No-Cost Value-Added Features

(1) Augmentation of Keefe Kiosk-Based Inmate Services
CenturyLink and our partner ICSolutions have spent several years developing operational tools for the Enforcer system — allowing inmate phones to be useful not just for calling, but also as inmate communications portals. This includes pre-built modules for:

✓ Commisary ordering by phone
✓ Grievance filing
✓ Appointments
✓ Staff to inmate communications
✓ Automated inquiries

This additional load on the telephone system is easily accommodated by CenturyLink’s system “over-provisioning”. As part of a Tier 1 network provider, we are able to cost-effectively architect the system to handle multiple times more call volume than simple inmate-to-family calling.

In addition, through our strategic partnership with kiosk provider Keefe, we are able to replicate their kiosk functionality over the phone system – either as an augmentation, backup, or even replacement for certain transactions (e.g. balance inquiries)...all using a single synchronized data source. Just as important, our telephone technicians will be cross-trained and able to handle service issues for kiosks as well.
**UNIQUE CAPABILITIES**

No one else can provide the level of integration and support from the inmate telephone system to the inmate kiosk system than the CenturyLink team.

- Data integration – single synchronized data source
- System access – no need for staff to “swivel chair”
- On-site support – cross-trained technicians = backups to backups +

This integration helps inmates by avoiding lines at kiosks and providing options to complete transactions. It also helps staff by providing cross-links across systems and avoiding the need to ‘swivel-chair’ to get to information, as well as eliminating any need for NDOC staff to intervene between vendors to complete projects.

The net result is that the phone system and kiosks work in tandem with each other, eliminating paper, providing an audit trail, and ensuring data access for staff.

(2) "DirectLink Trust" Debit

Enabled by a real-time interface between the Enforcer and the Keefe/ATG (KCN) banking system, DirectLink Trust debit allows the inmate to directly access funds in their trust account to place Debit calls. Once the inmate passes PIN verification, the ITS will offer the inmate the option to place a Collect Call or debit call. If the inmate selects a debit call, the system will then prompt the inmate to enter the destination number. If this destination number is allowed to be called by the inmate, the ITS will calculate the maximum cost of this call and immediately query the KCN banking system to determine if the inmate has
sufficient funds to complete this call.

If the inmate has sufficient funds to allow this call (minimum of 1 minute), the system will then place a temporary lien on these funds and, once the call is complete, the ITS will compute the actual cost of the call and communicate this cost to the banking system. This action triggers the banking system to decrement the inmate trust account, release the lien, and confirm the financial transaction to the ITS platform.

[Box]

**Unique Capability**

DirectLink Trust debit – **available only from the CenturyLink team**, provides several important benefits.

- No need for refunds upon release
- Immediate availability of funds = more calling + more funding for the Inmate Welfare Fund
- All funding remains through inmate banking/trust system, ensuring restitution and other payments are made

This interface eliminates the need, and potential delay, to transfer funds to the inmate phone account for debit calling, thereby ensuring an enhanced and more efficient user experience. From an administrative perspective, this seamless interface streamlines the release and refund process, as all unused funds are tracked and managed by the banking system.

(3) **Continuation of current attorney verification and review process**

Using existing service center personnel in Apopka, FL and Rocky Mount, NC, CenturyLink offers to continue the existing attorney verification process in place at NDOC today. As the Department is aware, this paperless process has been developed and improved in partnership over time, and is a critical security issue since these numbers are not recorded.

- No paper request forms
- Audit trail to measure service level agreement
- Offloads work from NDOC staff
- Double-validation upon first entry, in addition to quarterly audit

(4) **The Communicator – Paperless Inmate Communications (including PREA reporting)**

Although part of our replicating kiosk services (see #1 above), the Communicator provides additional value to the Department. Through standard IVR data entry and response technology, the Enforcer can be used to deliver medical information to and from inmates. This provides an automated means for inmates to request appointments and receive
responses, all in a single, trackable system. The system's voice messaging module can also be used, for example, for inmates to describe symptoms to medical staff.

