The Department of Administration, Shared Services of Alaska (SSoA), has established this contract for the purchase, installation, training, and maintenance of live scan fingerprinting equipment on a non-mandatory, as-needed basis by all State of Alaska agencies.

Purchases may be made by all other government entities within the state of Alaska under the terms and conditions of this contract, including cities/boroughs, school districts, and universities.

Contracts shall be considered non-mandatory for all Executive Branch Agencies. All other State of Alaska governmental entities may purchase from the contracts resulting from this contract such as the Alaska Legislative Branch, the Alaska Court System, the University of Alaska, Boards and Commissions, and State of Alaska political subdivisions – cities, boroughs and school districts.

**Contract:** #2016-9900-3148  
**Term:** November 10, 2015, through September 30, 2019  
**Renewals:** One remaining optional two-year renewal through September 30, 2021

IRIS Identification No. 160000213

**Vendor Contact Information:** Cross Match Technologies  
3950 RCA Blvd.  
Suite 5001  
Palm Beach Gardens, Florida 33410

Contact person: Thomas West  
Phone: 346-234-5940  
Email: thomas.west@crossmatch.com


For additional information, please contact the following contracting officer:

Shavonne Jordan  
Contracting Officer III  
SSoA - State of Alaska  
907.465.5682  
Shavonne.jordan@alaska.gov
**Live Scan Fingerprinting – Additional Product List & Pricing**

Attachment A provides an updated list of products and pricing for the Live Scan Fingerprinting Contract. All other terms and conditions of the contract and deliverables shall remain the same.

<table>
<thead>
<tr>
<th>Contract Name</th>
<th>Item Number</th>
<th>Long Description</th>
<th>Alaska Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK Contract 2016-9903-3148</td>
<td>926190-054</td>
<td>BUNDLED ASSEMBLY, L SCAN 1000 PALM PRINT SCANNER WITH LSMS ON DESKTOP COMPUTER, W/SILICONE PAD, ALASKA DPS</td>
<td>$ 9,268.15</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>850026</td>
<td>SOFTWARE ONLY, LIVE SCAN MANAGEMENT SYSTEM (LSMS), 500 PPI VERSION, LSMS FOR 500 PPI SCANNERS, INCLUDING BUT NOT LIMITED TO, GUARDIAN, LSCAN 500P. INCLUDES INTEGRATION ON COMPUTER WHEN ORDERED AS AN ENTIRE SYSTEM.</td>
<td>$ 400.00</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>920183-002US</td>
<td>SHIPPING ASSEMBLY, GUARDIAN, WITH SILICONE PAD KIT, WITH ROLLS, US POWER CABLE - TAA</td>
<td>$ 3,847.50</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>900439</td>
<td>FBI APPROVED NETWORK SYSTEM PRINTER W/1 - 550 SHEET TRAY. DUPLEX PRINTING - CRIMINAL CARDS. LEXMARK MS810DN, 10 FOOT PRINTER CABLE, MANUFACTURERS LIMITED WARRANTY</td>
<td>$ 910.00</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>850391-054</td>
<td>SOFTWARE, LSMS CONFIGURATION, ALASKA DPS</td>
<td>$ 0.00</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>930100-01</td>
<td>SYSTEM IMPLEMENTATION - PROJECT MANAGEMENT, INSTALLATION, VALIDATION, AND TRAINING.</td>
<td>$ 2,250.00</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>950083</td>
<td>CMT ADVANTAGE MAINT, YR 1, STANDARD CMT SW, LSMS</td>
<td>$ 300.00</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>950084</td>
<td>CMT ADVANTAGE MAINT, YR 1, STANDARD CMT SW, LSMS SUBMISSION SOFTWARE</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>930164</td>
<td>CMT ADVANTAGE MAINT, YR 1, HW, GUARDIAN V, USB, FW, NG, DEVICE ONLY DOMESTIC</td>
<td>$ 384.00</td>
</tr>
<tr>
<td>AK Contract 2016-9903-3148</td>
<td>850026-100</td>
<td>SOFTWARE ONLY, LIVE SCAN MANAGEMENT SYSTEM (LSMS), 1000 PPI VERSION, LSMS FOR 1000 PPI SCANNERS INCLUDING LSCAN 1000T, LSCAN 1000P INCLUDES INTEGRATION ON COMPUTER WHEN ORDERED AS AN ENTIRE SYSTEM</td>
<td>$ 1,071.20</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>420633</td>
<td>CARD, FIREWIRE 2-PORT PCI EXPRESS</td>
<td>$ 71.44</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>420637</td>
<td>MODEM, V92 56K, DATA/FAX, INTERNAL, PCI</td>
<td>$ 31.05</td>
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<td>AK Contract 2016-9903-3148</td>
<td>920107-005</td>
<td>UNIVERSAL CABINET, LSCAN 500/1000 INSERT, 17&quot; RUGGED NON - TOUCH MONITOR WITH MONITOR BRACKET, AND BRACKET, FOOTSWITCH CABLE ASSEMBLY AND KEYBOARD WITH TOUCHPAD - NO LSCAN 500/1000</td>
<td>$ 3,293.75</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>420753-10</td>
<td>CAMERA, EOS REBEL T6 - BLACK, CANON, W/PWR ADPTR</td>
<td>$ 530.00</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>900307-03</td>
<td>KIT, DIGITAL CAMERA MOUNT FOR MUGSHOT - UNIVERSAL CABINET, BRACKET ARM AND QUICK RELEASE PLATE TO HOLD DIGITAL CAMERA ON MONITOR MOUNTING POST OF UNIVERSAL CABINET, QUICK RELEASE TO REMOVE CAMERA FOR SCARS, MARKS, TATTOOS Photos</td>
<td>$ 109.90</td>
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<tr>
<td>AK Contract 2016-9903-3148</td>
<td>930161</td>
<td>CMT ADVANTAGE MAINT, YR 1, HW, 1000PX, DEVICE ONLY DOMESTIC</td>
<td>$ 1,399.00</td>
</tr>
</tbody>
</table>
BILLING INSTRUCTIONS: Invoices must be billed to the ordering agency’s address shown on the individual Purchase Order, Contract Award or Delivery Order, not to the Shares Services of Alaska (SSoA). The ordering agency will make the payment after it receives the merchandise or service and the invoice. Questions concerning payment must be addressed to the ordering agency.
LIVE SCAN FINGERPRINTING
SCOPE OF WORK

