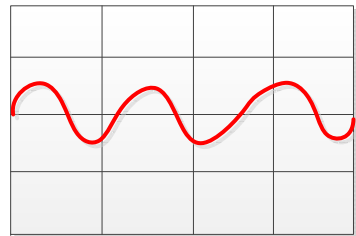


Operating range and transition zone explanation. Example 1.



Still person is in the controlled zone.
Moving person is in the blind zone. Sensor
sees breathing of the still person only.



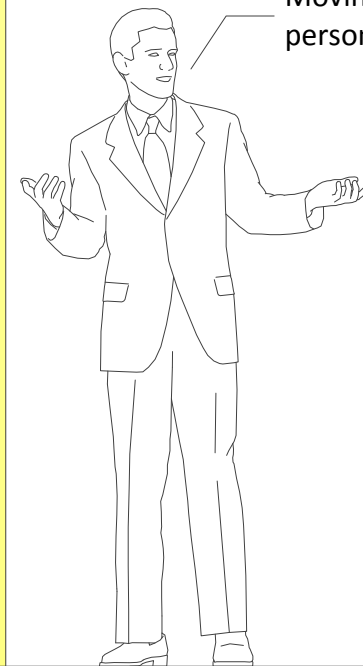
Short-pulse
sensor



Still
person



Moving
person



0m

Controlled Zone, SNR>20 dB

0.5m ... 4m

Blind Zone, SNR = 0 dB

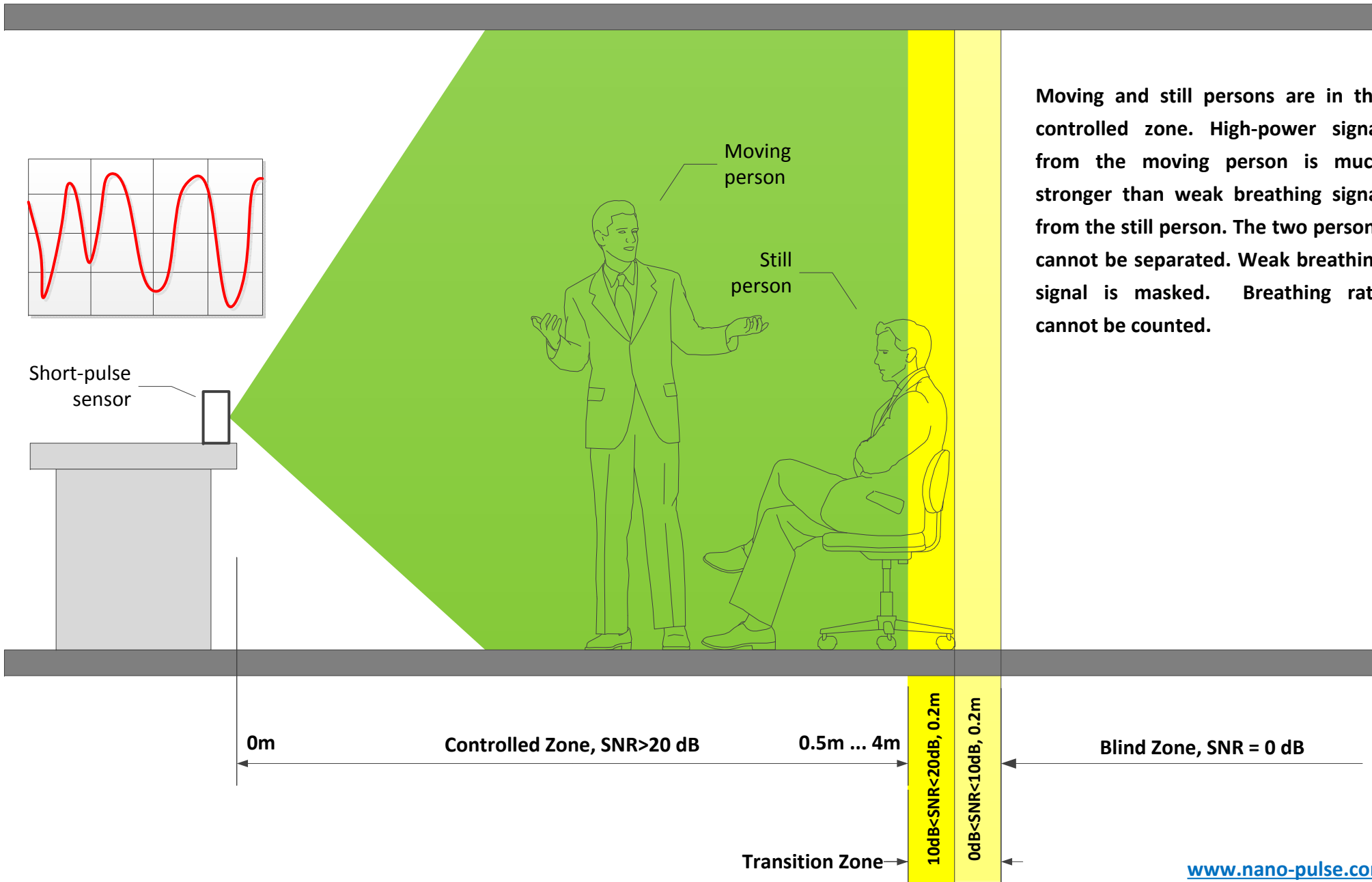
Length of the controlled zone is configured from SW and can be from 50 to 400 cm. Step is about 4 cm. Transition zone is always ~30-40 cm long. Behind transition zone we don't see anything.

