# EXPRESSION OF INTEREST FOR INLINE CT-EDS MACHINES FOR BAGGAGE HANDLING SYSTEM AT TERMINAL 2 AT CHHATRAPATI SHIVAJI MAHARAJ INTERNATIONAL AIRPORT, MUMBAI

Issued by Mumbai International Airport Limited

Date of issue: 20<sup>th</sup> June, 2022

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# DISCLAIMER

- 1. The information contained in or as part of the Expression of Interest document ("**EOI**") or otherwise provided to Applicants, was obtained from various sources and is offered in good faith for the guidance of the Applicants only.
- 2. Each Applicant is obliged to become acquainted with all of the provisions of the Applicable Laws affecting the Application, the execution of the Agreement and fulfilment of its terms. Applicants are deemed to have knowledge of and be in full compliance with all the Applicable Laws. Applicants acknowledge and agree that MIAL shall be entitled to disqualify any Applicant and exercise any other remedies it may have (including, without limitation, seek damages for loss of profit / loss of revenues), if any proceedings are brought against any Applicant and / or MIAL and / or any party, for breach of any Applicable Laws in relation to such Applicant's Application.
- 3. Any communication to the Applicants from MIAL shall be valid only if received in writing from any person authorised by MIAL.
- 4. The EOI is not intended to form the basis of a decision to enter into any transaction with respect to the Agreement or any other investment decision and do not constitute an offer, invitation or recommendation to enter into or make any such transaction or decision.
- 5. Neither MIAL nor its employees, agents, directors, consultants, advisors, contractors or subcontractors, make any representation or warranty, express or implied, or accept any responsibility or liability as to the accuracy or completeness of the information contained in the EOI or information made available or to be made available in connection with MIAL, its business activities or the Airport and nothing contained herein or provided or to be provided to the Applicants is or shall be relied upon as a promise or representation, whether as to the past or as to the future.

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# SECTION I : INTRODUCTION TO APPLICANTS

## 1.1 INTRODUCTION

# A. ABOUT MIAL

Mumbai International Airport Limited ("MIAL") is operating, managing and developing the Chhatrapati Shivaji Maharaj International Airport, Mumbai ("CSMIA") pursuant to the Operation, Management and Development Agreement dated April 4, 2006 entered into between Airports Authority of India and MIAL ("OMDA").

Under the OMDA, MIAL has the exclusive right and authority, *inter alia*, to operate, manage and develop and to provide aeronautical and non-aeronautical services at CSMIA for a term of 30 years starting from May 3, 2006, with an option (subject to the provisions of the OMDA) to extend the term for an additional period of 30 years.

# B. SCOPE OF WORK FOR INLINE CT-EDS MACHINES

MIAL intends to appoint agency to provide the supply, installation, testing, along with Baggage Handling System (BHS) integration & commissioning of inline CT-EDS machines at Terminal 2, CSMIA, Mumbai ("**Work**") as further detailed in Annexure 2 (Scope of Work) of this EOI.

# C. INVITATION

MIAL hereby invites all interested companies, whether private or public, registered in India ("**Applicant(s)**") and having experience in supply and installation of inline CT-EDS machines for Baggage Handling System, to submit their expression of interest by way of an application ("**Application**"). MIAL intends to shortlist Applicants based on the Application submitted by them for further bidding process. It is clarified that mere invitation by MIAL for participating in further bidding process does not constitute any contract between MIAL and any Applicant(s).

# 1.2 SCHEDULE FOR EOI PROCESS

The schedule for EOI process is specified in Clause 2.3 below. MIAL reserves the right to change the schedule at its sole discretion. Any such changes shall be intimated to the respective Applicant at the email address specified in its Application.

# **1.3 CONTACT DETAILS**

The following is the address and contact details for submission of Applications (by courier or registered post or hand delivery) in accordance with this EOI:

Head - Procurement, Mumbai International Airport Limited, Chhatrapati Shivaji Maharaj International Airport, Near Terminal 1B Arrivals, Santacruz (East), Mumbai - 400 099, India Applicants may seek clarifications in relation to this EOI by sending an email to: procurement.csmia@adani.com

For all email communications related to this EOI, please mention subject as "EOI FOR INLINE CT-EDS MACHINES AT CSMIA" in the subject line of the email.