The term “central site” is to refer to the collection point of all electronically submitted live scan submissions. Specifically, all live scan submissions are transmitted via SMTP to the central site as NIST compliant attachments to an e-mail message. The message must be submitted to a defined mail server for collection by the Department maintained NIST Store & Forward (NSAF). The NSAF processes and forwards all transactions to the WIN-ABIS system and, on demand, the NEC/WIN provided printer.

The goal of this project is the acquisition, installation and implementation of comprehensive electronic ‘live scan’ fingerprinting equipment capable of:

1) accurately scanning and recording the fingerprint and palm print minutiae directly from the subject’s finger and palm;
2) producing high resolution, hard copy print outs of flat and rolled fingerprint and palm print impressions on appropriate card stock (standard FBI criminal and applicant fingerprint card stock) and in the appropriate formats at the live scan site and at the central site;
3) securely transmitting data in the standard required to communicate to the NIST Store & Forward (NSAF) maintained by the Department (Each live scan system must be able to send the transaction to the local printer, NSAF, or both, as determined by the live scan operator.);
4) interfacing with State applications in order to receive and transmit information; and
5) providing functions and features that may prove useful for the State’s future needs (e.g., photographs, irises, etc.)

The contract may include three phases:

- **Phase 1**: Consists of the installation, configuration, and testing of all requirements of one live scan unit at the Central Site. Additionally, in this phase the contractor will be required to provide all deliverables enumerated in Section 5.02 of this RFP with equipment that meets all standards and requirements listed in that section.
- **Phase 2**: Once accepted by the state, the contractor will be required to deliver nine live scan systems and associated peripherals in the second phase, configured as accepted by the state in Phase 1, to replace the existing, obsolete live scan systems (Phase 2). These systems will be installed at the Anchorage Jail, the Anchorage Courthouse, the Fairbanks Correctional Center, the Mat-Su Pre-Trial Facility in Palmer, the Wildwood Correctional Center in Kenai, the Yukon-Kuskokwim Correctional Center in Bethel, Lemon Creek Correctional Center in Juneau, Anvil Mountain Correctional Center in Nome, and the Ketchikan Correctional Center in Ketchikan.
- **Phase 3**: The final phase will include the configuration, installation, and testing of additional live scan systems to state and local government agencies on an as-needed basis.

The Department may exercise the option to require the contractor to begin the second phase prior to completion of the first phase. The Department may choose to not execute Phase 3. The State has the right not to purchase any equipment, peripheral or service it deems it does not require.

The Department expects to purchase a minimum of 10 live scan devices and peripherals/systems/applications that meet the following specifications. Cross Match Technologies has submitted a fixed contract price to allow for the purchase of additional live scan systems by other Alaskan state and local agencies. Pricing must be guaranteed for a minimum of two years.

