Royal Thai Police Wireless CCTV Case Study



Background

To enhance public safety and security in the resort area of Pattaya, Thailand, the Royal Thai Police issued a public Tender for a CCTV solution to improve coverage of public spaces with high quality video surveillance.

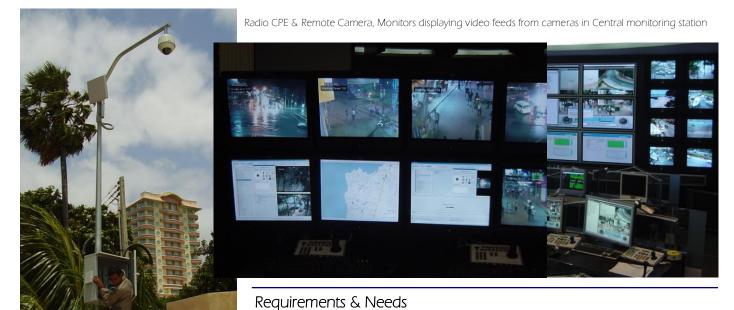
Globally, police forces are upgrading infrastructure to counter terrorism threats, aid crime deterrence, prevention, detection and traffic violation reporting.

At Pattaya, the CCTV Network would need to be deployed on a large scale and be upgradeable. Another obstacle was how to install it. Fibre infrastructure in the area is almost non-existent, and the digging involved in installing it would cause major disruptions to local tourism and be costly as well.

Wireless would solve these problems, but questions were asked—was there wireless technology available that could run a CCTV system this complex? Would enough bandwidth be available? Reliability? Picture Quality? The list went on.

Following completion of a set of requirements, A public Tender for supply was issued, and bidders invited. CableFree was approached because of proven track record with high performance radio, and specifically for CCTV projects...





A number of requirements presented themselves for this particular project, summarised below. One of the most interesting of these were the frequency restrictions. In Thailand, the 5xGHz bands are reserved for military use only. Elsewhere, 5xGHz bands are widely used for

such CCTV networks, where more spectrum is available. However, with only 2.4GHz available, the radio network would have to operate in this heavily congested band which is extensively used by Wi-Fi, Bluetooth, microwave ovens and cordless telephones all of which can cause widespread interference. A number of features unique to the CableFree radio products allowed them to overcome the interference and deliver on the required performance, even using 2.4GHz.

Wireless Excellence Limited

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- Needs to be Reliable (99.999% Availability)
- Upgradeable
- Flexible (Cameras can be added or moved)
- Compatibility (ability to work with other equipment in network)
- Deliver High Resolution video to multiple screens simultaneously)
- Approx 5Mbps Per Camera
- Work in a Dense urban environment using a commonly used frequency (2.4GHz)
- Provide fully secure transfer of video data
- Feeds needed to be two way to 'remote control' cameras
- Proven product history
- Ease of installation