Transition Zone

10dB<SNR<20dB, 0.2m

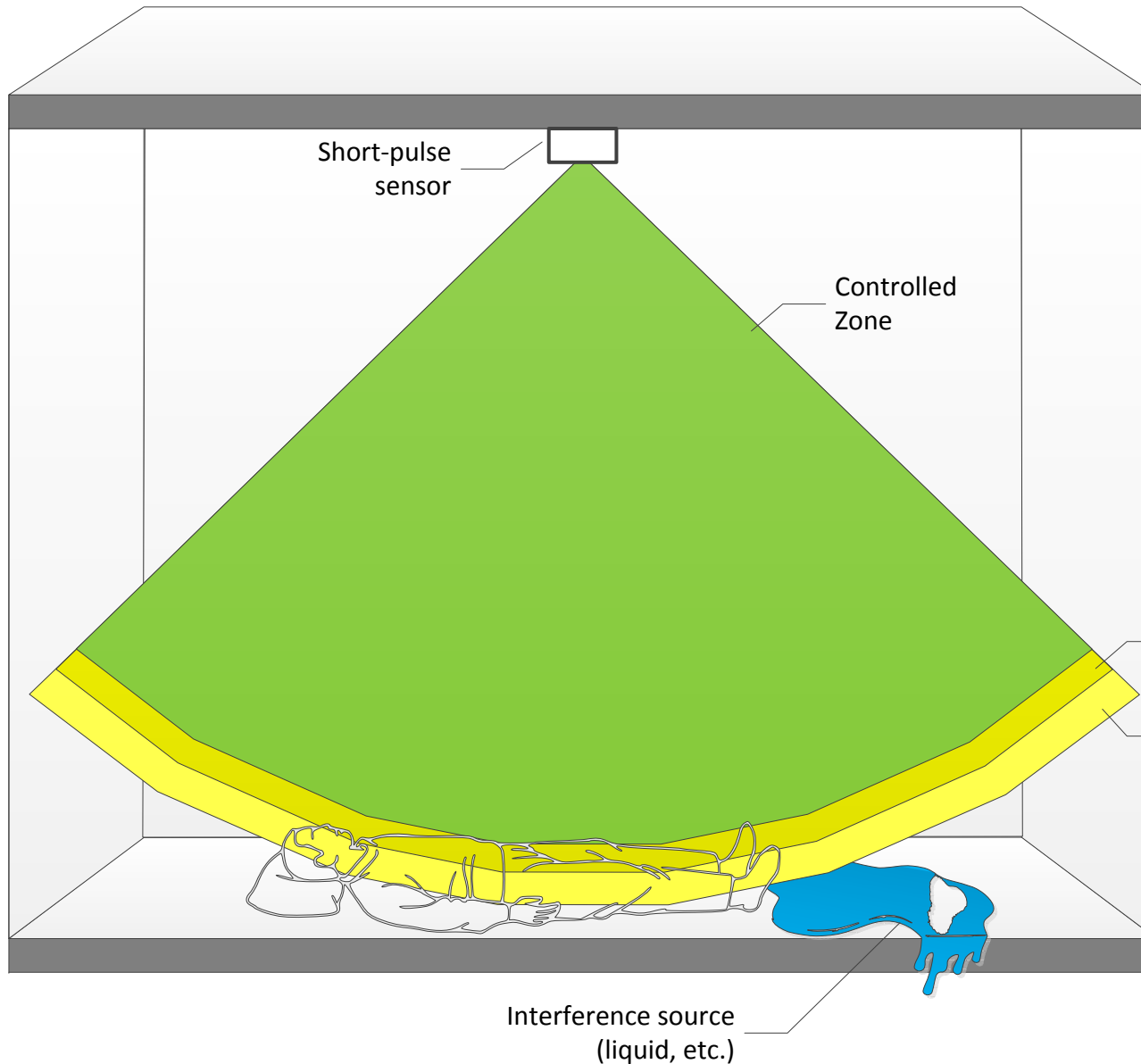
0dB<SNR<10dB, 0.2m

Operating range and transition zone explanation. Example 2.