The Department expects to contract with Cross Match Technologies to provide hardware, installation of hardware upgrades, software enhancements, plus support services. Cross Match Technologies is awarded a maintenance and support contract per the terms and conditions of subsection XVIII System Maintenance Requirements. All hardware will become the property of the State of Alaska. The support and maintenance contract will begin following successful installation and expiration of the original warranty for an initial period of one (1) year (minimum) with four (4) one (1) year renewal options to be exercised solely by the state.
I. LIVE SCAN FINGERPRINTING DEVICE SYSTEM REQUIREMENTS

A. Federal Bureau of Investigation (FBI) Approval/Certification
   The vendor must be certified by the FBI to meet the most current revision of the FBI’s Integrated Automated Fingerprint Identification System (IAFIS) Image Quality Specifications (IQS), Appendix F. The contractor must provide written proof to the State that the live scan equipment has been certified by the FBI. This proof of certification must be included.

B. Environment
   1. The contractor’s live scan equipment must operate effectively under the following environmental constraints. The Contractor may not assume physical conditions other than a standard office or jail environment with respect to electrical power, temperature and humidity. Cross Match Technologies must provide data that indicates the equipment’s electrical, temperature and humidity requirements. If the equipment is not capable of operating on power and air conditioning requirements of 110 +/- 10 volts with a dedicated 20 amp circuit, 80 +/- 20 degrees Fahrenheit with a temperature rate of change of less than 5 degrees Fahrenheit per hour and 50 +/- 40 percent humidity, the contractor must include a plan to provide power and air conditioning upgrades at the installation sites at no cost to the State.
   2. At a minimum, live scan equipment must meet minimum standards for an office environment. However, options must be provided to include a hardened cabinet that can withstand a harsh jail environment. None of the installations is expected to take place out of doors.

C. Noise level
   The noise level produced by all live scan equipment during operation, including any audible malfunction warning signals, must not exceed sixty decibels.

D. Surge Protection
   Transient voltage surge suppressors rated at 25,000 amps of power line surge suppression or equivalent must protect all live scan equipment.

E. Portability
   The live scan equipment installed at the Central Site, and any Court house, Correctional Facility or law enforcement agency must be housed in a secure metal cabinet, yet must be portable. “Portable” may be construed to mean either of the following:
   • Where the individual component devices of the live scan equipment are detachable from the cabinet and weigh less than fifty pounds each; or
   • Where the cabinet is equipped with lockable rollers. The cabinet must be able to fit through a 30” wide door entrance without requiring the removal of hinged doors.

F. Durability
   The live scan equipment must:
   • Be protected from physical assault and damage from fluids or dust.
   • All components must have rounded edges and no sharp corners to minimize risk of injury.
   • All breakable components, such as monitor screens, electrical connectors, printers and keyboards must be shielded or protected from physical abuse. (Note: the option of purchasing a live scan device without the hardened cabinet must also be provided. Any devices installed in a correctional or booking facility must include the hardened cabinet option.)
   • The scanning hardware must be protected from physical abuse.
   • All electrical components must be equipped with built-in air filtration devices and must be sealed or shielded from the effects of moisture.

G. Permanent Mounting
   Other than those devices that may be installed in other than a correctional or booking facility, the live scan equipment must be capable of being securely bolted to the floor or wall. All components must be securely mounted to the live scan cabinet or other work surfaces to prevent their use as weapons. However, all live scan equipment must be easily accessible for repair or routing maintenance.
H. System lock
The live scan equipment must be capable of being locked in a manner that does not require a power off.

I. System Requirements
- Windows 7 sp1, Windows Server 2012 r2, or newer Windows Operating System
- 16 GB RAM (Minimum)
- 64 bit Operating System
- 2 TB Hard Drive (Minimum)
- 3.1 GHz (Minimum)
- USB Port for printer attachment
- Gigabit Ethernet LAN communication and 56 kbps modem (modem is needed for portable devices only)
- Option to open source

II. KEYBOARD REQUIREMENTS
The keyboard for each live scan device must be fastened to the device so that it cannot be easily removed. However, it must be a detachable, full-function, enhanced QWERTY keyboard with a numeric pad. The keyboard must allow entry of all demographic data associated with the generation of fingerprint cards.

III. MONITOR REQUIREMENTS
The monitor for the live scan device must display all data as it is entered. This means that all demographic data must be displayed as the operator keys it and the finger or palm print image obtained by the scanning process must be visible to the operator. The data and fingerprint image display must be available in real time.

IV. PLATEN REQUIREMENTS
A. The platen(s) on each live scan device must have the durability to allow a minimum of 2,500 subjects to be printed without requiring replacement of the platen(s). If the platen is designed so that it needs replacement after a certain amount of use, the live scan device must alert the operator by means of a visual indicator and audible alarm that the platen needs replacement. If the platen does not require replacement for wear, no visual indicator or alarm is required.

B. The live scan device must employ a method that prevents any fogging or ‘ghost images’ from occurring on the platen during the fingerprint capture process.