# 1.4 DEFINITIONS & INTERPRETATIONS

- A. Throughout this EOI, unless indicated otherwise by the context, the singular also means plural.
- B. Any reference in this EOI to any statute or statutory provision shall be construed as including a reference to that statute or statutory provision, and to all statutory instruments, orders and regulations for the time being made pursuant to it or deriving validity from it, as may be from time to time amended, modified, extended or re-enacted, whether before or after the date of this EOI.
- C. The words "hereof," "herein", "hereunder" and words of similar import when used in this EOI shall refer to this EOI as a whole and not to any particular provision of this EOI. The words "include" and "including" shall be deemed to be followed by "without limitation" or "but not limited to" whether or not they are followed by such phrases or words of like import.
- D. The headings and sub-clauses of this EOI are intended for convenience only and shall not in any way affect the meaning or construction of any provision therein.
- E. Words and abbreviations, which have well known technical or trade or commercial meanings are used in this EOI in accordance with such meanings.
- F. References to recitals, clauses are, unless the context otherwise requires, references to recitals and clauses of this EOI.
- G. References to days, months and years are references to calendar days, calendar months and calendar years respectively.
- H. References to person shall mean any natural or legal person.
- I. References in this EOI to any consent or approval or permission or satisfaction or confirmation or certificate or agreement by an Entity shall, in each case, mean in written form and signed by an authorized signatory of such Entity.
- J. "Applicable Laws" means all laws, statutes, rules, regulations, codes, treaties, of any national, state or local government or any statutory or regulatory authority; all orders, decrees, rules, directions, guidelines, notifications or interpretations of any executive, administrative, judicial or quasi-judicial body; including all Applicable Permits; all as in force and effect from time to time; that are applicable to or binding upon (i) the person the property, or matter in question; or (ii) the Work or any portions thereof.
- K. "Applicable Permits" means all consents, approvals, registrations, licenses, no-objections and permits required under or pursuant to the Applicable Laws.
- L. "BCAS" means the Bureau of Civil Aviation Security of India.
- M. "TSA" means Transportation Security Administration, an American governmental agency that is responsible for travel safety, especially air travel.
- N. "ECAC" means European civil aviation conference.

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#### **SECTION II : EOI PROCESS**

## 2.1 AWARD PROCESS

- A. The purpose of this EOI process is to enable MIAL to shortlist companies for the Supply and installation of inline CT-EDS machines for Baggage Handling System at CSMIA. MIAL invites applications from interested parties for participating in this EOI process. The shortlisted parties would be subsequently invited to submit bids in respect of the said contract for Supply and installation of inline CT-EDS machines for Baggage Handling System at T2, CSMIA.
- B. MIAL is using two stage award process to grant contract for supply and installation of inline CT-EDS machines for Baggage Handling System at T2, CSMIA. The stages are:
  - a. Phase 1: EOI Stage
  - b. Phase 2: Tender Stage
- C. In the first phase, MIAL will shortlist Applicants based on the criteria set out in this EOI Document. The shortlisted Applicants will then be handed out the detailed tender documents and invited to submit a bid. The Applicant meeting the following eligibility criteria and complying with other terms and conditions of this EOI shall be shortlisted as Qualified Applicant.

# 2.2 ELIGIBILITY CRITERIA

The Applicant must fulfil the following eligibility criteria:

- (i) CT-EDS machine proposed by Applicant should meet technical specifications mentioned in the Scope of Work of this EOI.
- (ii) Applicant should have past experience of supply and installation of inline CT-EDS machines for Baggage Handling System in Airport.
- (iii) Applicant should be capable of providing supply and services.

# **2.3** TIME SCHEDULE

Date	Event
20 <sup>th</sup> June, 2022	Date of newspaper advertisement
27 <sup>th</sup> June, 2022	Last Date for Submission of Applications

MIAL reserves the right to change the above schedule at its sole discretion. Any such changes shall be intimated to the respective Applicant at the email address specified in its Application.