Moving and still persons are in the controlled zone. High-power signal from the moving person is much stronger than weak breathing signal from the still person. The two persons cannot be separated. Weak breathing signal is masked. Breathing rate cannot be counted.

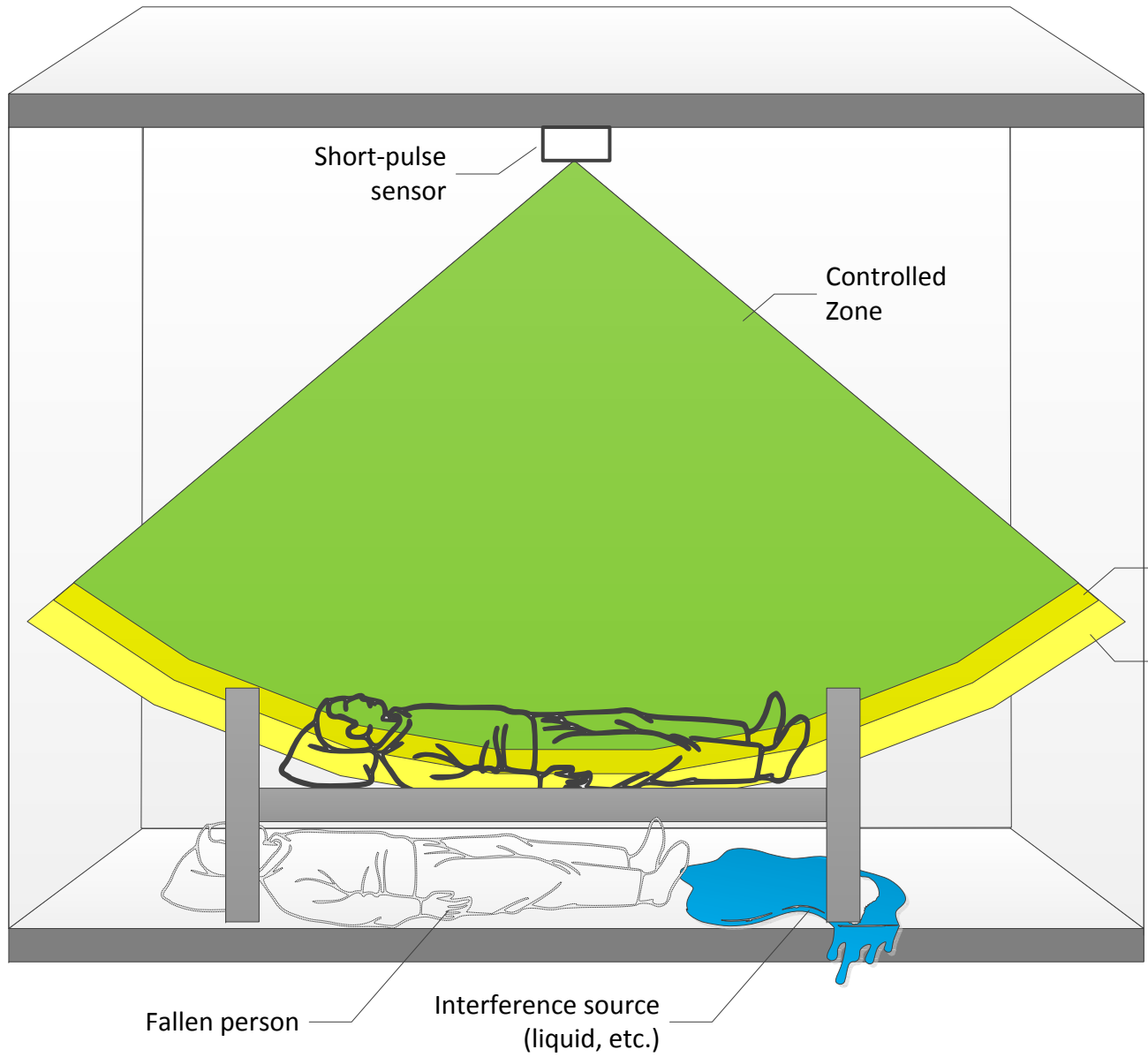
Operating range and transition zone explanation. Example 3.



Still person is on the floor. Liquid is flowing on the floor. Controlled zone is configured in a way that it ends right above the floor. Breathing of the still person is visible by the sensor. Liquid flow is invisible by the sensor. The floor surface can be found automatically by running calibration procedure which takes about a minute.

Tranzision Zone
 $10\text{dB} < \text{SNR} < 20\text{dB}$
Tranzision Zone
 $10\text{dB} < \text{SNR} < 20\text{dB}$

Operating range and transition zone explanation. Example 4.



Controlled zone configured above a bed allows detecting breathing of the person in the bed, and not detecting the person fallen off the bed. Interference sources on the floor (in the blind zone), like mice or flowing water are not visible.