V. PRINTER REQUIREMENTS
The pricing for laser quality duplex printers is on the cost proposal. The printer must meet the following requirements:
A. Card Printing
Each laser quality duplex printer must be capable of printing standard FBI 8”x8” criminal (FD 249) and applicant (FD 258) fingerprint cards. The printer must be able to be configured to print according to Alaska’s implementation of the WIN printer specification. Palm prints must be capable of being printed on 8 ½ x 11 inch paper, with minimal demographics to be determined by the State. Upon registering with the procurement officer for this solicitation, vendors will receive a copy of these specifications.

B. Stacker Capacity
Each laser quality duplex printer must be capable of unattended printing of at least 250 cards (i.e., the stacker capacity must hold at least two hundred fifty fingerprint cards).

C. Tray Capacity
Each laser quality duplex printer must be capable of printing both applicant and criminal fingerprint cards without requiring the manual feeding of those cards. Each tray must be capable of holding a minimum of 125 cards each.

D. Print Speed
Each printer must be capable of printing at a minimum rate of five cards per minute.

E. Unattended Printing
Each printer must be capable of the unattended printing, i.e., once the printing process has been initiated, it must be able to print all of the data in the card buffer memory without operator intervention.

F. Plain Paper Printing
Each laser quality duplex printer must be capable of printing data (such as management reports and printer settings) on plain 8 ½” x 11” paper. This may be accomplished using the manual feed tray, or a separate tray.

VI. PRINTING REQUIREMENTS
A. Transmission Buffer
Each live scan device must be capable of queuing a minimum of two hundred records before requiring the cards to be printed either locally or transmitted electronically to the central site.

B. Simultaneous Operation
Each live scan device must be capable of simultaneously scanning one set of fingerprints while locally printing a different set of fingerprints. Therefore, the printing of previously scanned fingerprints must not cause the fingerprint scanning function to be delayed, or prohibit the operator from entering demographic information on a subject. Each live scan device operator must be able to locally print or re-transmit any transaction to the central site as long as the transaction remains in the live scan queue.

C. Multiple Card Output
Each live scan device operator must have the option to print up to ten copies of a given fingerprint card without having to re-scan the subject’s fingerprints.

D. Paper/Malfunction Alarm
Each live scan device must alert the operator of any malfunction or not-ready condition by means of status lights and an audible alarm. Such conditions include, but are not limited to paper jam, card hopper is empty, toner is low and interrupted transmission.

E. Card Stock
Each laser printer must be capable of printing on card stock having the following specifications:
- Thickness: seven mils (0.007 inches)
- Weight: 44 lb. Special ledger card stock, 99 lb. white tag card, 100 lb. White tag stock, or an equivalent paper stock
- Size: 8” by 8” (with a tolerance of +/- 1/32”) card stock

F. Condition of Cards
The printing process must not cause the fingerprint cards to be ‘curled’ or damaged upon output.

VII. FUNCTION CONTROL REQUIREMENTS
Contractor must provide the State the capability to establish and define edit criteria for the acceptance of prints. This relates to specifications provided in Section 5.01, Paragraph XI. The live scan device must notify the operator what information is missing if the operator attempts to transmit the fingerprint images prior to having all required data. Upon registering with the procurement officer for this solicitation, vendors will receive a copy of the Alaska Electronic Biometric Transmission Specification (EBTS).

VIII. FEATURE EXTRACTION REQUIREMENTS
The live scan device must support feature extraction that allows the device to analyze the captured images to make sure there are no duplicate or missing (and/or unmarked) fingerprint images on any given ten print record. This feature must also ensure that all fingerprint digits are recorded in the proper sequence. The operator must receive an error message indicating which finger(s) do not meet capture requirements, and should instruct the operator on the appropriate corrective action. This feature must require the operator to attempt to take corrective action; however, it must also allow the operator to override the rejection after a specified number of attempts to correct the problem.
IX. SYSTEM AVAILABILITY REQUIREMENTS
Cross Match Technologies must demonstrate that the proposed live scan device is capable of ninety-eight percent effective availability for the total system and is expected to operate twenty four hours per day, seven days per week, excluding required maintenance time not to exceed four hours per month.

X. THROUGHPUT REQUIREMENTS
A. Image/Demographic Data Capture Time
The uninterrupted start to finish time required for a trained live scan device operator to capture the rolled and plain impression fingerprint image data and to record demographic information must be, on average, no more than ten minutes per transaction. This time requirement excludes the printing process.

B. Data Forwarding
The process of forwarding data to the central site must not cause the fingerprint scanning function to be disabled, i.e., once initiated, the process must be transparent to the live scan device operator. Each system must provide the operator with the ability to transmit completed transactions to the central site, local printer, or both.