# 2.4 APPLICATION FORM

# A. Contents

- i. The Application shall be submitted in a sealed envelope comprising of the following:
  - Application Form along with necessary documents as per **Annexure 1**.
  - ✤ Applicant credentials, company profile, relevant experience, list of clients, etc.
  - Technical specifications of Applicant's inline CT-EDS machine.
  - Applicant Company's financial details like certified turnover details for last three years, etc.
  - Other documents indicating competency of Applicant for the Work.
- ii. **Sealing and marking of Applications:** Applicants shall submit original version of the Application sealed in a single envelope with the following marking:

"EOI FOR INLINE CT-EDS MACHINES AT CSMI	A

APPLICANT'S NAME:	
APPLICANT'S ADDRESS:	
E-MAIL ADDRESS:	***************************************

This envelope shall be addressed to the addressee set forth in Clause 1.3 and shall be submitted by the due date specified in Clause 2.3 above.

- iii. All documents comprising the Application shall become the property of MIAL and shall not under any circumstances be returned to the Applicants. MIAL shall be free to utilise any information / data provided to it as a part of the Application in any manner that it deems fit.
- iv. MIAL shall not be responsible for the loss or non-receipt or delay in the receipt of any EOI application sent by post or courier.
- v. MIAL has the exclusive and final right of acceptance/rejection of applications from any of the parties/Applicants.

# 2.5 **DISQUALIFICATION**

MIAL shall have the right to disqualify any Applicant if, in MIAL's opinion:

- i. the Applicant, or any employee, officer, agent, director, advisor, consultant, contractor, subcontractor, servant or staff member of, or any person associated with such Applicant has or may reasonably be thought to have, at any time, involved in any dishonest, fraudulent, illegal or unlawful business practices whether in connection with the Application or otherwise; or
- ii. the Applicant engages in anti-competitive behavior including, collusion between Applicants or solicitation of MIAL's employees, agents, directors, consultants, advisors, contractors, or sub-contractors. Applicants may only have contact with the authorised official of MIAL solely for the limited purpose of submission of Applications and queries concerning the EOI and other matters as provided for in the EOI; or
- iii. the Applicant breaches any of the terms and conditions contained in the EOI; or
- iv. the Applicant or any of the affiliates or any of their employees, directors:

- a. has been disqualified from a tendering process by MIAL or its Application was rejected by MIAL or a contract awarded to it is under dispute for material breach; or
- b. has withdrawn from the tendering process conducted by MIAL subsequent to award of contract; or
- c. is has been either directly or indirectly involved in any frivolous or vexatious litigation against MIAL; or
- d. has been convicted in any criminal case;
- v. any other fact or circumstance exists, which justifies such disqualification.

The decision of MIAL in this regard shall be final and binding on all the Applicants.

# 2.6 MISCELLANEOUS

- A. MIAL shall issue subsequent bidding documents to the shortlisted Applicants.
- B. The EOI process shall be subject to provisions of OMDA.

# Annexure 1 : Application Form

[Place, Date]

To: Head – Procurement, **Mumbai International Airport Limited,** Terminal 1, Chhatrapati Shivaji Maharaj International Airport, Santacruz (E), Mumbai 400 099.

Dear Sir:

# Sub: Application in response to the EOI for inline CT-EDS machines at CSMIA

- Ref: EOI for inline CT-EDS machines at CSMIA dated \_\_\_\_\_, 2022 ("EOI") issued by MIAL.
- 1. We confirm that we are submitting our Application for supply and installation of Inline CT-EDS machines for Baggage Handling System at Chhatrapati Shivaji Maharaj International Airport ("CSMIA").
- 2. We hereby confirm that we meet the eligibility criteria specified in this EOI and in this regard, we have enclosed all required documents (together with the supporting documents) in accordance with Section 2.2 of the EOI.
- 3. We further confirm that we are not disqualified from participation in the competitive bidding process, pursuant to the provisions of the EOI.
- 4. We represent, warrant and covenant to MIAL that all information furnished or to be furnished by us to MIAL at any time (including without limitation, as part of our Application in response to the EOI) is true, complete, accurate, unconditional and fairly presented. We undertake to forthwith inform MIAL in the event of occurrence of any circumstances that would render any information, representations or warranties in our Application, untrue, incorrect or invalid.
- 5. Having read, carefully examined and understood the terms of the documents comprising the EOI (including without limitation, the form of the Agreement issued), we, the undersigned, hereby offer to perform the Supply and installation of inline CT-EDS machines for Baggage Handling System (as defined in the EOI) in accordance with:
  - (a) all terms and conditions as specified in the EOI, including without limitation the form of Agreement, the annexures, exhibits, attachments and amendments to the EOI; and

(b) our Application;

provided however that in the event of any inconsistency between (a) and (b) above, (a) shall prevail.

- 6. We hereby agree and confirm that our Application has been prepared strictly in accordance with the instructions in the EOI (including the forms set forth therein) and that we shall at all times act in good faith and abide by the terms and conditions of the EOI.
- 7. We represent and warrant to MIAL that as of the date of submission of the Application:
  - (a) the information furnished by us is true, complete, accurate, unconditional and fairly presented;

- (b) we have all the necessary corporate approvals and authorizations to participate in the EOI; and
- (c) neither we nor our affiliates are in anyway, directly or indirectly, interested in, or associated with any other Applicant or its Application.

In the event of occurrence of any events or circumstances that would render any of the foregoing representations and warranties untrue or invalid, we covenant to promptly notify MIAL of the same and agree that MIAL shall be entitled to reject our Application in such event and if awarded the contract, withdraw the same, without MIAL incurring any cost or liability.

8. We represent and warrant that we [are / are not] [*strike out which is not applicable*] Group Entity(ies), of MIAL or its shareholders (other than AAI). We further represent and warrant that we [are / are not] [*strike out which is not applicable*] Related Party of MIAL or its shareholders or directors.

# 9. **Confidentiality undertaking:**

We hereby undertake and agree to keep the Information (as defined below) confidential. We acknowledge that the Information is confidential information of MIAL and is provided solely for the purpose of enabling the Applicant to submit its Application and participate in the process for selection by MIAL of the Successful Applicant for performing the Services ("**Specified Purpose**"). We, the Applicant, hereby undertake and agree that in consideration of receipt of such Information, we shall abide and be bound by the following terms:

- (a) "**Information**" means the EOI and any and all documents and information, whether specifically mentioned as 'confidential' or not, provided by or on behalf of MIAL to the Applicant or otherwise obtained by the Applicant pursuant to the EOI, or negotiations and discussions with MIAL, including without limitation, any clarifications, amendments or documents subsequently issued, drafts of definitive agreements, information obtained through interactions with MIAL and site visits (if any), all technical, commercial, financial, operational, legal or statistical information, all agreements, plans, layouts and documents in relation to the Airport, in each case whether in writing, electronic form or other tangible form or disclosed by oral or visual presentation or other intangible method.
- (b) The Applicant shall use the Information solely for the Specified Purpose. The Applicant shall maintain the confidentiality of the Information and shall not disclose the Information to any person, other than:
  - i. its employees, professional advisors and consultants, who have a need to know in connection with the Specified Purpose; and
  - ii. a party with the prior written consent of MIAL;

provided in each case that (i) Applicant shall ensure that such party agrees to appropriate confidential treatment of such Information as per the terms hereof; and (ii) Applicant shall be solely responsible for any act by such parties which results in the Information not being treated in accordance with the confidentiality provisions hereof.

(c) Confidentiality obligations hereunder shall not apply to any Information that (i) is or becomes available in the public domain, other than by breach of confidentiality obligations by the Applicant or any other party, (ii) is in possession of the Applicant prior

to its disclosure by MIAL and rightfully received without any breach of confidentiality by any party. If Applicant is required to disclose any Information pursuant to any Applicable Laws or an order of any judicial or statutory authority, Applicant shall give MIAL reasonable prior notice of the circumstances of such requirement prior to disclosing such Information and shall co-operate with MIAL to minimize the extent of disclosure, including any effort by MIAL to contest or obtain a protective order against such requirement.

