

Tab 6 – Technical Requirements

In addition to the following information, Contractors must include in this tab response to all information requested in Part 2.5-A through ~~2.5-F~~ 2.5-D (*change per addendum #2 8.9.05*) of this RFP, include Attachment 5 Department of Corrections (DOC) Inmate Telephone Cutover Schedule, Attachment 11 Installed Equipment Form, Attachment 12, Environmental Requirements.

MCI Response:

MCI has read understands and has complied in the pages that follow with detailed responses to RFP Section 2.5-A through 2.5-D. MCI has also completed the requested Attachment section 11, 12 and Environmental section and included these responses in this proposal.



Installed Equipment: The Contractor must include with its proposal:

A. System B and System C: Inmate Telephone Service, Prepaid Inmate Telephone Service and Monitoring and Recording Equipment/System.

1. A minimum list of five customers located in the United States with a system having all of the operational characteristics as the system being proposed in response to this RFP. Names, addresses, points of contact and telephone numbers are required.
2. See Attachment 11 for the format for providing the information.

It is the intention of the Evaluation Committee to call one or more of the listed contacts to discuss the installed system(s).

MCI Response:

MCI has read, understands and has complied.

The requested Customer Listing has been provided within PA Attachment 11 of this proposal using the format requested in Attachment 11 of the original RFP.

D. Demonstration:

A. Basic Requirements:

The Commonwealth may require Contractors whose proposals are determined by the Commonwealth, in its sole discretion, to be reasonably susceptible of being selected for award, to provide a demonstration of System B and C as an integrated entity. The demonstration of Systems B and C as proposed in the RFP shall be conducted at a Contractor customer location. No demonstration that is required by this RFP may take place at a Pennsylvania DOC facility. A minimum of six (6) and not more than seven (7) Commonwealth representatives will be a part of the team reviewing the demonstration. The Contractor shall be responsible for reimbursing the Commonwealth for the travel expenses of the representatives of the Commonwealth to attend the demonstration(s).

Reference Attachment 13 giving the content of information on the current expenses under the Commonwealth of Pennsylvania Governor's Office Management Directive 230.10 for lodging, subsistence and transportation. After the demonstration Commonwealth personnel will process travel documents through the Comptroller's Office which reviews the document and supporting documentation. The Comptroller's Office will issue a document to each Contractor stating the dollar amount that it must reimburse to the Commonwealth.

No Contractor may subsidize charges, nor may it provide gifts, gratuities, upgrades, free meals, free rooms, free transportation, etc.

MCI Response:

MCI has read, understands and will comply.



B. Name and Location of Demonstration Site:

The name and location of the System B and C institution proposed as the site for the demonstration shall be included in the response to this paragraph in the proposal.

MCI Response:

MCI has read, understands and has complied with the proposed demonstration site below.

This facility was recently installed, under separate agreement, as an extension of MCI's contract with the Colorado Department of Corrections. The equipment installed is equivalent to MCI's proposed VACI System 100.

Cheyenne Mountain Pre-Release Center
2945 East Las Vegas
Colorado Springs, CO 80906

C. Dates/Times Controlled by Office of Administration:

The date and times of the demonstration will be coordinated by the Office of Administration. The Office of Administration retains the right to reject a demonstration site and date proposed by the Contractor and to require an alternative(s) from the Contractor.

MCI Response:

MCI has read, understands and agrees.

D. System(s) to be Demonstrated:

The system(s) to be demonstrated must be operational, completely integrated, in production, and in operation at the site.

MCI Response:

MCI has read, understands and submits that the proposed site listed within this section is operational, completely integrated, in production and in operation site.

E. Responsibility for Cost:

The Office of Administration will not be responsible for any costs incurred by the Contractor in conducting the demonstrations. The Contractor must reimburse the Commonwealth for the traveling expenses of the Commonwealth representatives.

MCI Response:

MCI has read, understands and will comply.



