



Case Story: Prison Solution

Managing and distributing panic alarms to DMR radios with indoor and outdoor positioning

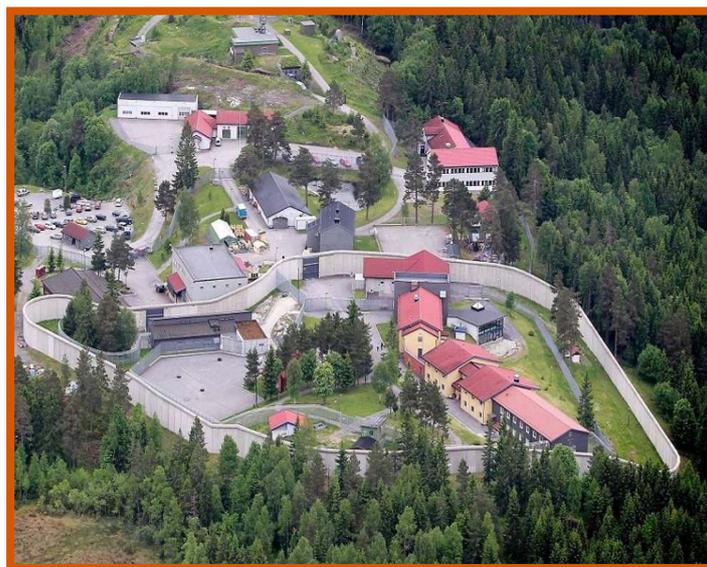
A prison in Norway have decided to use Zonith to further security measures for guards on site. This prison holds 97 male prisoners at a time, 49 of whom need to be kept in high security custody. It is part of the Norwegian Correctional Service, comprising 5 regions and 3826 prisoners.

The facility was built in 2012 with a focus on protecting security guards from the outset. They were looking to provide guards with radio devices to raise alarms and open lines of communication to one another should a situation arise. They also wanted to know the position of their staff, no matter where they were on-site.

Requirements:

- Deploy a panic alarm system throughout facility
- Track staff throughout all buildings
- Track staff in outdoor areas
- Display alarms visually to security

Working with the management team, ZONITH deployed an alarm handling software solution using both Bluetooth and GPS technology with Motorola radios.



Key Features

- ▶ Increases staff safety throughout entire prison
- ▶ Allows alarm handling and positioning from one radio device
- ▶ Staff are visible anywhere, anytime
- ▶ Both indoor and outdoor alarms are displayed graphically in guard tower on one map
- ▶ All alarms are logged for post incident reporting
- ▶ Offers a cost effective option for an all-in-one solution

In short

Needs

Deploy a panic alarm system that can locate and display staff positioning to security on a map and via text to radio devices.

Solution

ZONITH Alarm Control System was deployed to monitor panic alarms from DMR radios, and send those alarms to other DMR handsets on site. Alarms can be raised by pushing an emergency button on the radio, which will start the alarm handling process. The position of the radio can be tracked both indoors and outdoors using Bluetooth and GPS technology. This is a future proof solution as other alarm systems (e.g. fire panels, BMS, etc.) can be added at any point.

Benefits

- ▶ Reduces emergency reaction times
- ▶ Delivers simple and accurate information in an emergency
- ▶ Future-proof solution
- ▶ Increases staff confidence and safety
- ▶ Enables alarm logging

The Solution

Manage and dispatch panic alarms:

ZONITH Alarm Control System (ACS) is a software platform that was configured to listen to alarms raised from DMR radios, and dispatch these alarms via text to security. This piece of software can listen to any alarm source and dispatch alarms to various types of media, giving this prison the ability to build on the solution in the future.

Indoor Positioning System (IPS):

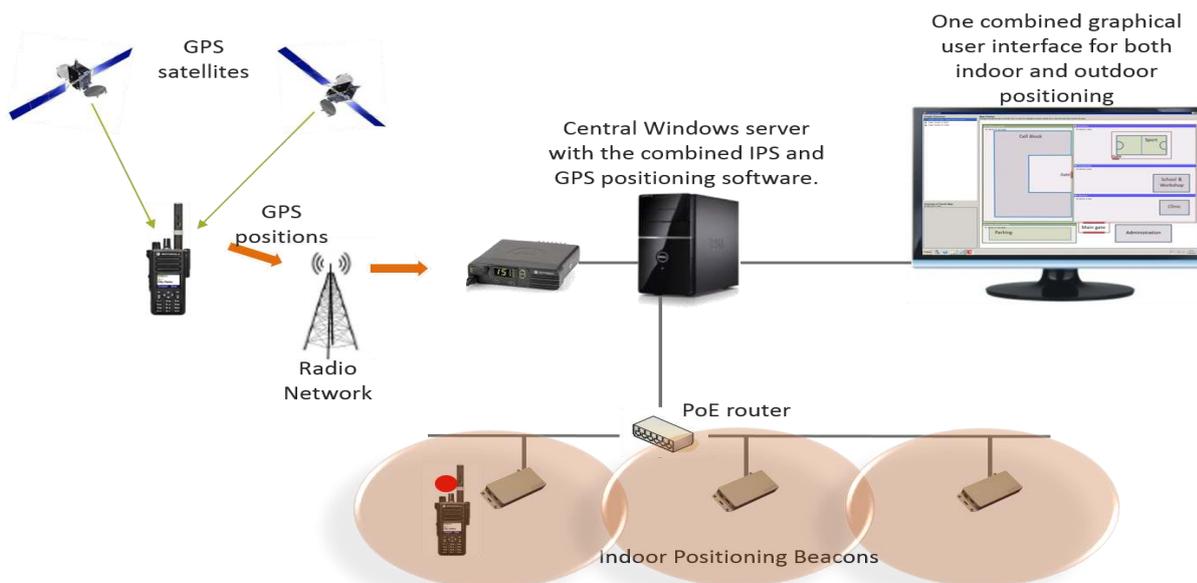
100 Bluetooth Beacons were deployed throughout the facility to provide room level indoor positioning accuracy of staff carrying Bluetooth enabled devices. Each device can be recognized and given a name, showing not only a device in a specific location, but the identity of the staff member holding that device.

GPS outdoor positioning:

Once a staff member carrying a DMR handset leaves the building, the device will seamlessly switch to GPS tracking to cover staff in outdoor areas. Furthermore, GPS Geo-Fences were created to enable more specific outdoor locations when an alarm is raised, such as 'car park' or 'exercise yard'.

Alarm Display:

All alarms can be viewed graphically via a touch screen device mounted in the guards room. When an alarm is raised a map will pop-up showing the location of the source, whether indoors or outdoors. In an emergency situation, this gives security and management the ability to very quickly and easily locate all staff on-site.



Combining Bluetooth and GPS positioning technology