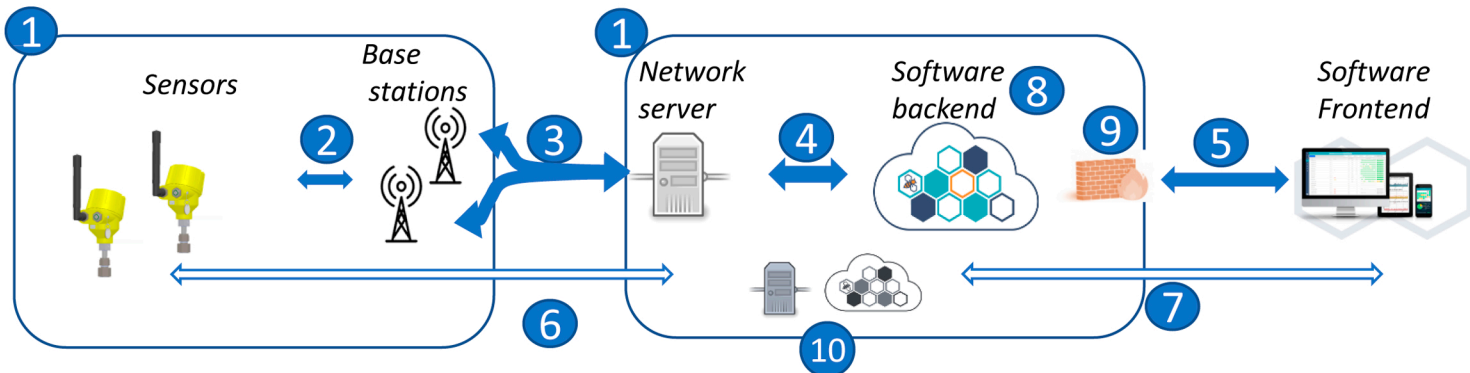


Security by design



Physical access control:

- (1) All equipment within premises with physical access control.

Networks security

- (2) LoRaWan security for wireless communication.
- (3) VPN secured communication from base stations to network server.
- (4) Network server and software backend within a PN
- (5) https from backend to frontend.

Encryption

- (6) AES 128 encrypted from sensors to network server.
- (7) Backend to frontend communication encrypted by TLS.

Logical access control

- (8) Single access point from outside the PN are
- (9) IP address restriction from outside PN

Redundancy

- (10) Servers backup as images
- (10) Redundant hardware for continuity of operation