F. Details of Demonstration:

1. The demonstration for System B shall consist of a series of telephone calls placed from inmate stations; both collect and prepaid. The setup and details of these calls are scripted and the operational demonstration is designed to determine the effectiveness of the proposed systems in meeting the operational standards as presented in Part 5 – 2.5-A. The calls shall be placed and received by members of the Evaluation Committee and/or individuals designated by the Commonwealth of Pennsylvania. The telephones used for the calls must be inmate stations associated with the institution inmate call control system and located in a cellblock or yard in which multiple stations are installed. The calls shall be received using a variety of terminating switches/station equipment.

MCI Response:

MCI has read, understands and will comply.

2. The demonstration of System B shall consist of a series of telephone calls placed from and to text telephones (TTY) that would be used by an inmate. If a demonstration cannot be provided then a detailed written explanation must be given as part of the demonstration of the integrated system.

MCI Response:

MCI has read, understands and will comply.

3. The demonstration of System B shall consist of a demonstration and/or explanation of mechanical cut-off control switches proposed. If a demonstration cannot be provided then a detailed written explanation shall be given.

MCI Response:

MCI has read, understands and will comply.

4. The Contractor shall demonstrate System C (monitoring and recording equipment/system) by operationally demonstrating that it meets the requirements of the RFP as presented in Part 5 – 2.5-C. It is desired that the Evaluators get "hands on" experience with the system. If a demonstration can't be provided then a detailed written explanation shall be given.

MCI Response:

MCI has read, understands and will comply.

5. Since the requirements of the RFP are to be considered minimum, each Contractor is encouraged not only to propose, but also to demonstrate, additional features considered desirable by the Contractor that will be made available to the Commonwealth as part of the services provided under this RFP.

MCI Response:

MCI has read, understands and has complied with additional features offered at not additional cost the Commonwealth noted throughout this RFP response.

G. Detailed Cutover Schedule: Contractors must submit a detailed cutover schedule with their proposals, including time frames for the various stages of installation and tests and acceptance by the Commonwealth for system B - Inmate Telephone Service and Prepaid and for System C - Monitoring and Recording Equipment/Systems. Reference 2.5-D Common Requirements - 4 Installation, Transition and Implementation and Attachment 5 Inmate Telephone Cutover Schedule for providing the schedule.

MCI Response:

MCI has read, understands and has provided a detailed implementation schedule in response to 2.5D item 5 of this Section. MCI has also provided a completed PA Attachment 5 – Inmate Telephone Cutover Schedule in this proposal response.

Part 5 Systems

2.5-A. System B: Inmate Telephone Service:

1. General Conditions – Inmate Telephone Service:

a. No Charge to the Commonwealth: There shall be no charge to the Commonwealth by the Contractor for the telephone lines, station equipment, cabling, Contractor work, associated wiring or any other cost to install and maintain the inmate telephone service. The Contractor is responsible for all costs associated with software or hardware upgrades and licenses. For the most part the Commonwealth cabling and conduit is provided at all Department of Corrections locations; however in some instances Contractor may have to supply what is required to complete the project. At this point, that amount cannot be determined. Estimation would be 1 % of inmate phones.

The non-coin collect-only inmate stations may be replaced on a one-for-one basis. The placement of inmate stations, at a minimum, shall meet existing standards and comply with all Americans With Disabilities Act (ADA) requirements. The current Verizon placement of inmate stations complies with ADA requirements.

MCI Response:

MCI has read, understands and will comply.

MCI confirms that there will be no charge to the Commonwealth by the Contractor for the telephone lines, station equipment, cabling, Contractor work, associated wiring or any other cost to install and maintain the inmate telephone service. MCI also acknowledges that MCI is responsible for all costs associated with software or hardware upgrades and licenses. In support of this section, MCI will also comply with all rules and regulations as they pertain to ADA requirements.

b. Compliance with Regulations and Law: The Contractor shall comply with all applicable regulations and mandates set forth by the Commonwealth of Pennsylvania Public Utilities Commission (PUC) and the Federal Communications Commission (FCC) and must meet all applicable requirements of the Telecommunications Act of 1996 and any updates or replacements of the act. All installations must be in compliance with the Americans With Disabilities Act to include the installation of text telephones (TTY) as required by the law. The Contractor shall not engage in unreasonable practices as specified in FCC regulations.