- (d) The Applicant shall, promptly upon the request of MIAL, return or destroy all Information including without limitation all originals, copies, extracts and summaries thereof (including information on electronic media), and certify to MIAL that it has returned or destroyed such Information within two days of such request by MIAL.
- (e) The Applicant agrees that the use or disclosure of the Information in breach of these confidentiality provisions will cause irreparable harm or injury to MIAL, which is incapable of recompense by way of damages. Accordingly, the Applicant agrees that MIAL is entitled to seek injunctive or other appropriate relief to restrain any breach or threatened breach of these confidentiality provisions.
- 10. We hereby agree that the EOI and this Application shall be construed, interpreted, enforced and governed, in all respects, by the laws of India. The courts at Mumbai will have exclusive jurisdiction in respect of all matters arising out of the EOI and this Application.

We, the Applicant, undertake that the representations, warranties, covenants, agreements and undertakings in the Application are true and correct and we shall be liable for any breach thereof. We hereby accept all the terms and conditions of the EOI. Capitalised terms used but not defined herein have the meanings set forth in the EOI.

Yours sincerely,

For and on behalf of [*name of Applicant*]

\*Signature of Authorised Signatory(ies)

Name:

Title:

Phone number:

E-mail:

#### Annexure 2 : Scope of Work

Vendor is this document shall mean Applicant as defined in EOI

#### Scope of Work

Objectives of the project are:

- 1. To be compliant with BCAS circular 11/2017 or latest
- 2. Installation of ECAC standard 3 or higher, Inline machines with advanced threat detection capabilities

The scope of work includes detailed technical requirement for removal of existing EDS Machines installed at Mezzanine floor of Baggage makeup area along with supply, installation, testing, BHS integration & commissioning of CT-EDS inline machines at Terminal 2, CSMIA, Mumbai.

Terminal 2 present inline machines will be replaced with CTX machines which will enhance the current detection standard to ECAC standard 3 or higher.

#### Removal of Existing 10080 EDS machines & Storage

Vendor must provide methodology for removal of HS10080 EDS machines without much hampering of BHS operations, no damage to removed equipment & to be placed in the provided space by MIAL with proper covering.

Vendor to provide all necessary document required for installation, Machine diagram, Maintenance space requirement, Point load diagram beforehand.

All lifting equipment, manpower, vehicles & permissions are in scope of vendor. MIAL will guide in obtaining permission.

Lifting equipment (ex: Chain pulley or blocks) & tools certified by authorized agency to be used for required weight as per site conditions.

Vendor must specify which utilities have to removed, shifted or any civil work is required in the initial stage itself with minimum disturbance to existing structure.

If platforms are decided to be removed, after removal the platform will rest half on plinth and half on the path. Blocks for balance should be arranged by vendor.

#### Space for UPS & Batteries

To confirm the area required for UPS & batteries installation

Vendor to do complete cabling from UPS to machines which may require installation of cable trays, laying of cable etc. as per MIAL standards. No exceptions.

Vendor to confirm Input electrical supply requirement.

Vendor to confirm HVAC requirements for batteries & UPS.

## **CT-EDS Machine**

Compliant with specifications mentioned in latest BCAS security equipment circular.

Machine height to be matched with existing BHS conveyor height.

To share PPT of Machine, Detailed brochure, TSA/ECAC/BCAS Certification.

OEM to share the Make, OS, Architecture, Configuration, Licenses, Applications, Capacity limitation, Server Backup methodology.

Dedicated standalone workstation to be provided with each machine which can be configured as an analyst to work with BHS in case of total Matrix/Mux server failure along with all report & image storage (1TB).

This Workstation shall be plug and play for operating the machine in Dedicated / standalone mode in case of emergency.

Image saving capacity of machine in Standalone Mode to be minimum of 14 days / 1TB or whichever is higher.