C. Transmission Status
Upon completion of the capture of fingerprint and demographic data, the operator must be given the option of sending to the Central Site, printing locally, or both. A default transmission protocol will be established per device at the time of installation. The status of the transmission process must be made visible to the live scan device operator. Therefore, it must be possible for the operator to determine that a given transmission has been successfully completed, is still in progress, and has experienced error in the transmission and/or that the transmission has failed.

D. Transaction queue
The live scan queue must maintain a minimum of 200 transactions prior to automatic purging from the queue. Transactions that are not printed or transmitted (depending on the circumstances) must remain in the queue until printed or transmitted to the Central Site. Each live scan device operator must be able to locally print or retransmit any transaction to the central site as long as the transaction remains on the live scan queue.

E. Concurrent Printing and Transmitting
Each live scan device must be capable of transmitting electronic fingerprint data. Therefore, the device must be able of not only sending such data to the laser printer connected to the device, but also concurrently transmitting the data to the central site.

XI. DATA INPUT/OUTPUT REQUIREMENTS
A. Fingerprint Card Formats
1. Multiple Card Formats
The live scan device must be capable of creating and printing all scanned image data and operator-entered alphanumeric (demographic) data on each of the fingerprint card formats according to the Alaska printer specifications. All graphic and alphanumeric data must fit wholly within the designated data field boundaries. This means that there must be no overlapping of data nor should the data overlap the pre-printed lines on the fingerprint card. Upon registering with the procurement officer for this solicitation, vendors will receive information pertaining to printer specifications for the various types of transactions. Each device must be capable of creating and printing the following card types:
- Criminal, answer required (CAR)
- Miscellaneous Applicant (MAP); note: this format is used for miscellaneous applicants as well as for the registration of sex offenders, amnesia victims, missing persons and deceased subjects.
- Non-federal User Fee (NFUF)
- Federal Applicant User Fee (FAUF)
- Federal Applicant (No Charge) (FANC)
- Known Deceased (DEK)
- Unknown Deceased (DEU)
- Missing Person (MPR)
2. Operator Selection of Format
   The live scan device operator must be capable of specifying the card type upon which the live scan images and demographic data are to be recorded.

3. Demographic Data Fields
   a. Data Field Specifications:
      All data fields must conform to the data field specifications according to the Alaska Electronic Biometric Transmission Specification (AK EBTS). Upon registering with the procurement officer for this solicitation, vendors will receive a copy of the AK EBTS. The system must contain the option to be able to default to a specific reason fingerprinted (AK EBTS Field 2.037).

   b. Display Format:
      All data fields must conform to the data field specifications defined in the AK EBTS.

   c. Pre-fill of Demographic Data from remote Data Store:
      Each live scan device must be capable of capturing available demographic data via a web service from both the Alaska Public Safety Information Network (APSIN) and the Alaska Corrections Offender Management System (ACOMS). The system must have the ability to change web service URLs by user parameter setting. The Department of Public Safety reserves the right to restrict access to these data stores.

   d. System Modifications:
      It is anticipated that from time to time, the State will need to add, delete, or modify demographic data fields. Therefore, the contractor must provide for periodic revisions of the data field specifications if requested by the State, and it must be able to implement those changes remotely or through a locally provided service. This must be provided at no cost to the State, with the State limited to four changes during the first year. The Contractor must allow the State to establish certain authorizations and restrictions in order to maintain control of the changes made.

   e. Periodic Data Table Updates:
      Where possible, all data fields that are limited in acceptable data shall be table driven. Periodically, table values change, and the tables must be updated with the new values. Updated tables are retrieved through a web service provided by the State. Each live scan device must periodically check the web service and update the live scan table files. This must be accomplished with minimal manual intervention, and must not require system rebooting or software re-initialization. Details on how this functionality will be offered are included. Upon registering with the procurement officer for this solicitation, vendors will receive a copy of the web service specifications.

      Additionally, on occasion, it may be necessary to 'force' an update of a device’s tables. Functionality for manual update of the tables must be provided.

   f. Device Specific Defaults:
      Each device must be configurable to having its own data field defaults (e.g., local agency default ORI). The operator must have the ability to change these defaults.

   g. Signature Capture:
      The option of including signature capture (NIST Type 8 records) must be included in pricing. The ability to capture both the signature of the person being fingerprinted and the official taking the prints must be included. The digital signatures captured
must conform to the printing requirements of the central site.

4. Standard OCR Fonts
   All alphanumeric data printed in the designated data fields must meet the ANSI standards for Optical Character Recognition (OCR). All alphanumeric data printed on each live scan fingerprint card must be consistent in size, OCR readable and between seven and twelve points in size.