Attachment 14 is Act 181 of 2002. This bill amend the Dual Part Relay and Telecommunication Device Distribution Program Act (Act 34 of 1995) to expand the definition of "person with disability" to provide telecommunication devices to individuals with a certified disability who requires TTY technology to access telecommunication services.

MCI Response:

MCI has read, understands and will comply.

MCI will comply with all applicable regulations and mandates set forth by the Commonwealth of Pennsylvania Public Utilities Commission (PUC) and the Federal Communications Commission (FCC) and will meet all applicable requirements of the Telecommunications Act of 1996 and any updates or replacements of the act. MCI will also comply with the ADA regulations by installing TTY phones as required by law.

c. Responsibility for Permits, Nomenclature, and Specs: The Contractor is responsible for all permits applicable to the installation, operation, and maintenance of the telephone equipment and systems, associated wiring, and dial tone services. The Contractor shall provide the detailed nomenclature of the equipment that shall be used. Technical specifications shall be provided for all station equipment and telephone systems proposed.

MCI Response:

MCI has read, understands and will comply.

As the prime contractor, MCI its accepts its responsibility for all permits applicable to the installation, operation, and maintenance of the telephone equipment and systems, all associated wiring, and dial tone services. MCI will supply a detailed nomenclature of the equipment that shall be used, and technical specifications for all station equipment and telephone systems.

NOMENCLATURE / TERMS

BNA: Billing Name and Address

CPU: Central Processing Unit

Focus 100: The main controlling unit or server of the ITS

GB: Gigabyte (1,000 MB or Megabytes of memory)

GUI: Graphical User Interface

HSS Disk Arrays: Hot Swappable Spare, meaning that the Hard Disk Drive may be replaced while the system is still up and running.

IMS: Investigative Management System / Gang Manager

ITS: Inmate Telephone System

- RAID 5: Originally RAID stood for "Redundant Array of Inexpensive Disks". The word Inexpensive has since been replaced with "Independent". RAID is a system of using multiple hard drives for sharing or replicating data among the drives. Depending on the version chosen, the benefit of RAID is one or more of increased data integrity, fault-tolerance, throughput or capacity compared to single drives. RAID is broken out into the follow standard types:
- RAID 0 "Disk Striping" High I/O Performance / Speed
- RAID 1 "Disk Mirroring" High Data Reliability / Fault Tolerance
- RAID 2 Bits (rather than bytes or groups of bytes) are interleaved across multiple disks. (not very widely used)
- RAID 3 "Parallel Transfer Disks with Parity" High Data Reliability & Highest Transfer Capacity
- RAID 4 "Independent Transfer Disks with Parity" Similar to Level 3, but manages disks independently rather than in unison. Not often used.
- RAID 5 "Independent Access Array with Rotating Parity" High Data Reliability & Transfer Capacity
- SCSI: Interface consisting of a standard port between a computer and its peripherals that is used in some computers [syn: small computer system interface, SCSI]

Wintel ITC7042: Inmate Phone which is Powder Coated cold rolled steel.

The Focus 100 system is designed for maximum uptime and reliability by using the highest quality components and latest technology available today. The principle hardware building blocks of the Focus system are the Intel Dialogic telephony cards, the Intel SC5300 server, and the SCSI RAID5 HSS disk arrays.

The carrier grade Intel Dialogic computer telephony hardware cards are recognized in the industry for their high availability and cutting edge technology. VAC specifically chose the Intel Dialogic hardware for the Focus 100 system for the reliability.

The Intel SC5300 Server provides up to 730 watts of power with redundant supplies, contains seven fans that provide excellent thermal performance, supports up to 10 hot-swappable disk drives, and is one of the most reliable computer telephony chassis



available today. Using dual Xeon CPUs with hyper threading technology, the SC5300 chassis is unbeatable in performance and reliability.

The Focus 100 SCSI RAID5 Disk arrays are configured with hot swappable spares to insure the optimum availability and will be backed up on site to another external disk array.

