

1. Key Report Findings

Contraband Cell Phones in Prisons are a Growing State and National Security Issue

In 2011, approximately 15,000 contraband cell phones were confiscated at the California State Prisons.¹ This represents only the cell phones found, not all phones in the facilities. Though the phones may be used for communications with family or for entertainment, they can also be used for illegal or dangerous activities. This California Council on Science and Technology (CCST) report acknowledges that a suite of technological and non-technological approaches to address this problem is warranted.

Inconsistent Screening at State Prisons

Screening of California Department of Corrections and Rehabilitation (CDCR) personnel and visitors entering and leaving the prisons was found to be less rigorous than screening found at a normal airport security screening access point. During visits to several prison facilities, unscreened items, e.g., purses, duffle bags, and large soft-sided ice chests, were seen both entering and leaving CDCR facilities without x-ray, metal detection, or thorough manual searches.

Existing and Evolving Complexities of Signal Capture

There are significant technological challenges to effective implementation of MAS and other approaches based on the evolving capabilities of mobile devices. This includes capabilities seen in mobile devices in the marketplace today and the anticipated future capabilities of commercial mobile devices including satellite phones.² This complexity argues for an investment in securing the contraband devices themselves rather than reliance on technology to block the communication.

MAS Technology Not Yet Proven for Prison Environment

CCST finds that the Managed Access System (MAS) technology of today is not mature enough for immediate large-scale deployments such as that proposed by CDCR at California's 33 state prisons.

MAS Efficacy Protocols Not Defined

CCST notes that there is no evidence that CDCR has fully or reliably identified the size of the contraband cell phone problem or a mechanism to determine the efficacy of a MAS when deployed.

Baseline Benchmarks Needed

To evaluate the effectiveness of an installed MAS, a baseline measure of contraband cell phone usage must be done prior to implementing a MAS strategy.

¹ CDCR personnel provided these numbers orally to the CCST project team at a CDCR briefing on January 5, 2012 held at the California Senate Office of Research and again at a prison tour on January 10th, 2012.

² Technical Evaluation Report: CCST Challenges, Sandia National Laboratories, April 19, 2012 (See Appendix 9)

2. Recommendations

Alternative options for mitigating Contraband Cell Phones should be considered before adoption of MAS or use of other technologies

MAS, even if successfully designed and deployed, is not enough. Other options (technical and non technical) for managing the cell phone problem should be aggressively pursued. Undertake a comparative benefit/cost for these other options that include:

1. **Implement the Federal Prisons Screening Protocols in California Prisons- Airport like security screening** at all entrances for all personnel and all items.
2. **Conduct thorough searches of all items, vehicles, and personnel at all sally port entrances** using all available means to identify contraband.
3. **Test the use of other technologies within confined prison locations**, (e.g., prison cell block or technologies to identify and locate transmissions) to intercept and dead-end unauthorized cell phone calls.
4. **Engage the cell phone carriers to identify use of their technology and to deny connections** for unregistered cell phones from within prison locations.
5. **Pursue, in coordination with other states and federal legislators, prison specific exceptions to Federal Communications Commission (FCC) anti jamming regulations.** This approach would be complementary to the federal government's 2012 agreement with vendors to disable stolen cell phones.

However, if MAS is pursued then pursue it wisely: Independently test one or more pilots before contracting for a MAS.

An independent consortium should be created to develop and oversee the design and deployment of a MAS Pilot Network. The consortium should include technical expertise from research organizations, cellular network operators, and from the California Legislature, (e.g., the Senate Office of Research). The consortium should be overseen and managed by an independent third party with technical credentials suited to the task.

Design, Install and Monitor MAS Pilot(s).

One or more pilot projects should be installed and operated for at least 12 months **prior to contracting for deployment of a CDCR MAS** to provide;

1. Identifiable measures of efficacy for the MAS regarding the volume of cell phone usage before and volume of blocked calls after the MAS deployment.
2. A working template for implementing the MAS in the demanding environment of a correctional institution.
3. The operational expertise of cell phone network operation within the CDCR and/or California Technology Agency (CTA).
4. A mechanism for third party oversight of the MAS operation and conformance to wireless operations standards including a mechanism to measure vendor compliance to emerging wireless technology and deployment modernization techniques.