100% Paperless Grievance Reporting
The Communicator eliminates the need for NDOC to handle and process paper kites. With our paperless process, inmates can file grievances, request medical/dental appointments, submit PREA or crime tip reports, or even file complaints about the Inmate Telephone System— all using secure voice mailboxes on any standard inmate telephone. Depending upon the type of inmate report, the appropriate Facility staff will be automatically notified when an inmate files a new grievance. Using text-to-speech technology, staff can type responses into the ITS and the response will be delivered to a secure voice mailbox for inmate retrieval.

Communicator Management Screen

(5) Emergency Auto-Dialer
CenturyLink offers the capability, on short notice to generate a calling campaign to provide general information to friends and family. For example, if a disaster at a facility (fire, flood) that causes the ITS to no longer function, an automated calling campaign could provide a status to all numbers dialed by inmates within a certain timeframe.

✓ Piece of mind for friends and family
✓ Reduces inquiries to central office

(6) ICER – Inmate to Inmate Communication Event Recording

Uncovering Intra-and Inter-Facility Inmate-to-Inmate Telephone Communications
CenturyLink is pleased to offer the department ICER™ - Inmate Inter-Communication Evaluation and Reporting system. We are partnering with JLG Technologies, a leading voice biometric analysis technology company. After developing its Investigator Pro voice identification and crime investigation system now in place in 176 correctional facilities
throughout the country, JLG furthered its research as a result of requests from corrections investigators to develop an automated way of identifying inmates who are illegally communicating with other inmates using the inmate telephone system. The result of this research and development effort is ICER.

The Threat

Inmates have been, and continue to communicate with each other over the telephone systems that have been provided for their controlled contact with the outside world.

Until now, ITIC (short for Inmate-to-inmate phone communications) has essentially gone undetected because there was neither practical technology nor uniform networking capability to identify such communications. Following are highlights of the ITIC threat:

- Through a variety of methods, inmates are circumventing the inmate telephone system at a particular facility to communicate with another inmate whether the other inmate is in a neighboring POD or in a facility in a different state and using a different inmate phone system. Inmates exploit conference bridges, services such as Skype, Google Voice and other kinds of modern telecommunications technology. In addition, they rely on called parties to bridge the calls, place three-way calls, or even put two speakerphones in proximity to one another, so that inmates can talk to other inmates

- Until recently, ITIC incidents were only found when accidentally stumbled upon by correctional staff and incidents are now known to occur with much wider frequency than previously known. ICER has already identified more than 1,000 of these events.

- These ITIC communications have involved criminal activities including coordinating gang-related murders, drug trafficking, racketeering, as well as inmate disturbances at multiple correctional facilities around the country.

Technology, Cooperation Between Inmate Telephone System providers, and Participating Nation-Wide Corrections Administrations are Joining to Reduce the Threat

Every day we learn from the news about instances of major crimes being solved because of the increasingly cooperative efforts of state and federal agencies that are now beginning to share case-critical data around the US and the world. In the world of inmate phone calls, we are offering a new technology based on voice biometric analytics and a dedicated cooperative network provided through a consortium of inmate telephone system providers* and JLG Technologies. This combined effort will enable all participating corrections administrations throughout the country to receive specific and detailed information on a call-by-call basis when their inmates are using their phone systems to talk to each other – whether the calls are connected between different inmate telephone systems, between PODs in the same facility, or between inmates in facilities from Florida to California. The more agencies that take part in the ICER network and share ICER data, the more ITIC calls that will get caught in the net and be reported.
* ITS providers who have joined the ICER Consortium to date includes Securus Technologies and CenturyLink. As of 3.25.14, PayTel Communications, ICSolutions, and GTL (Global Tel*Link) have signed letters of intent to join.

**How ICER Works**

ICER uses advanced voice analysis technology to generate a “call signature” — a representation of the call that does not involve any of the original audio — for each completed inmate telephone call. Call signatures are then automatically encrypted and transmitted to the central data center at JLG Technologies headquarters in Framingham, MA for analysis. Because none of the original audio is used in a call signature, the ICER system is in full compliance with state laws regarding the transmission of call recordings.

Under normal operations, call signatures are created, transmitted, and received at the data center within seconds of each completed call. Upon arrival, the call signature is immediately analyzed and checked against other call signatures. If an ITIC event is detected, it is logged in the ICER system database and investigators from the participating corrections administration are automatically alerted via email to log into the ICER system for the detailed report. To protect certain elements of inmate data from being displayed to participating agencies, on-line consent by both parties must be gained before details of the full report are made available.

