



INACT™ MANAGED ACCESS  
SOLUTION  
CONTROL OF WIRELESS  
COMMUNICATIONS FOR CORRECTIONAL  
INSTITUTIONS

Proprietary and  
Confidential

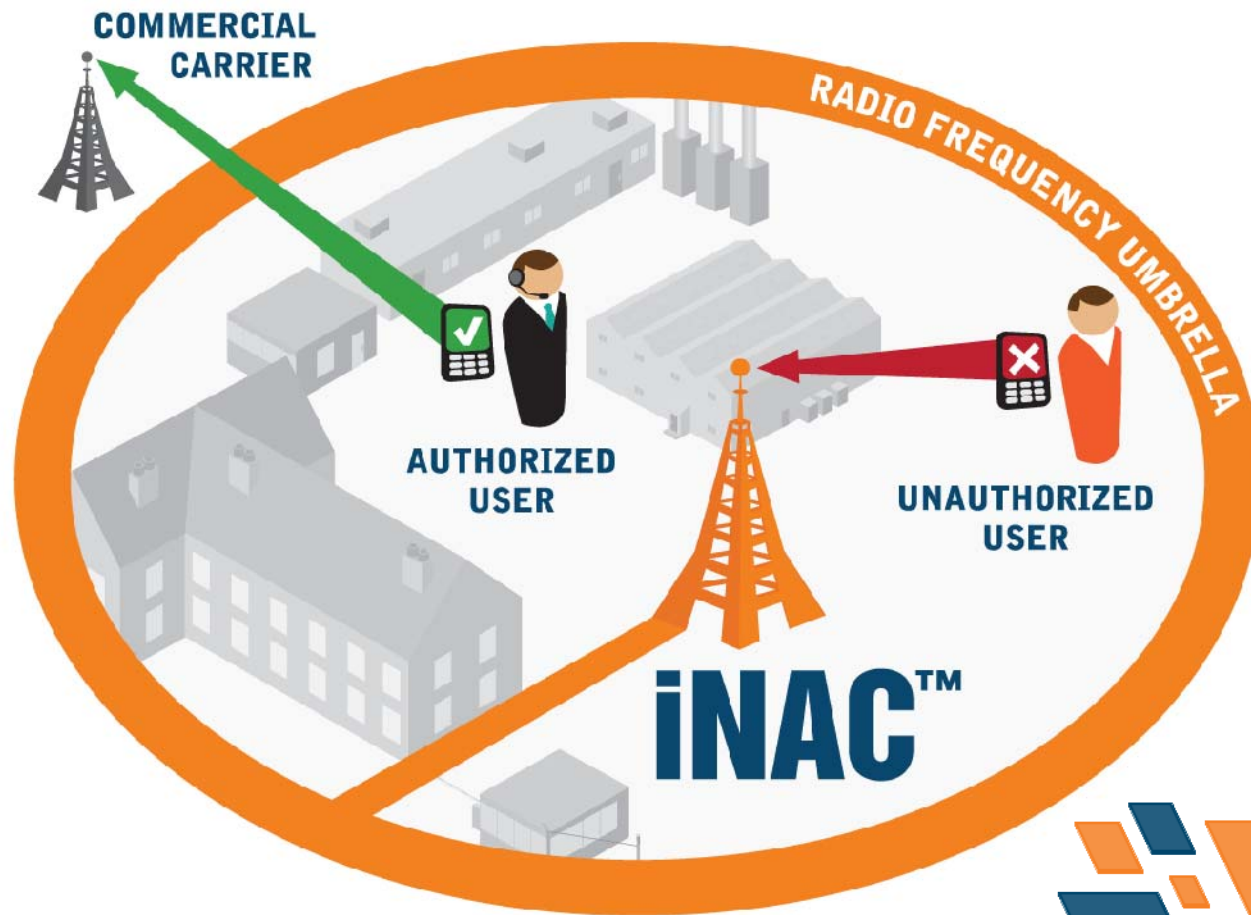
# INTRODUCTION TO TECORE NETWORKS

Tecore's Managed Access Solution, branded as the Intelligent Network Access Controller, or iNAC™, is the industry leader in Managed Access Technology.

As the inventor of Managed Access and a pioneer supplier of multi-technology mobile core and network infrastructure, Tecore has serviced the commercial, government, military, public safety, and correctional sectors for over 25 years.

# THE COMPREHENSIVE SOLUTION

The iNAC technology establishes a radio frequency (RF) umbrella within a precisely defined target area.



Proprietary and Confidential



# MANAGED ACCESS – 101

- The concept of Managed Access can be explained in a few steps:
  - Wireless devices leverage protocols and technologies to exchange information with their commercial networks – Managed Access works in the same fashion.
    1. When a device enters the coverage area of the Managed Access Solution (MAS), the device is attracted and compelled to communicate as if it were on the commercial network.
    2. Once connected, it is automatically identified as either a **known authorized device** or an **unknown, contraband device**, which is predetermined by the system administrator's settings.
    3. Dependent on the above identification, treatment of the device on the MAS network is as follows:
      - **Unknown, Contraband devices** are met with **denial**, yet still appear as though they are accessing the commercial network
      - **Authorized devices** are **redirected** to the actual commercial network and continue to maintain commercial service

# EMERGENCY ACCESS & LAW ENFORCEMENT SUPPORT

- While the basic MAS technology concept provides a simple decision mechanism of approved or unapproved, there are unique cases where **exceptions** need to be made. Tecore's iNAC MAS always supports:
  - **Emergency Calls (911 or 211)**
    - Regardless of the device's status, the call is allowed to be completed.
  - **Communications Assistance for Law Enforcement Act (CALEA)**
    - As subscribers access the iNAC solution, reports and forensics can be captured and generated for each instance as lawful intercept in accordance with court orders or applicable laws.