Focus 100 System Electrical & Environmental Specifications	
Environmental	Temperature: 35-90°F; Humidity: 2-98% non-condensing
Power Requirements	115VAC, 20 amps (up to 2 required in Full-height Rack)

Focus 100 System Specifications	
Focus100 Digital Trunk Capacity*	Up to 1,536 stations x 1,536 trunks in 4 Racks
Focus100 Analog Trunk Capacity*	Up to 1,536 stations x 1,104 trunks in 4 Racks
Half-height Stand-alone System	24" x 37" x 48" Max: Analog: 96 stations x 72 trunks Digital: 96 x 96
Full-height Stand-alone System	24" x 37" x 76" Max: Analog: 288 stations x 216 trunks Digital: 288 x 288

*** For comparison purposes only. There is no theoretical system capacity limitation.**

Following are the known capacities of the Focus 100 System:

- Individual Inmate Accounts – There is no capacity limit to the number of inmate accounts that can be supported on the Focus 100 system.
- Call Records – There is no capacity limit to the number of Call Records that can be maintained on the Focus 100 system.
- Simultaneous Administrative Users -- There is no limit to the number of simultaneous administrative users on the Focus 100 system.
- Workstations/PCs – There is no capacity limit to the number of workstations/PCs that can be supported on the Focus 100 system.
- Simultaneous Live Call Monitors – There is no capacity limit to the number of simultaneous live call monitors on the Focus 100 system.

- Inmate Telephones – There is no capacity limit to the number of inmate telephones that can be supported on a Focus 100 system.
- Simultaneous Telephone Calls – There is no capacity limit to the number of simultaneous inmate telephone calls supported by the Focus 100 system.

Call recordings are stored on a state-of-the-art RAID 5 Disk Array that consists of several separate and inter-linked hard drives. This redundant design helps prevent data loss. A recorded call could continue to be played back in its entirety even in the event one of the drives fails and has to be replaced. Recorded calls are stored in a non-volatile, power independent memory that ensures data integrity, even under severe conditions. The Focus 100 hard drive system features expandable memory capabilities and simple call archiving methods. The system features 100% real-time call recording capability, and will be able to record all inmate calls placed from any inmate phone located within the facility, simultaneously.

The hardware components of the ITS are:

1. Server

Intel SC5200 series 5U Server NEBS compliant chassis

SE7500 series motherboard

2 2.4 GHz Xeon CPUs

10 SCSI slots per chassis (~ 2.5 TeraBytes of available disk storage using 292GB SCSI drives w/ raid5 HSS)

2. Disk Arrays

Raid5 HSS SCSI w/ dual channel U320 ROMB disk controller

Cheetah 292GB, 146GB, or 73GB SCSI U320 3.5LP 10KRPM SCA drives

3. Telephony boards

Intel Dialogic HDSI (High Density Station Interface) Cards to Inmate phones

Intel Dialogic DMV 600B and 1200B – 48 and 96 port CO trunk interface cards

The Shadow digital Call recording technology is an integrated component of the inmate call processing system and will record each and every conversation initiated through the system (except identified attorney/privileged calls) twenty-four (24) hours a day 365 days a year and at any time a call is placed, even all calls simultaneously, which includes both the inmate and the called party. Even call attempts that were not connected are maintained and recorded which allows for investigators to research such call attempts.

MCI is proposing to provide and utilize Wintel ITC7042 inmate telephone station instruments. Wintel formerly known as Phillips and Brooks/Gladwin (PBG) is the leading manufacturer of inmate telephone station equipment utilized through the State and County Correctional markets. The Wintel ITC7042 inmate telephone set is a proven product providing security, reliability and durability despite the harsh correctional and jail inmate facility environments. The telephone instrument utilizes pin in head security screws that can only be removed with a special screwdriver to protect access to the inner workings of the phone. This phone instrument utilizes line power, is UL approved, and complies with the applicable NEC requirements. Please refer to the specifications allocated in the following illustration.