5. Fingerprint Image Requirements
   a. Image quality requirements
      1) FBI Image Requirements
         All electronically produced fingerprint images must conform to the most current version of the fingerprint image requirements established by the FBI.

      2) Image Quality Control
         Each live scan device must be able to automatically redisplay, for operator verification, a captured fingerprint image if that image contains an inordinate number of artifacts (false minutia), insufficient number or quality of ridge characteristics, or an image placed out of sequence. It must be possible to adjust the sensitivity of this rejection so those images with more or less false minutia will be deemed acceptable by the live scan device. Each live scan device must also be able to automatically reject a captured fingerprint image that fails to meet quality control standards. The operator must be prompted to re-roll the unacceptable finger(s) and/or plain impressions, and must not be allowed to override the rejection unless the operator has attempted to obtain acceptable prints a minimum of 2 times.

      3) Image Quality Control Override:
         If a fingerprint image is redisplayed for verification by the image quality control feature, but the operator determines that the image should be accepted, the operator must be able to manually override the image quality control feature and require the device to accept the image. Before this override is allowed, the operator must be prompted to re-roll the unacceptable finger(s) and/or plain impressions, and must not be allowed to override the rejection unless the operator has attempted to obtain acceptable prints a minimum of 2 times. In such cases, a manual override designation must be placed in the NIST record and printed on the card. (One acceptable method to place the override designation in the NIST record is to add it to the 2.124 field, with the “BIP” (best image possible) value. Other methods may be considered and approved.) A record log must be maintained for audit purposes. The log must indicate ORI, operator, date/time the override occurred, aspect of the image that was in question, and the transaction control number of the record that was produced.

      4) Image Security:
         Once an image has been captured, processed and deemed acceptable by the live scan device operator for transmission to the central site, it must be impossible to further edit, alter or otherwise change that image or any of the minutiae contained within the image. An allowance for the operator to correct demographic information and retransmit and/or print the card must be provided.

   b. Image Capture Requirements
      1) Rolled Impressions:
         The electronically produced 'rolled' impression images of each finger must be displayed in the proper sequence within the designated blocks on the standard fingerprint card formats. Each image must be oriented within its appropriate block so that the impression is aligned on the vertical axis in relation to the base of the fingerprint block and the image is centered in the box.

      2) Plain Impressions:
         The electronically produced ‘plain’ impression images of the thumbs and four fingers of each hand must be displayed in the proper sequence within the
designated blocks on the standard fingerprint card formats. The four finger images must be captured simultaneously for each hand and printed in the designated boxes on the fingerprint card. The four finger capture area of the scan surface must be so designed as to ensure that all four fingers of each hand are simultaneously captured without losing any of the area above the flexion crease.

3) Rejected Print Substitution: 
The live scan device must allow the operator to reject any captured images and re-scan the appropriate finger(s) in order to replace the rejected images. This must be allowed without requiring the operator to re-scan any otherwise acceptable images.

4) Missing Finger Annotations: 
The live scan device must allow the operator to make missing finger annotations (e.g., AMP, BAND, MISS and DEF) in accordance with the most recent publication of the AK EBTS. Finger annotations must be recorded in the appropriate tag field of the NIST record, and must be printed on the fingerprint card in accordance with the Alaska Printer Specifications.

5) Over-sized and Juvenile Fingers: 
The scanning mechanism of the live scan device must be capable of capturing image data from virtually any size finger, from smaller juvenile fingers to larger ‘oversized’ digits. In any event, the image size must be ‘actual size’ and conform to the national standard.

6) Scan-Ready Indicator: 
The live scan device operator must be informed when each finger is correctly positioned for scanning, and when the scan process for each finger has been completed. If the fingerprinting process is interrupted, the live scan device should visually prompt the operator as to which finger should be recorded next.

7) Finger Orientation Markers: 
The live scan device must have finger orientation markers (horizontal and vertical) to assist the operator in properly orienting each finger. The orientation markers must be clearly marked either adjacent to the platen surface, or on the monitor. The purpose of this requirement is to ensure that when printed, each captured image is properly situated in the appropriate block on the fingerprint card. This orientation should prior to the scan process in order to eliminate the need to re-scan a finger because of improper placement within the fingerprint block.

8) Record Display: 
The live scan device must display the fingerprint images in a format similar to the fingerprint card. Demographic information must also be displayed and must contain a reference to the name of the field (e.g., name, date of birth, etc.). This functionality may be provided through separate screens or through displaying the entire card image. This functionality must also enable the operator to confirm that all demographic and fingerprint image data has been properly entered.

