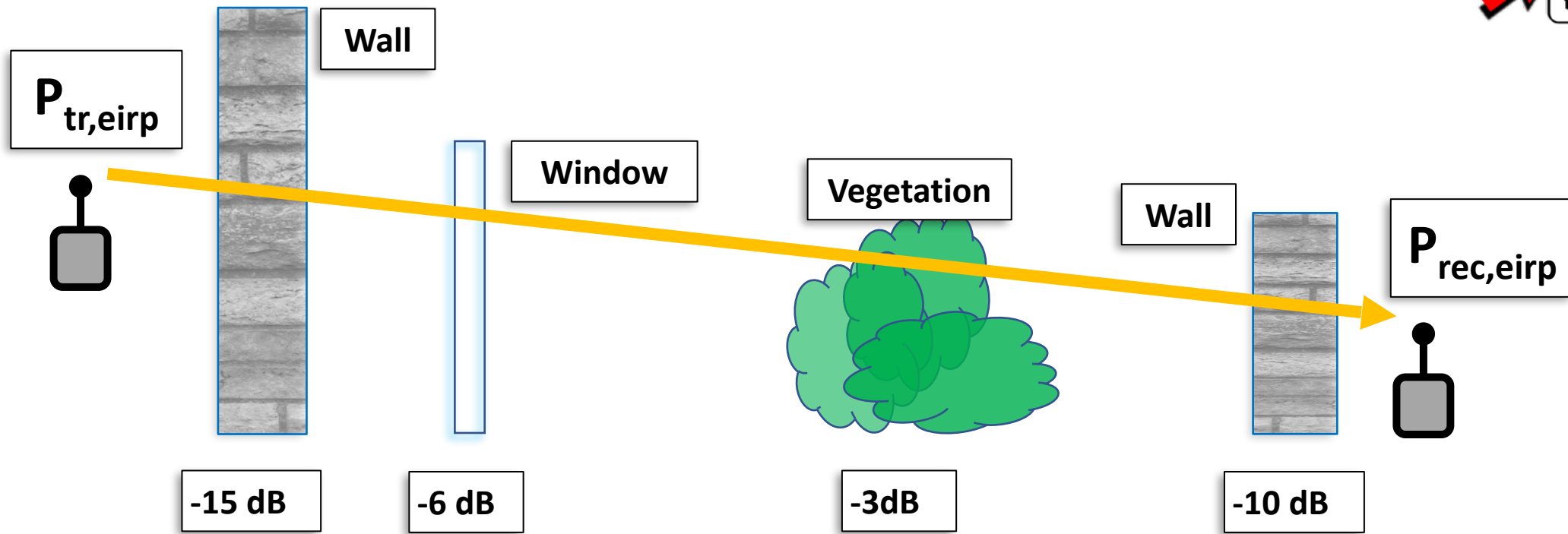


# Propagation Path: 0 – 1 km, Free Space & Obstacles



$$P_{rec,eirp}/dBm = P_{tr,eirp}/dBm - L_{freespace}/dB - A_{obstacle1}/dB - A_{obstacle2}/dB - ..$$

# Propagation Path: 0 – 1 km, Attenuation of Obstacles



Penetration Loss in dB

Frequency Range : 200 - 10.000 MHz

a = 0,55

Frequency	Reference 2.400 MHz	input 235 MHz	input 433 MHz	input 868 MHz	input 5.000 MHz
Wall Type:					
Window	3,00 dB	1,33 dB	1,77 dB	2,27 dB	3,53 dB
Window thick	6,00 dB	2,67 dB	3,55 dB	4,54 dB	7,05 dB
Door (Wood)	7,00 dB	3,11 dB	4,14 dB	5,30 dB	8,23 dB
Thin Wall (5cm)	7,00 dB	3,11 dB	4,14 dB	5,30 dB	8,23 dB
Wood Wall	8,00 dB	3,56 dB	4,73 dB	6,06 dB	9,40 dB
Brick Wall	10,00 dB	4,45 dB	5,91 dB	7,57 dB	11,75 dB
Concrete Wall 10cm	10,00 dB	4,45 dB	5,91 dB	7,57 dB	11,75 dB
Concrete Wall 15cm	15,00 dB	6,67 dB	8,86 dB	11,36 dB	17,63 dB

Adjustable!