The ICER system doesn’t require correctional facilities to transmit audio files and each agency is always in complete control of the level of sensitivity of any data transferred.
ICER Event Report

Event Identified On: Mar 11, 2014
10:14 pm (EDT)

An Inmate Inter-Communications Event has been detected involving an inmate at your facility. The details of which follows below:

<table>
<thead>
<tr>
<th>Inmate</th>
<th>WILLIAMS, LAURIE</th>
<th>SMITH, DAVID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency</td>
<td>Russ County Detention Center</td>
<td>Russ County Detention Center</td>
</tr>
<tr>
<td>Site</td>
<td>45676</td>
<td>24781</td>
</tr>
<tr>
<td>Inmate ID</td>
<td>0041996769</td>
<td>0042797568</td>
</tr>
<tr>
<td>Called Number</td>
<td>17024463043</td>
<td>17022141399</td>
</tr>
<tr>
<td>Station Name</td>
<td>OPEN AREA MALE - 25</td>
<td>OPEN AREA MALE - 27</td>
</tr>
<tr>
<td>Call ID</td>
<td>4631857072</td>
<td>4318321735</td>
</tr>
<tr>
<td>Call Start Time</td>
<td>Mar 11, 2014</td>
<td>Mar 11, 2014</td>
</tr>
</tbody>
</table>
10:12 pm (EDT) | 10:13 pm (EDT)  |
| Time into Recording (H:M:S) | 04m:21s (261 sec) | 03m:30s (210 sec) |
| Duration of Event (H:M:S)    | 01m:22s (82 sec)       | 01m:22s (82 sec)       |

Above - Sample report showing data which investigators in two participating agencies will see once mutual viewing acceptance is granted. Until mutual viewing acceptance is granted, investigators will only be able to see inmate call data for their own facility (either the right or left sides of the report) plus limited data on the inmate from the other facility. Where inmates are calling each other within their own facility (not shown), all data for both inmates will be displayed automatically.
While we view ICER as a significant contribution to detecting inmate inter-facility communication, participation of your administration and facility is voluntary and will be provided at no cost to your facility. The cost of this technology is born by the consortium of inmate telephone providers and JLG Technologies. We would be pleased to discuss ICER further with the department during contract discussions. We have included a copy of the user’s license that would grant permission to the department to participate in the nationwide ICER operations in Tab IX- Other Information Material to this proposal. The only prerequisite is completion of the attached JLG Technologies standard license form contained herein.

Where the ICER Network is Currently Operating

ICER is currently operational in these states: CA, NH, FL, KS, and MD. Upon completion of the license agreement, the department’s state and facility will automatically be added to the network.

CenturyLink’s Customer Correctional Agencies Participating in the ICER ITIC Program:

- Kansas Department of Corrections
- New Hampshire Department of Corrections (on the proposed Enforcer system; NH DOC prime contract holder is ICSolutions)

ICER™ – is a registered trademark of JLG Technologies

(7) Additional Investigative Assistance

As a division of a Local Exchange Carrier (LEC), CenturyLink also has unique access to carriers and reverse lookup databases, and continues to offer assistance whenever needed to NDOC investigative staff. These unique relationships are augmented by our Las Vegas-based Program Manager Debra Lambe, plus our “closed loop” prepaid account setup process, which verifies Billing Name and Address information for all called parties upon account setup, and makes this information available to authorized users anywhere in the Enforcer
(8) and (9) Data Detective Visual Link Analysis + Call Pattern Analysis

Link Analysis

Data Detective Link Analysis provides powerful data mining tools for investigators. Using Link Analysis, authorized NDOC staff will be able to search varying degrees of separation in order to establish links from inmate to inmate or end user to end user. Links are established when an end user (outside the facility) interacts with one or more inmates through The Enforcer system, or when multiple end users interact with the same inmate(s). These linked "interactions" can include:

- Inmate phone calls
- Access Corrections / Keefe Deposit services
- E-messaging services

Key features of Link Analysis include:

- Facility staff can explore important data using a dynamic visual map.
- The unique design of the visual map allows investigators to quickly find connections and patterns.
- Link Analysis is a web-based program. Authorized facility staff can use it from their own desktop or laptop computer, in addition to using onsite workstations.

