Submission No 28

INQUIRY INTO PARKLEA CORRECTIONAL CENTRE AND OTHER OPERATIONAL ISSUES

Organisation: Merewyn Partners Pty Ltd

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MEREWYN PARTNERS

Abstract

Submission to NSW Parliamentary Inquiry Into Contraband at Parklea Correctional Centre

1 Introduction

Merewyn Partners works collaboratively with corrections organisations to find, evaluate and provide technology solutions to issues and threats impacting correctional facilities.

The following describes initiatives that Merewyn Partners Pty Ltd has been involved in, supporting Geo Group by scoping, researching, trialling, developing and providing technology-based solutions to meet specific needs.

2 Mobile Phone Detection Trial

2.1 Requirement

In August 2015, Geo asked Merewyn to provide a trial of different mobile phone detection technologies. The stated objectives were:

- Trial the effectiveness of technology in a live operational environment
- Develop an agile operating model for deployment as an integral part of centre strategy against mobile communication device introduction and use.

2.2 Solution

Merewyn commenced testing two different mobile phone detection technologies in Parklea Correctional Centre (PCC) in September 2015.

2.3 Outcome

During the trial, Merewyn successfully detected contraband mobile phones using both types of technology, enabling successful retrieval of that contraband. The results of the trial were also presented to the national corrections Emerging Technology Workgroup (ETWG) in February 2016.

3 Mobile Phone Detection System Implementation

3.1 Requirement

In July 2017, Geo requested Merewyn to provide a solution to detect contraband mobile phones in PCC.

3.2 Solution

Merewyn deployed a mobile phone detection solution in PCC in September 2017.

The mobile phone detection solution was expanded in December 2017.

3.3 Outcome

A number of contraband mobile phones have been detected and removed since the system was implemented.

4 Prison-Safe Cleaning Products

4.1 Requirement

Geo advised Merewyn that one of their biggest risks was injury caused by inmates breaking wooden broom handles during critical incidents and using the sharp shards as stabbing weapons. Risks were also identified with inmates either melting or sharpening fragments of various other wooden and plastic cleaning products and using heavy wooden cleaning tools as weapons.

4.2 Solution

Merewyn conducted international research and advised that “prison-safe” cleaning products were available from the USA that are designed specifically to reduce the possibility of turning cleaning products, including broom handles, into improvised weapons.

4.3 Outcome

Merewyn supplied samples of various prison-safe cleaning products to Geo and to other correctional authorities throughout Australia for evaluation in April 2016. Positive feedback has been received from organisations using these products, however to date only one authority has purchased products.

5 Thermal cameras

5.1 Requirement

During discussions with Geo in November 2017, Merewyn proposed using thermal cameras to further improve the efficiency and effectiveness of searching cells to locate contraband mobile phones.

5.2 Solution

Merewyn identified small hand-held thermal imaging devices that allow corrections officers, upon initial entry into a cell to perform a search, to detect recent “hot-spots” where inmates may have hidden a mobile phone or other contraband.

5.3 Outcome

In December 2017, Merewyn supplied several thermal image devices to Geo at PCC. Geo is in the process of evaluating these tools.

6 Nonlinear Junction Detector

6.1 Requirement

As above, to further improve locating mobile phones during cell searches, Merewyn proposed the use of non-linear junction detectors.

6.2 Solution

Merewyn advised Geo of Non-Linear Junction Detector (NLJD) technology; often used by surveillance counter-measure specialists to detect hidden electronic devices.

6.3 Outcome

In December 2017 Geo purchased several NLJD devices for use in PCC and is in the process of evaluating these tools.

7 Drone (UAV) Detection

7.1 Requirement

Following the increased use of drones being reported around the world, including Australia, to drop contraband into prisons, in November 2017 Geo requested Merewyn to identify a suitable drone detection solution.

7.2 Solution

In December 2017, Merewyn identified drone detection solutions and proposed the demonstration of the preferred solution at PCC.

7.3 Outcome

In January 2018, Merewyn performed a successful demonstration of drone detection. Geo has asked Merewyn to implement the drone detection solution, and this will be completed in the coming weeks.

8 Discussion of Technologies Aimed at Stopping the Use of Contraband Mobile Phones

The following technologies can be employed to either detect the use of mobile phones or stop the use of mobile phones.

8.1 Mobile Phone Detection

Mobile phone detection can be deployed to pinpoint the location of a phone. This information can then be used to locate and confiscate the device.

8.1.1 Advantages

- Lowest cost to purchase and operate;
- Can be implemented very quickly, ie a matter of weeks versus years for jamming, as it does not require lengthy public consultations and ACMA approval;
- Does not require ongoing coordination with, and reporting to, mobile phone telecommunications operators;
- Allows efficient use of resources by concentrating cells searches on cells where phones are in use, and experience indicates other contraband is often found co-located, e.g. drugs and tobacco. This contrasts the random searching approach required to be undertaken in prisons on a regular basis;
- Supports law enforcement activities;
- Can be deployed in high-priority locations as required, i.e. maximum and high security cell-blocks, without requiring large investment in supporting infrastructure;
- When cellular service providers change their spectrum usage the RF monitoring can be adjusted rapidly via the centralised management system.

8.1.2 Disadvantages

- Mobile phones could be used prior to the phone being located and confiscated;
- Requires the phone to be active;
- Requires experienced technical support to ensure all mobile telephony communications operating bands configured in the sensors are accurately calibrated at all times.

8.2 Jamming Mobile Telephony Signals

8.2.1 Advantages

- When all cellular protocols and bands are jammed inmates cannot use contraband mobile phones for real-time communication;
- Acts as a disincentive to smuggle phones;
- Can be deployed on a prioritised per cell-block basis when using the correct jammer architecture.

8.3 Disadvantages

- Phone can be used in non-real-time mode;
- Expensive to purchase;
- Usually expensive to upgrade the signal jamming frequencies to meet changing RF requirements;

- Requires experienced technical support to ensure all mobile telephony communications operating bands are accurately configured to avoid interference to external users outside the prison facility;
- Provides no indication of the presence of mobile phones in a facility, and therefore does not provide the benefit of targeted searches for other contraband.

8.4 Managed Access (IMSI Catcher)

8.4.1 Advantages

- Ability to bar all calls from non-recognised (rogue/contraband) mobile phones;
- A white-list of approved mobile phones can be implemented;
- Acts as a disincentive to smuggle phones;
- Supports law enforcement activities;
- Possible to identify the location of the mobile phone.

8.4.2 Disadvantages

- It may be difficult to cover the target area without impacting the public;
- Requires skilled mobile telephony resources to manage;
- Requires permits to import and operate mobile phone telephony technology;
- Phones can still be used for non-real-time communication.

8.5 Technology Comparison Summary

8.5.1 Blocking the use of mobile phones

Contraband mobile phones can be blocked from real-time communications by using either jamming or managed access solutions. Both technologies are also at risk of interfering with the public use of mobile phones being used in close proximity to the prison.

Both technologies will deter some inmates from smuggling phones into prisons.

Some authorities overseas are using both jamming and managed access technologies in the same facility. This occurs in jurisdictions where law enforcement works closely with prison authorities.

8.5.2 Detecting and Removing Mobile Phones

Once a phone has been switched on, the location of the phone can be identified and retrieved, along with other possible contraband that has been smuggled in. By comparison with jamming and managed access, mobile phone detection can be implemented very quickly and at lower cost.

Mobile phone detection technology will deter some inmates from smuggling in mobile phones.

Detecting mobile phones before they reach in-mates is the ideal outcome, and with the use of drones to deliver contraband into prisons on the increase, drone detection technology should be explored.