- The overwhelming choice for State Prison Systems, The Federal Bureau of Prisons and County Facilities nationwide.
- Proven reliability, durability, and flexibility.
- DuraClear® Technology **ITC7042 Full Size Blue** All-in-one electronic dial features modular incoming line w/**Vol. Control** and handset connections for quick maintenance. Carbon (HS) and DuraClear® (DURA) Handsets have separate 4-pin connections.
- Built-in user controlled volume “LOUD” button for ADA mandated volume control (user-controlled volume amplification AND volume must reset to normal with on-hook to meet ADA requirements)
- Powder Coated cold rolled steel provides rugged vandal resistant telephone housing designed and built for inmate use
- Confidencer technology, built into every dial, filters out background noise at the user’s location, allowing better sound to the called party
- Heavy chrome metal keypad bezel, buttons, and hookswitch lever withstand abuse and vandalism
- All telephone stations are equipped with a compact tamper resistant window card holder.
- All telephone station features, including size, mounting hardware, meet telephone industry standards.
- All telephone stations are equipped with armored handset cord is equipped with a steel lanyard (1000# pull strength) and secured with a 14 gauge retainer bracket for maximum vandal resistance. Handset has a sealed transmitter and receiver caps, suitable to withstand heavy use and abuse.

- Handset has sealed transmitter and receiver caps, suitable for heavy use and abuse locations
- Pin-in-head security screws minimize tampering
- Hearing aid compatible and FCC registered (DF4USA-75652-CC-B)

The dimensions of this phone are 2 3/4" depth x 20 7/8" tall x 7 7/8" width. Through MCI's experience in the industry, we believe this model best meets the needs of the requirements set forth in this RFP; however other more compact models are available. If DOC would like a more compact model of phone than proposed, MCI will present all choices to DOC and come to agreement as to which model DOC believes best meets its needs. These other models are available at no additional cost to DOC.

MCI will supply Ultratec Supercom 4400 or compatible TTY phones. MCI will maintain these phones at no cost to DOC.



d. Equipment may be same as Installed or Equal: Contractors may propose the same type of station equipment (inmate phones) that are currently in place, an approved equal, or an upgrade. If an equal or an upgrade is proposed, documentation shall be submitted to support that fact. Refer Attachment 1 Payphones in Place.

MCI Response:

MCI has read, understands and will comply.

As noted in the above section, 2.5-A.1.e, MCI is offering to replace each phone with a higher quality phone that will produce crisp, rich sounding quality that is further amplified in the recordings to offer the highest possible quality.

e. Other Features: The Contractor shall include in its proposal a listing of any features that are considered advantageous to the Commonwealth that are not listed in this RFP which shall be furnished with the proposed equipment. This listing shall clearly identify that the features are provided at no cost to the Commonwealth.

MCI Response:

MCI has read, understands and will comply.

MCI has read, understands and is offering value added services at no charge to the Commonwealth. MCI has listed below the following Value Added Services:



- Investigative Management System
- Site Monitor
- Snitch Line
- Automated Inmate Data Exchange Program (NCC)

These advanced services, will provide the PA DOC with the ability aid their investigators in valuable record gathering.

MCI Value Added Service Offerings

Investigative Management System

MCI offers its Investigative Management System (IMS) value-added product to the Commonwealth at no additional cost. Upon request for this feature, MCI will work with DOC representatives and site personnel to implement the feature and provide the necessary training to DOC staff.

MCI developed the IMS investigative tool specifically for its Inmate Calling System (ICS) customers. IMS was designed to facilitate safe, secure, and orderly operations for staff, visitors, and inmates/wards by [REDACTED]

IMS is a stand-alone software application that comprises a [REDACTED] module and an [REDACTED] module. The modules run outside of the ICS, and each can run independently or concurrently with the other.

The application combines three sets of data that can be searched by user-initiated queries. The first data source, provided by MCI, is a database created from call detail records (CDRs). The other two sets of data must be provided by the DOC: [REDACTED]

[REDACTED] For these modules to provide the most complete information, inmate PINs are required.