OEM to share CTX Image Processing Time, Die Back Condition, Idle Mode, Cold Start, Reboot time etc. OEM to share Reset time of machine after fault, failure. Chart for the same needs to be shared. Major faults that can occur along with its rectification time.

OEM to confirm automated Contraband Detection feature availability in the machine.

CTP/IQTK or similar kit to be provided with each machine.

Calibration certificate of IQTK/CTP to be provided.

Vibration dampers to be provided to reduce any machine vibrations.

All consumables, spares are considered in vendors during project & warranty period. Predictive maintenance / condition monitoring system should be included as counteractive measure to reduce downtime of equipment

AERB type approval / Radiation report to be shared

Ups for 30 mins +-5 backup should be provided, in case of power failure system should be configured with UPS to give alarm of power failure on system live dashboard & should safe shutdown by itself to avoid any loss of data.

OEM to share all documents like Technical Manual, PM Checklist, Integration Manual, Critical Spare List etc.

OEM to check & confirm on sufficient space required for maintenance before machine installation.

OEM to provide start-up spare parts kits with machine to avoid any impact on installation schedule.

OEM to share disposal process for the provided machines.

OEM to confirm on usage / requirement of Alignment conveyors and impact on throughput OEM to share drainpipe provision / AC / Exhaust / water requirement along with all technical details (If applicable)

#### System Live Dashboard

Compliant with specifications mentioned in latest BCAS security equipment circular. A Live dashboard should be provided to display real time health monitoring of system. Clear alarm with issue should be available on dashboard to reduce the diagnostic time.

All equipment should be properly mapped in the system.

Live communication with BHS, log event report should be displayed on the dashboard. Predictive maintenance / Condition monitoring should be displayed on live dashboard. Live dashboard should be customizable as to MIAL requirements.

#### **Reporting workstations**

Compliant with specifications mentioned in latest BCAS security equipment circular

Statistics report up to 2 years should be available always.

Automatic uptime calculation of the connected equipment should be available without any manual interference, same should be displayed on dashboard.

Reports should be available in customizable format as specified by MIAL & have provision to make changes as & when required by MIAL.

All Management information system report as per BCAS should be available

All reports should be user / level specific & no consolidation is acceptable.

Color printer (Options should be provided to MIAL for selection) should be provided with each reporting workstation to take print of Bag images or reports.

OEM to share all Timeout types & next level to which image will be sent

OEM to share the Operator Console Photos & details with its life for replacement due to daily use wear and tear.

Time frame for each statistic report should be in duration of 00-01 minutes.

Report should have total baggage time along with individual level decision time & remarks.

Level wise matrix timeout should be available.

TIP feedback report should be available.

OEM to share Log Events, Error Reports, Machine Performance statistics, Generator Replaced Dates from any one Airport where it is already installed

E&M Reports: (E&M Workstation must be Admin access controlled)

Level 3 Mistrack, Generator Hours & Current Status, Machine Status, Machine Failure Alert on Email/SMS, Machine Fault Alert on Email/SMS, Server Status, Server Failure Alert on Email/SMS, Server Fault Alert on Email/SMS, Workstation Status, Workstation Failure Alert on Email/SMS, Workstation Fault Alert on Email/SMS, Stray Bag, Log Events, Error Reports, MTTR, MTBF, Network Status, Network Failure Alert on Email/SMS, Network Fault Alert on Email/SMS, Server Fault Alert on Email/SMS, Network Fault Alert on Email/SMS, Server Fault Alert on Email/SMS, Network Fault Alert on Email/SMS, Network Fault Alert on Email/SMS, Server Fault Alert on Email/SMS, Network Fault Alert on Email/SMS, Server Fault Alert on Email/SMS, Network Fault Alert on Email/SMS, Server Fault Alert on Email/SMS

/ SMS, Blackout Image Alert on Email / SMS, Bag jam Alert on Email / SMS, TIP Status Report, Machine Temperature & Humidity Record, Machine Time Based throughput, Image Low space alert for server setup, CD Writer, USB Access. Same to be configured to be displayed upon the dashboard as required.