# INAC MANAGED ACCESS SUCCESS ELEMENTS

- **Footprint Control**

- As the iNAC coexists with the commercial network, a balance of power levels and parameters is required to ensure that the commercial coverage is not impacted outside the institution. This requires experienced RF engineers, system designers, and installers.

- **Technology Coverage**

- The iNAC is the only proven MAS in the market that has evolved through 2G, 3G, 4G, and now Wi-Fi and 5G.

- **Spectrum Band Coverage**

- The iNAC supports the current bands where wireless technologies are deployed and is determined by facility location.

- **Upgradeability**

- Tecore's Software Defined Radio (SDR) architecture of the iNAC delivers the flexibility required for past, present, and future technology evolution and support. This is key as wireless technology is an ever moving target.

- **RF Deployment Flexibility**

- No two facilities look alike, which can impact the methods and equipment set required for creating the proper RF footprint for the institution. Tecore's iNAC has been deployed in both challenging urban and vast rural deployments.



# ENHANCED FEATURES

- The iNAC supports **enhanced location technology**, providing the added benefit of locating the device within the facility in addition to managing its communications.
- However, the beauty of MAS is that locating the device to prevent unlawful communication is not necessary. This tool is a benefit when additional forensics are needed from the physical device.
- In addition to including **Wi-Fi** as part of the MAS RF umbrella, the iNAC can be equipped to include a local facility-run, secured Wi-Fi service. This service can be used for local inmate education, scheduling, video visitation, and content distribution.
- To further assist critical communications within the facility, the system supports the addition of **P25 radio capability**, which is widely used in the public safety realm.
- As **drone technology** becomes more accessible, there have been incidents where smuggling contraband into facilities has taken place through this new vehicle. An extension of our solution can be integrated to identify drone threats.

# HISTORY

- Contraband cell phones continue to be at the forefront of issues facing today's prisons and correctional institutions on a daily basis. For **over ten years**, the industry has sought to find a comprehensive solution for controlling these communications.
- In **2008**, Tecore carried out the **first MAS deployment** and continues to partner with the Department of Corrections (DOC) to install this comprehensive solution.



# SPECTRUM SUB-LICENSING, FCC & CARRIER SUPPORT

- Since MAS is required to transmit in order to provide coverage, the solution requires access to the licensed spectrum to operate properly. In its recent report and order, the Federal Communications Commission (FCC) implemented rules to streamline the initial process Tecore pioneered to provide a clear path to spectrum access for MAS deployments in correctional institutions.
- In addition, the NTIA, FCC, and GAO have issued reports, studies, and proposed rulemaking that reaffirms Tecore's iNAC MAS solution is legal and effective.

# NOT ALL CELLULAR INTERDICTION SOLUTIONS ARE CREATED EQUAL

- As a testament to the severity of the contraband cell phone issue, numerous systems have been introduced to the market, none of which prevent communications from happening before they occur. Other solutions come **with consequences**:
  - **Traditional Search and Seizure**
    - Scanning Devices
      - Passively/actively provides location of devices based on emitted radio signals
      - Transceivers often placed in plain view of inmates, creating a security risk
      - Requires device to come within a few feet of scanning device, a small percentage of the institution's footprint
    - **Staff and K-9 Search Parties**
      - Requires personnel to retrieve devices in order to terminate communication
      - Highly dangerous and requires extra manpower

# NOT ALL CELLULAR INTERDICTION SOLUTIONS ARE CREATED EQUAL

- Technology Concepts
  - **Detection/IMSI Catching**
    - Requires device to come within a few feet of the detection device
    - Unmanageable to require commercial carriers to disable IMSI identifiers, including local, international, and roaming carriers
  - **Beacon Based Technology**
    - Requires custom firmware in the device to be able to 'connect' and disable the cellular device
    - If the device is purchased with the firmware, it can be bypassed, which renders the solution useless

# NOT ALL CELLULAR INTERDICTION SOLUTIONS ARE CREATED EQUAL

## ▪ Jamming

- This option remains **illegal** in the United States under the Communications Act of 1934.
- It does not differentiate between legitimate and emergency communications, posing a **significant public safety risk** for inmate and staff inside the institution, as well as the general public, if the signal leaks outside the target area.
- The control of the footprint requires highly filtered RF signals in all frequencies and technology bands, making the **cost as much as and more** than the deployment of MAS.

# MANAGED ACCESS – PREVENTING ILLEGAL COMMUNICATIONS BEFORE THEY OCCUR

- The **Benefits** of the iNAC MAS have surpassed its counterparts:
  - Managed unwanted communications before they occur
  - Allows authorized and emergency calls to complete
  - Operates within the existing laws
  - Does not require personnel to retrieve devices to terminate communications
  - Addresses not only cell phones, but SIM cards as well
  - Device and call information is available for forensic analysis
  - Options for tracking device location

# TRUSTED & PROTECTED TECHNOLOGY

- Tecore Networks iNAC Managed Access is based on a solid foundation of patented technology. Tecore holds 9 patents solely dedicated to the Intelligent Network Access Control and Method.
- Tecore is a USA Corporation founded in 1991
- Tecore is ISO 9001-2008 certified
- Tecore has over 25 years of industry experience

# THANK YOU

We appreciate your time to discuss the advantages iNAC Managed Access brings to the Corrections Community.

For more information, please visit [www.tecore.com](http://www.tecore.com).

If you have additional questions, our sales team is available at [sales@tecore.com](mailto:sales@tecore.com) or by phone at 410.872.6500.





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