This tool will automatically be applied to all calling and payment information.
**NDOC will have access to Link Analysis reports in real time 24 hours a day, 7 days a week. These reports can be searched by date range and include all calling and transaction information, including the called party (or depositor's) address.**

Below is a sample Link Analysis visual map. In this sample, an end user “Michael Miller” has received phone calls from multiple inmates. The visual map displays Michael Miller’s name, phone number, and total number of calls received, as well as all the inmates who called him. The visual map also shows other call recipients who interacted with one or more of the same inmates as Michael Miller. Again, all reports are available 24/7, and reports can also be exported to Excel or downloaded as a PDF.

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**Link Analysis Screen**

**Call Pattern Analysis**

The new Enforcer system will also be equipped with a robust analytical system that enables correctional staff to quickly and easily identify calls of interest that are most likely to provide actionable intelligence among the thousands of inmate conversations recorded each month. Call Pattern Analysis works by analyzing the associations between inmates, called parties, and even other inmates and – most importantly – by identifying changes in these associations or calling patterns that could indicate illicit activity.

Calling patterns are naturally established as the result of inmate and called party schedules and preferences. For instance, an inmate is usually familiar with each called party’s work
schedule and will avoid calling during certain times (such as weekdays, for example) when that person is usually at work. To increase the likelihood of having their call answered, the inmate will naturally make a habit of calling in the evening or over the weekend.

While legitimate changes in pattern do sometimes occur – such as when a change is made in the called party’s work schedule – disruptions to normal patterns can also be an indicator that illicit activity is occurring.

For example, if a pattern of regular communication exists between a particular inmate and a called party, and then communication suddenly ceases altogether, the absence of calling could indicate that the inmate has obtained the use of an illegal cell phone, on which he or she is making these phone calls. If calling to this telephone number suddenly resumes on the regular schedule, but it is a different inmate who is placing the calls, this could indicate that the called party is merely facilitating communications to the outside world and possibly assisting in the completion of illegal communications.

Call Pattern Analysis identifies relationships and calling patterns among inmates, called parties, and even other inmates. Call Pattern Analysis then detects subtle and dramatic changes in these relationships and calling patterns to identify calls, inmates, and called numbers as suspicious. Call Pattern Analysis will increase the productivity and efficiency of your investigative staff by automatically identifying calls of interest that are most likely to provide actionable intelligence.

Detailed queries can be structured – based upon timeframe, called number and/or inmate PIN – to help investigators pinpoint calls of interest, such as:

- Phone numbers called by multiple inmates
- Phone numbers that appear on multiple inmates’ PAN lists
- Phone numbers that appear on an inmate’s PAN list but are never called
- Frequently called numbers
- Sudden absence of an inmate’s regular calling
- Sudden absence of calling to a particular number
- Changes in regular calling times/days
- Increase in inmate calling over a finite period
- Decrease in inmate calling over a finite period
- Increase in calling to a particular BTN over a finite period
- Decrease in calling to a particular BTN over a finite period
- Transfer of communication patterns from one inmate PIN to another inmate PIN

Investigators can use this information to isolate call recordings of interest. Or, they can use the ITS’s custom reporting tools to create detailed reports containing particular data of interest – for example:

- A list of all numbers called by more than one inmate within a specified timeframe;
- A list of all calls attempted by a particular inmate during a designated timeframe
- A list of all telephone stations used to dial a particular telephone number.

The ITS's flexible reporting application allows investigators to create custom queries based upon any combination of the data that is collected for each and every phone call, and to save these custom queries locally or globally in order to quickly run the reports again over future timeframes.

Listening queue

Once calls are identified as suspicious and needing further review, the Enforcer's Listen Queue tool helps investigations manage case activities. Depending on the Department's rules, authorized listeners can choose calls randomly or be 'forced' to listen to identified calls in order, then include notes and follow-up. All functions are tracked for management review.