DOC personnel who have an IMS user name and password will be able to access the Web-based application and perform queries from an existing workstation. IMS is an easy-to-learn, user-friendly, intuitive GUI application.

[REDACTED]

the BNA information provided within the ICS system as part of the Call Detail Record data requirements.

In addition, BNA Look-Up can assist DOC staff in determining who the local exchange carrier is for the phone number, and if the number is blocked or prevented from receiving inmate calls, and if blocked, why the block is in place (e.g. non-payment, cell phone, etc.). The figure below shows all the information that will be provided when the BNA Look-Up is utilized.

BNA Lookup

Phone No: 9163918886
Lee, Ivan
6749 21st
SACRAMENTO, CA
95822

LATA	LEC (based on CADD/HPA/XX)	City	State	Time Zone	SPID	Active	NPA Split
726	PACIFIC BELL	SACRAMENTO	CA	4 - PST	14	Y	None

CVG Status: UNBLOCKED - Code 722 from SACCVG01

LIDB Status: UNBLOCKED - Code 711 from SACCVG01

BNA Lookup

MCI Site Monitor

The site monitoring application is a value-added feature that MCI can offer to the Commonwealth at no additional cost. MCI will provide access to this tool and data to a limited number of DOC and Headquarters staff. Upon request for this feature, MCI will work with DOC representatives and site personnel to implement the feature and provide the necessary training to DOC staff.

The Site Monitor tool is a revolutionary method for monitoring the health of the entire ICS solution from a frame relay wide area network (WAN) connection to the ICS platform. It communicates with each system every 15 minutes to verify that the platform and network are fully operational. Thus, it will notify MCI on a near-real-time basis of any suspected service-impacting event, enabling MCI to begin problem resolution before facility staff become aware of the problem.

In addition to checking the health of the system every 15 minutes, the Site Monitor application performs the following tests and checks:

- **IPing.** Site Monitor will proactively "ping" the Cisco IP router and ICS server located at each DOC site to verify network connectivity to the facility systems

and that they are active. MCI will immediately take steps to resolve the problem before it is evident to facility personnel.

- **Call Failures.** Once per hour the Site Monitor will calculate the number of failed call attempts against the total number of attempts—unbillable and/or failed vs. completed billable calls. When a high failure rate is detected, the system will automatically generate an alarm, prompting the MCI Service Center and Network Operations Center to troubleshoot the problem and begin appropriate resolution activities.
- **Call Blocks.** Once per hour the Site Monitor will calculate the number of blocked calls against the number of completed or billable attempts. If a high block rate is detected, the system will automatically generate an alarm that prompts MCI's investigation and resolution activities.
- **Billable Calls.** Once per hour the Site Monitor will compare each facility's number of billable calls against historical volume for the same day and time period (e.g., the past three Tuesdays for the one-hour time period of 5:00 PM to 6:00 PM CDT) to identify aberrations in call volume. This process helps identify possible service-impacting events. For example, a site that shows a zero usage traffic volume could indicate the occurrence of a major outage or simply that the site is in lockdown or delayed inmate count status.

MCI's Site Monitor tool is an intelligent device that can monitor multiple, geographically diverse locations, each with unique features, resolution time frames and calling parameters. The functions of MCI's Site Monitor are performed from MCI's development facilities in Sacramento, CA. By maintaining a physically diverse location for monitoring, MCI can initiate trouble tickets even if the entire Commonwealth is without service. Another benefit of placing the Site Monitor functions in Sacramento is that MCI's DOC Account Team can leverage its internal on-site development resources and implement programming enhancements to the system.

Identifying potential service-impacting events is the first step of proactive monitoring, and alerting key staff to these events is second. Once an event is identified, key MCI Account Team personal, field operations personnel, and the Service Center staff are sent a text page as well as a priority email alerting them of the event. If requested, MCI can also ensure that DOC personal are notified.

The figures below depict the MCI Site Monitor tool's screen shots. Red indicates a potential service-affecting issue worthy of investigation. Yellow indicates that a red issue has occurred and is in the problem resolution process. Blue indicates all is well and normal. Black indicates the absence of site traffic.