#### Level 2A, 2B workstations

Compliant with specifications mentioned in latest BCAS security equipment circular

Programmable analyst time as per BCAS specification

All image manipulation techniques should be available as hotkeys, Configurable via supervisor login

OEM to brief on all Image Manipulation options available for 3D Image like Suspicious item, Slicing, Cropping, Measurement, Zoom, Super penetration etc.

Manual marking of threat object with configurable predefined threats & remarks should be available to reduce decision time & same should be visible across all security levels and can be enabled/disabled as per MIAL requirement.

Each workstation must have indicator for offline or online indication

Each Workstation to be equipped with DVD Combo Writer, Speaker & provision of Image local storage for purpose of TIP / Training.

Should have capability to save images in local drive with minimum of 1000 images. Local storage should not affect the server storage in any way. It should auto delete after storage gets full without manual interference.

Audio beep should be played when new image is available to Analyst

Provision of inbuilt training module in offline mode

Ups for 30 mins +-5 backup should be provided, in case of power failure system should be configured with UPS to give alarm of power failure on individual workstation & should safe shutdown by itself to avoid any loss of decision.

Should have capability to convert 2A workstation as standalone workstation near the machine in case of total matrix/mux server network failure.

Should have provision to configure workstations with specific machines. 1 to 1 configuration or 1 to many within 1 hour.

Summary report should be available after user logout, such as No of accept, reject, timeout bags. Have provision of configuring, enabling & disabling as per MIAL requirement.

#### Level 3, 4 workstations

Compliant with specifications mentioned in latest BCAS security equipment circular A barcode scanner should be provided to recall all images via bag tag / BID / GID

Programmable analyst time as per BCAS specification

Manual marking of threat object with configurable predefined threats & remarks should be available to reduce decision time & same should be visible across all security levels and can be enabled/disabled as per MIAL requirement

Each workstation must have indicator for offline or online indication

All image manipulation techniques should be available as hotkeys, Configurable via supervisor login Each workstation must have indicator for offline or online indication

Ups for  $30 \pm 5$  mins backup should be provided for each workstation, in case of power failure system should be configured with UPS to give alarm of power failure on workstation & should safe shutdown by itself to avoid any loss of decision.

Next bag tag should not be able to scan without decision of previous image, Message for the same should be displayed on screen.

Level 4 workstation should have capability of integration boarding pass number with passenger bag along with SRI.

#### Matrix/MUX server

Compliant with specifications mentioned in latest BCAS security equipment circular

Vendor to consider placement of server number 01 in Terminal 1 MCR 1 & server number 02 in Terminal 2 MCR 2. Approximate distance between both terminals is 6 kilometers

Overall, 100% Redundant Server (S/W & H/W) & 100% Redundant Network Switch with auto switchover & Hot Standby.

Complete details of Server, Make, OS, Architecture, Configuration, Licenses, Applications, Capacity limitation, Server Backup methodology.

Server must have provision of 100% bag screening and should be configurable as per user requirement or regulatory requirement.

Images should get auto deleted after 80% capacity of storage is reached without manual interference.

Image Storage Server Quantity 100000 Bags Per Day in T1 & 14 Days Minimum storage

Vendor to share methodology of image backup to ensure 0% image loss.

Server should not be used for saving any training images on permanent basis.

TIP library to be provided as per BCAS circular, it needs to be upgraded as & when required by MIAL with images provided by MIAL without any additional cost.

Provision to select specific TIP to the individual as per his training needs.

Provision to be provided for updating TIP library with MIAL provided images.

UPS backup of  $30 \pm 5$  mins backup should be provided, in case of power failure Matrix server should be configured with UPS to give alarm of power failure on Matrix server, Dashboard & Reporting workstation & should safe shutdown by itself.

Should have multi-level authentication with proper personal authorization to avoid any security lapse. In case of integrating machine of different terminals, separate grouping / teaming of equipment must be

considered for reports & data analysis Should be compliant with MIAL cyber security standards.

Remote monitoring of server to be restricted & password controlled with authorization from MIAL Admin OEM to support BHS in case of any upgradation of HBS. OEM to have mutual agreement with BHS service partner for complete integration of machines with the objective to achieve <1% mistrack rate & operations.