Listening productivity is also enhanced by the Enforcer's Enhanced Call Player, which allows users to isolate portions of the call, skip, or speed up playback (note human speech can be sped up approximately 130% without loss of understanding). In this way a 15 minute phone call can be reviewed and notated in as little as 3 or 4 minutes.
(10) **Officer Check-In**

The Enforcer's tracking module offers the ability to capture and record corrections officers' location via inmate telephone using an ID/PIN assigned to the officer. Each officer will use a nearby inmate telephone to log in to the system and verify that they are working in that part of the facility. The check-in event is logged by the system as a call record and can be reviewed, reported, or generate an alert just like any other inmate phone call. There is no charge associated with this feature. No charges associated with this feature.

(11) **PREA reporting and Crime Tips**

Part of the Communicator Inmate Communications Portal, the Crime Tip and PREA lines can be configured to support as many crime tip lines, PREA lines, and other voice message lines as each facility requests. If an external tip line exists that NDOC prefers to retain, ICSolutions will simply program that number in for free calling and speed dial access (it can also be set as a privileged NDOC would like only those staff members with access to the destination voicemails to be able to hear inmates leave messages). Otherwise, any and all message lines that the NDOC would like to create will simply be voicemail boxes on The Enforcer itself. Each will have a speed dial code clearly posted for the inmates and will be free. Any or all lines can also be privileged, if NDOC so requests.

Each voicemail's number (#123 for instance) can also have an alert set on it so that a designated facility investigator or administrator is notified immediately whenever an inmate dials the line. At NDOC's discretion, each line can be set to allow access with or without PINs, to enable truly anonymous reporting as required by the PREA Act.

(12) **Data Sharing and Integration with Other Nevada Law Enforcement Agencies**

CenturyLink currently provides ITS services to two of the three largest jails in Nevada – Clark County and City of Las Vegas Detention Centers.

CenturyLink is able to offer access to live calls and recordings at other Nevada facilities using the same Enforcer User Interface IG del Porto's group will use on a daily basis. In
addition, privileges can be granted as broadly or as narrow as desired, and remote access is a basic feature of the platform.
Other features are also possible and we offer to work with NDOC to implement as needed or desired. For example:

✓ A feature between NDOC and Clark / City of LV that checks for and disallows concurrent calls (e.g. calls to a cell phone that bridges the calls).
✓ Transfer of inmate information – such as attorney numbers, calling restrictions or other database information to avoid re-entry
✓ CenturyLink also offers to provide no-cost data integration as directed by NDOC – such as data transfer to N-Dex

‡ UNIQUE CAPABILITY‡

CenturyLink’s position with other major Nevada jails provides additional opportunities for NDOC – aiding both operations and investigations.

(13) Backup Technical Assistance

As “the phone company” in southern Nevada, CenturyLink, Inc. employs hundreds of highly-skilled telecommunications personnel qualified in a wide range of areas – outside plant location and repair, fiber splicing, demarcation extensions, etc. These personnel are made available to our correctional customers as needed and have been utilized at a number of correctional facilities we serve, including NDOC.

‡ UNIQUE CAPABILITY‡

Our parent company CenturyLink, Inc. employs hundreds of skilled technicians in southern Nevada and has made them available as needed for complex issue resolution.

(14) Cross-training of technicians on inmate kiosks
CenturyLink offers to cross-train our inmate telephone technicians on inmate kiosk maintenance, ensuring uptime and faster break-fix

‡ UNIQUE CAPABILITY‡

CenturyLink is able to provide additional manufacturer-certified technical assistance for maintaining inmate kiosks provided by our partner Keefe.
(15) **Additional bandwidth**

*CenturyLink, Inc.'s network capabilities also provide opportunities to 'over-provision' the ITS network and augment the state's network where needed.*

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As part of a Tier 1 network provider, CenturyLink offers to work with the Department regarding their administrative bandwidth needs.

(16) **Quarterly service reviews**

*CenturyLink has kept its commitment to hold quarterly face-to-face service reviews with the Department regarding our ongoing performance, industry changes, and new feature offerings. These meetings have led to implementation of a number of new features, such as inmate voicemail, trust balance inquiries, detailed inmate location restrictions, and more.*

*These meetings have been especially beneficial for the CenturyLink team and we offer to continue them under a new contract.*
Value-Added Features With End-User Fees

(17) **Video Visitation**

CenturyLink, through our partnership with video visitation provider HomeWAV, offers a pilot video visitation program to NDOC.

