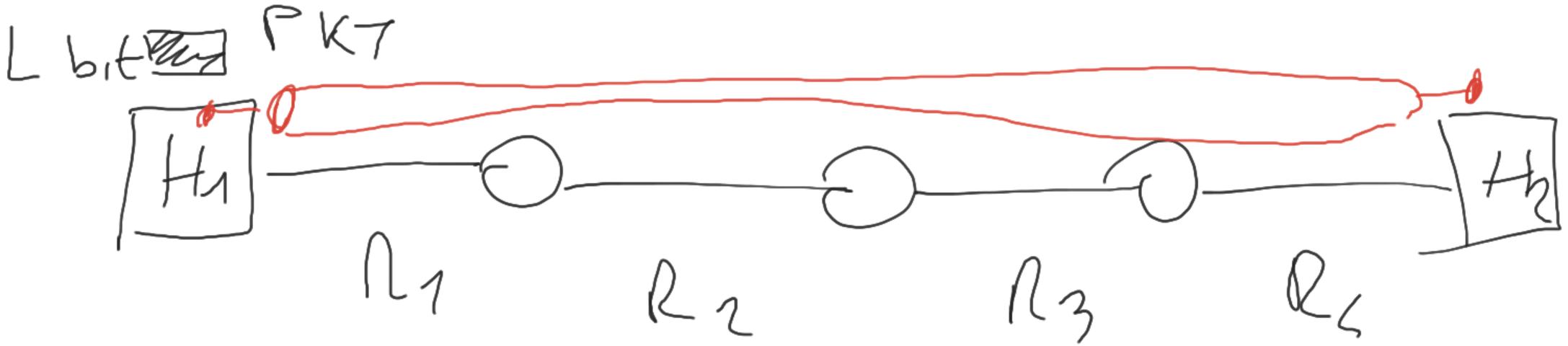


$$W \cdot U_{SW}$$

$$W \frac{L}{R}$$

$$RTT + \frac{L}{R}$$

$$\frac{W_{MAX}\ \frac{L}{R}}{\Omega + \frac{L}{R}} = 1$$



$$\frac{L}{R}$$

W_{MAX}^1 S

W_{MAX}^2

R

BDP = RTT · R

① $R_1 = 1\ Kbps$, $d^{e2e} = 1\ ms$

② $R_2 = 1\ Gbps$, $d = 1\ ms$

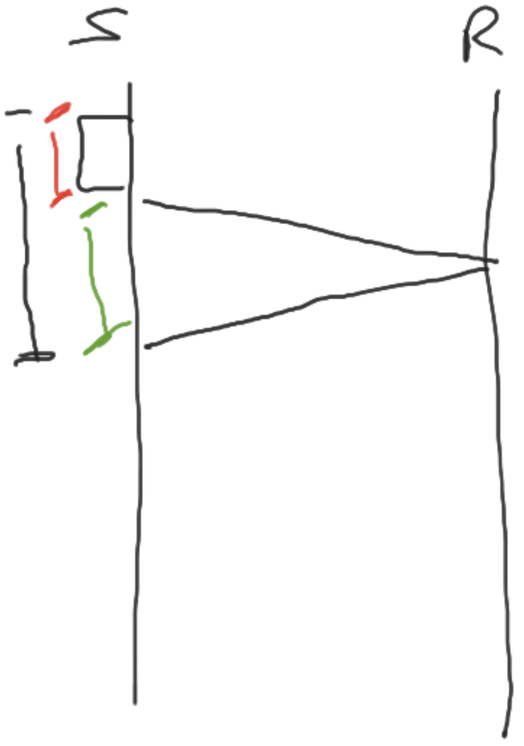
$L = 1000\ B$

$V_1^{SW} = ?$ / $V_2^{SW} = ?$

$BDP_1 = ?$

$BDP_2 = ?$

$$U_1^{SW} = \frac{\frac{L}{R_1}}{\frac{L}{R_1} + 2\,d_{rel}} =$$



$$= \frac{\frac{1000 \cdot 8}{10^3}}{\frac{1000 \cdot 8}{10^3} + 2 \cdot 10^{-3}} = \frac{8}{8 + 2 \cdot 10^{-3}} \approx 1$$

$$W_{MAX}^{\uparrow} = 1$$

$$BDP_1 = R_i \cdot d_{2ze} = 1 \cdot 10^{3} \cdot 10^{-3}\ b_{17}$$

$$U_2^{sw} = \frac{L/R_2}{L/R_2 + 2d_{ezz}} = \frac{\frac{1000 \cdot 8}{10^{9}6}}{\frac{1000 \cdot 8}{10^{9}6} + 2 \cdot 10^{-3}} =$$

$$= \frac{8 \cdot 10^{-6}}{8 \cdot 10^{-6} + 2 \cdot 10^{-3}} = \frac{8}{8 + 2000} \cdot \frac{10^{6}}{10^{6}} =$$

$$= 0{,}005$$

$$W_{max}^{2} \; U_{2}^{sw} = 1$$

$$W_{max}^{2} = \left\lfloor \frac{1}{U_{2}^{sw}} \right\rfloor = \frac{1}{0,004} = 250$$

$$BDP_2 = R_2 \cdot d_{e2e} = 10^{8} \cdot 10^{-3} = 10^{6} \text{ bit}$$