9) NIST Interface: 
The live scan devices must be equipped with the WSQ Compression and NIST Interface software that will generate Header, Demographic and Image record transmissions in accordance with "Data Format for the Interchange of Fingerprint, Facial, & Scar Mark & Tattoo (SMT) Information" (ANSI/NISTS-ITL 1-2011:Update 2013) Type 1, 2, 8, 14, and 15 record formats. Additionally, each device must be capable of recording and transmitting NIST Type 10 (Facial and SMT images) and Type 17 (Iris images) records. Each device must be capable of recording 1000 ppi Type 14 records. Functionality to down sample those images to 500 ppi Type 4 records, prior to transmission, must be
provided. The implementation of the down sampling must be configurable at the discretion of the state. It is anticipated that some installations will not have a need to record palm print (NIST Type 15) records. All images transmitted must be able to be processed by DPS software.

XII. SECURITY REQUIREMENTS

A. Operator Log-on
Each live scan device must have a terminal security feature based on operator log-on and password validation. Such a feature should prevent the system from responding until after the operator has entered a valid user ID and password. Each live scan device must possess all of the following features:

• The live scan device must not operate without first requiring an operator log-on and password validation.
• After a five minute period of inactivity, the live scan device must automatically log off and require a new log-on and password validation before fingerprinting is allowed.

B. Operator Signature
Each live scan device must automatically record the operator’s name in the appropriate tag field of the NIST record and in the appropriate block upon printing the fingerprint card. The live scan device may automatically enter the operator’s employee number in this same field. This must occur without operator intervention.

C. System Clock
Each live scan device must have a system clock. The live scan device must accurately maintain an internal date and time, which must remain current. Each device must be able to accurately maintain its internal date and time by accessing a State accepted network time protocol (NTP) network time stratum 1 or 2 server, with an accuracy of within 100 ms.

D. Virtual Private Network
Each live scan device must be able to participate in a CISCO Virtual Private Network (VPN). Each device must have a contractor-supplied hardware device that is compatible with the DPS VPN.

E. Remote Access
Any contractor remote access for maintenance purposes will be performed through a method approved by the Department of Public Safety. The remote access should be shown to meet stringent security requirements as specified by the State.

XIII. TRAINING REQUIREMENTS

A. Terminal Operation
The Contractor must provide hands-on training at each installation site for all personnel who will be operating the live scan devices and peripheral equipment. Operators must be trained to perform startup functions, complete the entry of demographic data (both manually and using the state developed web-service for interfacing with the Department of Corrections’ ACOMS jail management system and the Department of Public Safety’s APSIN criminal history record system), record all finger (and palm, if appropriate) images and transmit and print recorded images and demographic data.

B. Operator/User Maintenance
The Contractor must provide on-site training, at each installation site, covering all aspects of operator/user maintenance for system components and general preventive maintenance procedures and schedules.

C. Training/Maintenance Manual
The Contractor must provide a comprehensive written manual for each installation site, covering all aspects of terminal and system operation and maintenance. This manual must contain step-by-step instructions of the following processes:

• Startup
• Completing demographic data (manually and through the web service interface with OTIS and APSIN)
• Recording finger/palm images
• Transmitting and printing of records
• Preventive maintenance (live scan device and printer)
• Diagnostic procedures (live scan device and printer)
• Operational readiness verification procedures (live scan device and printer)
• Remedial maintenance procedures (live scan device and printer)
• Table updating procedures (if required)

The manual must also be provided in an electronic editable form (i.e. Microsoft Word).

XIV. DOCUMENTATION REQUIREMENTS

A. User’s Guide
The Contractor must provide a User’s Guide for each live scan device. This guide must clearly define all functions of the live scan equipment (including printers). It must include copies of all screens, descriptions of all data fields, operations and parameters, proper responses to error conditions, as well as instructions regarding start up and shut down and operator log-on and log-off. This documentation may be incorporated in the Training/Maintenance Manual (described above), or may be a separate document. If a separate document is provided then it must also be provided in an electronic editable form (i.e. Microsoft Word).

B. User’s Maintenance Manual
The Contractor must provide a User’s Maintenance Manual for each live scan device. This guide must clearly identify all operator tasks required to keep the live scan hardware (including printers) in working order. This documentation may be incorporated in the Training/Maintenance Manual (described above), or may be a separate document. If a separate document is provided then it must also be provided in an electronic editable form (i.e. Microsoft Word).

C. Context Sensitive Help
Each live scan device must be capable of providing on-screen context sensitive help to the operator.

XV. COMMUNICATIONS REQUIREMENTS

A. State of Alaska Wide Area Network Connectivity
Each live scan device must be able to connect to the central site and transmit through the State of Alaska Wide Area Network. Transmission of the NIST record must be via SMTP using MIME attachments to store the NIST records. The transmission must be encrypted as required by

B. Guaranteed Delivery
Whenever the live scan device has initiated a transmission, the transmission completion must be guaranteed. That is, the operator must not be required to re-scan the fingerprints or re-initiate the transmission in the event of a busy or error condition during the transmission.