There should not be any interference of inbound & outbound system. Both should work independently as per defined process

OEM to provide expansion capacity of additional 2 machines & 10 workstations without any hardware modification to existing system.

#### Network switches & IT Cabling

Compliant with specifications mentioned in latest BCAS security equipment circular.

Vendor should consider all active network components, media converters in their scope.

Vendor to provide & install all field switches, media converter & other active components as per site requirement for completion of project.

Switches considered should be capable of future expansion.

Distance of rooms should be considered & no latency/delay should occur during any point of operation during image retrieval.

Passive cabling comprising only CAT6 & fiber will be in MIAL scope. Fiber termination to be conveyed in advance to MIAL.

#### Training

Detailed Technical Training to E&M Team on Inline Machines. (10 members)

#### Storage for New machines

Vendor should deliver material at MIAL provided storage space. Loading, unloading, movement & further movement of material from storage to installation site will be in vendor's scope. The vendor should provide maximum dimensions of boxes.

Storing, removal, & security of the same until handover is responsibility of vendor.

Vendor must ensure security of all equipment till final handover to MIAL.

# Installation of machines include Fixing of machines on mezzanine floor, Testing & integrating with BHS concluding with Final SAT with all stakeholders

To provide detailed plan & sequence of machines to be installed with schedule. Should be strictly adhered. Any shutdown to be informed 48 hours in advance.

Should ensure all necessary equipment for installation of machine are on site.

All permits to be readily available before commencement of work.

Integration document to be shared to BHS team along with Telegram structure.

Future provision for integration of Level 3 XBIS, OOG machines etc. along with existing machines should be considered in the scope.

OEM to share certificates/Test reports of all type of explosive test apart from TSA/ECAC certificate.

In addition to the above mentioned, Vendor scope includes end to end activity from supply, installation, testing, BHS Integration & Commissioning of CTX machines, Level 2A-2B workstations with integrated UPS, Level 3-4 workstations with integrated Barcode scanners & UPS, Reporting workstations with printers & Fully redundant Matrix server.

Vendor shall provide all design, engineering, labor and materials, equipment transport, installation, testing, commissioning, and operational handholding services, as required to achieve the project objectives.

Any interface devices required for integration with BHS to be provided by vendor.

Integration to be done with existing BHS vendor. All requirement to be met with the existing BHS. Vendor should include all the work such as shifting, cutting, drilling, filing etc. which is required for installation of equipment in their scope only with MIAL approval.

Sufficient manpower should be arranged managed by vendor in case 2 or more machines have to be simultaneously installed.

Vendor should acquire required entry permits; work permits before commencement of work.

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This includes all the required material, accessories, labor as applicable quantity in the vendor scope only. Material Supplied for the work will be under vendor custody until final handover of work completion. All the material movement handling and storage will be in the Vendor scope only.

All resources (including dummy bags) required for successful completion of testing will be in the scope of vendor.

Any damage to MIAL/Third party to be recovered from Vendor.

# Drawings

The drawings shall be prepared and submitted by the Vendor for approval. MIAL will approve the drawings incorporating necessary changes for execution.

# Safety

Vendor to ensure all safety & precautionary measures are taken during project execution & later.

# Life Expectancy

The complete system shall have a life expectancy of 12 years. The Vendor shall ensure complete hardware, software, spares, and service support of the installed control System during this period. In the case of the control hardware full forward or backwards compatibility must be assured for updates on hardware and software over time.

# Warranty/DLP

All equipment supplied and installed should have Warranty cover of minimum 36 months. Warranty services must include repair/replacement: Any manufacturing defects, Improper installation, Poor standard of materials used, Color fade and brittleness, any other quality of service or material issues identified by the MIAL. During Warranty / DLP period, Vendor to provide complete service support in accordance to Service Level Agreement (SLA) specified by MIAL.

#### Handover

Final handover of the system in satisfactory condition with 30 days of observation period to check the reports & system availability. Snag list to be completed before final handover.

**Exemption:** Nothing