The System basically works like the inmate telephone system. The inmate visitation stations are installed in facility dayrooms or other locations, often near inmate pay phones, for convenient inmate access. Also, as described below, the System employs a dynamic, immediate scheduling approach that avoids the need for facility personnel involvement in "schedule in advance" programs utilized by other video visitation systems. This approach avoids the costs and logistical problems and frustration encountered reacting to daily facility operations (lockdowns, transportation, etc.) with visitation systems that require advance visitation scheduling.

**System Description**

The System is comprised of off-the-shelf hardware consisting of visitation stations, signal converters and servers as required. The visitation station contains the processor, monitor, camera, and handset; the physical dimensions are 26” width, 18 ½” high, and 6” deep.

The System’s unique, patent pending software allows inmates to initiate video visits, on the inmate visitation stations, direct with approved visitors. No facility personnel are required to schedule or to connect an inmate’s video visit with his pre-approved visitor. No other Internet based video visitation system offers this significant cost saving solution. The System essentially works just like the Facility’s inmate pay phones.

The System does not require a minimum call length or require a connection fee. The System supports call lengths from one minute to the maximum set by the Facility in one
minute increments, charges in one minute increments, and allows visitors to buy minutes in one minute increments. Additionally, the System allows inmates and visitors to send one minute video messages that the receiver can view the next time they accesses the System. If desired, these instant video messages may be used to communicate convenient times for a visit between the inmate and visitor.

The System provides for positive identification of inmate and visitor with unique personal identification numbers, and can record all visitation events simultaneously.

Visitors do not need to purchase any proprietary hardware or software in order to use the System from their home computers; all that is needed is a computer with high speed Internet access, Adobe Flash Player, a web camera, microphone and speakers. Visitors can also connect with an Android or Apple smart phone with dual cameras for remote visitation.

(18) **Inmate Voicemail**

Already in place today, the Enforcer inmate voicemail option feature is a convenient way for friends & family to leave messages for inmates. The length of the voicemail is configurable and typically set at 30 – 60 seconds. This is a useful feature for family members to leave a best time for the inmate to call, or to communicate news such as a death in the family without the need to contact staff.

Inmate voicemail also maintains security requirements. In order to send a voicemail, the friend/family member must have an established pre-paid collect account, which is associated with a phone number. All pre-paid collect accounts, regardless of funding method, include verified billing name and address information. In addition, the Enforcer is able to check the phone number on the pre-paid collect account with the inmate’s PAN table to ensure no unauthorized contacts are made through the voicemail system.
(19) **Voice Biometrics - Pre-Call Verification**

Pre-call verification is a highly effective method for preventing PIN theft among inmates – especially if operational tools such as trust account balance or other information services are implemented.

As inmates are brought through the intake process, they are required to go through an automatic voice enrollment procedure using CenturyLink-provided enrollment phones. The inmate follows the simple prompts, dials their PIN into the phone, and is prompted to speak a few phrases including their name. The entire process requires little to no supervision by staff and takes about 3 minutes to complete.

Once the voiceprint is captured and the inmate enters population, they are prompted to verify their PIN by voice each time they attempt to make a call. If the voiceprint matches, the call is released to the network. If it does not, the inmate is informed of the failure.

This feature is also highly configurable: it can be turned on or off on a phone level, can be associated with "velocity" thresholds to avoid repeated attempts to trick the system, and has a number of reporting capabilities tied to it.

(20) **Investigator Pro Voice Biometrics**

The Investigator continuous voice biometric platform includes pre-call verification and brings with it a number of additional capabilities such as detecting impostors after call setup, detecting and marking suspicious activity, and tracking suspicious activity by category.

**Suspicious Call Finder**

Conventional voice verification systems – where inmates’ voice prints are verified before the call starts but not after – have two major limitations: first, they do not detect inmates handing the phone to another inmate after validation, and second, in the case of a verification failure, they only record the event.

The Investigator's Suspicious Call Finder module eliminates these limitations and provides analysis of inmate voices throughout the entire call; in addition, it provides the key piece of information correctional facilities value: the probable identities of imposters. When a call is completed, the Investigator goes to work uses specialized hardware and software to perform the billions of mathematical computations necessary to intelligently compare previously enrolled inmate voice models against the voices on the call, determining the highly probable identities of imposters.