XVI. EXTERNAL INTERFACE REQUIREMENTS

A. In-House Interfacing
The Contractor must provide the capability to down-load data from other, non-live scan automated data bases or booking systems via a State of Alaska web service interface. This interface provides access to demographic data in needed to complete fingerprint card transaction. The live scan operator must be able to select which system is the source of the demographic information. The system must provide the ability to change the web service URLs by user parameter setting.

B. In-House Interfacing Availability
The specified in-house interface must be available to the State at the time the devices are installed.

C. Network Interfaces
The interfaces specified above must link each live scan device to a centralized state e-mail server. This configuration is intended to allow for the seamless processing of received transactions through the WIN AFIS and the state print server.

XVII. MANAGEMENT REPORT REQUIREMENTS

Each live scan device must be capable of locally creating monthly management data files and transmitting those files to the state’s central site. These data files must reflect the usage of the live scan device and attached printer(s). The reports must consist of, but not be limited to, the number of subjects booked/printed, subdivided by:
The type of fingerprint card format, listed by date and time;
The name of the operator taking the prints;
The time required to take each set of prints;
The number of copies printed for each subject; and
If transmitted to the Central Site, an annotation that the transaction was transmitted successfully.

The data file must be in a form defined by the State for loading into a SQL database.

XVIII. SYSTEM MAINTENANCE REQUIREMENTS
A. Self-Diagnostic Capability
The Contractor must provide a self-diagnostic capability for each live scan device whereby an operator
can determine that all component devices are functioning normally. This may be accomplished either
by diagnostic routines performed by the operator or remotely initiated diagnostics performed by the
Contractor’s representative at the request of the operator.

B. Remedial Maintenance
The Contractor must provide remedial maintenance service which ensures that a live scan device or
attached printer will not be out of service for more than eight continuous hours. If a device/printer is
out of service for eight continuous hours, the Contractor shall, by the eighth hour, replace the defective
device/printer with an operable device/printer until the defective item has been fully repaired.

Maintenance costs for the first year after acceptance must be included in the purchase price for each
device. The cost plan includes maintenance agreement costs for each device the subsequent five
years. Cross Match Technologies agrees to invoice each site’s point of contact at least 60 days prior to
the expiration of the maintenance agreement. If the invoice is not received by the agency responsible
for paying the invoice, the maintenance agreement shall be considered to be in full effect until
the invoice has been received and processed by the agency responsible for paying the invoice. The
responsible agency will process the invoice within 30 days of the invoice date.

Cross Match Technologies must provide maintenance options to include 7 x 24 hour maintenance plan,
5 x 24 hour maintenance plan and 5 x 8 maintenance plan. Depending on the location of the live scan
system, it is anticipated that less than 7 x 24 hour maintenance may be required/desirable.

C. On-Call Maintenance
The Contractor must provide maintenance on an on-call basis. If the Contractor is unable to correct
the problem remotely, the Contractor must begin on-site repair within four hours of the time the user made
the initial repair request.

D. Depot Maintenance
The Contractor must provide a depot maintenance (swap-out) capability whereby a faulty piece of
equipment would be exchanged for an operable piece of equipment in the event that the repair cannot
be completed in the maximum allowable downtime of eight hours.

E. Configuration Management
The Contractor must provide the means and method to restore a system in a timely manner in case of
catastrophic failure or disaster. This should be done through good configuration management
techniques, which include a copy of all configuration settings and a baseline system backup for each
device. New copies of all configuration settings must be created each time the system configuration
changes.

XIX. REMOTE SYSTEM ACCESS REQUIREMENTS
Each live scan device must be capable of being accessed by operators from the central site. The access
must be accomplished through the State WAN via TCP/IP. The remote access must have the capability, at
a minimum, to assess the status of the device, view and manipulate the queues, update the tables, view and
retransmit fingerprint cards, and reboot the system.

XX. MODEL OR PARTS UPGRADES
During the life of this contract, the Contractor agrees to install, at no cost to the State, all retrofit models, or
parts upgrades offered by the manufacturer within 90 days of the date the upgrade is introduced by the
manufacturer. The State also reserves the right to accept upgrades to models on the basic contract, after
such equipment is placed in service, when the upgrades improve the way the equipment operates or improves the accuracy of the equipment.

XXI. ITEM UPGRADES
The State reserves the right to accept upgrades to models on the basic contract when the upgrades improve the way the equipment operates, or increases the functionality of the equipment. Such upgraded items must be at the same or lower price as the items in the basic contract. If an item upgrade changes the brand/model number of an item on contract, vendors shall request prior approval from the Contracting Officer.