नवमंगलुरपत्तनप्राधिकरण
NEW MANGALORE PORT AUTHORITY
यांत्रिक अभियंता विभाग
Mechanical Engineering Department
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TENDER NO: NMPA/CME/ 2023-24/RFID   **Date: 08.03.2024**

CORRIGENDUM NO. 2

Sub:-E-Tender for "Operation and Comprehensive Annual Maintenance Contract (CAMC) of the RFID system for a period of 5 years at NMPA" **– Corrigendum No. 2 – Reg.**

Ref:-i) E-Tender Reference No. NMPA/CME/ 2023-24/RFID
    ii) E-Tender Id No: 2024_NMPT_796814_1
With reference to the above E-tender, the following corrigendum has been issued.

SL No	Heading	Clause No & Page No.	Existing	Read as
01	**SPECIAL CONDITIONS OF CONTRACT**	**SERVICE LEVEL AGREEMENT Clause No.4.36, Pg No. 45**	The implemented system performance will be governed by the Service Level Agreement (SLA) format as given below. New Mangalore Port will use the following performance indicators to monitor and evaluate the performance of the System. _See table below_	The implemented system performance will be governed by the Service Level Agreement (SLA) format as given below. New Mangalore Port will use the following performance indicators to monitor and evaluate the performance of the System. _See table below_
02	**SPECIAL CONDITIONS OF CONTRACT**	**Penalty Clause No.4.37, Pg No. 45-46**	**Penalty**: Penalty will be levied if any of the sub-components fails or if the whole RFID system fails. As per clause xix, The downtime will be calculated based on the RFID check list signed by the CISF inspector at the gate for every shift clearly mentioning the down time: **i. Penalty for total system failure:** • If 1 < Dwt <= 4 then P = (Dwt -1) x (1.10 x Y) / (12 x 30 x 24) P:Penalty, Dwt: Cumulative Down time in hours for the month, Y:Amount quoted by the bidder per year	**Penalty**: Penalty will be levied if any of the sub-components fails or if the whole RFID system fails. As per clause xix, The downtime will be calculated based on the RFID check list signed by the CISF inspector at the gate for every shift clearly mentioning the down time: **i. Penalty for total system failure:** • If Dwt <= 4 hrs then P = (Dwt) x (1.10 x Y) / (12 x 30 x 24) P:Penalty, Dwt: Cumulative Down time in hours for the month, Y:Amount quoted by the bidder per year

Existing (SL No 01) table:

Sl. No.	Key Performance Indicators (KPI)	Minimum Guaranteed Performance
1	RFID System Availability	100% at all times
2	RFID system failure	Not more than 1 Hours in 365 days

Read as (SL No 01) table:

Sl. No.	Key Performance Indicators (KPI)	Minimum Guaranteed Performance
1	RFID System Availability	100% at all times

For SL No 02, the penalty equations:

Existing:
$$P = (Dwt - 1) \times \frac{(1.10 \times Y)}{(12 \times 30 \times 24)}$$

Read as:
$$P = (Dwt) \times \frac{(1.10 \times Y)}{(12 \times 30 \times 24)}$$

- If 4 <= Dwt then

$$P = Dwt \ x \ \frac{(1.5 \ x \ Y)}{(12 \ x \ 30 \ x \ 24)}$$

- If Dwt <= 360 then the contract will be terminated and PBG will be forfeited.

ii. Penalty for partial system failure:

For calculating penalty, the system is divided into following sub components:

i. RFID system not working in individual lanes, total 8 lanes presently.

ii. Weighbridge Automation Failure

iii. Failure of capturing data of workers boarding vessel, due to Hardware, Software issue.

$$P = Dwt \ x \ \frac{(1.10 \ x \ Y)}{(12x \ 30 \ x \ 24 \ x \ 10)}$$

Note: i) The no 10 above i.e no of lanes is subjected to change with increase in no of lanes during gate automation in future.

ii.) Part of an hour is considered as one hour.

iii.) If any one component in a lane is not working. It will be considered as RFID system failure in that particular lane.

iv.)If any component in any of the two weigh bridges fails it will be considered as RFID system failure in weighbridge system.

v.)If any component in any of the system for capturing data of workers boarding vessel fails at B.No.2 & 3 then it will be considered as RFID system failure incapturing data of workers boarding system at berth.

iii. Penalty for delay in taking over the RFID system within 15 days from the date of issue of LOA

From 16th day of issue of LOA, Rs.1000 per day for first 5 days, Rs.2000 per day from 21st day to 25th day. Rs.4000 per day from 26th to 30th day. After 30 days, Termination of contract and forfeit of EMD.

iv. Penalty towards short supply of Manpower as per duty Roaster

Supervisor – Two times the Proportionate deduction for each day of absence as penalty upon not providing substitute under similar category.

Data entry staff/Technicians – Two times the Prorata deduction as per

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- If Dwt > 4 hrs then

$$P = Dwt \ x \ \frac{(1.5 \ x \ Y)}{(12 \ x \ 30 \ x \ 24)}$$

- If Dwt >= 360 hrs then the contract will be terminated and PBG will be forfeited and the firm will be blacklisted for a period of 2 years.

ii. Penalty for partial system failure:

For calculating penalty, the system is divided into following sub components:

i. RFID system not working in individual lanes, total 8 lanes presently.

ii. Weighbridge Automation Failure

iii. Failure of capturing data of workers boarding vessel, due to Hardware, Software issue.

$$P = Dwt \ x \ \frac{(1.10 \ x \ Y)}{(12x \ 30 \ x \ 24 \ x \ 10)}$$

Note: i) The no 10 above i.e no of lanes is subjected to change with increase in no of lanes during gate automation in future.

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iii.) If any one component in a lane is not working. It will be considered as RFID system failure in that particular lane.

iv.)If any component in any of the two weigh bridges fails it will be considered as RFID system failure in weighbridge system.

v.)If any component in any of the system for capturing data of workers boarding vessel fails at B.No.2 & 3 then it will be considered as RFID system failure incapturing data of workers boarding system at berth.

vi) During unforeseen breakdowns, the contractor will be permitted a maximum of 15 minutes grace time per instance, subject to not more than 4 such instances per month. If the system is ready and operational within 15 minutes, the penalty will not be imposed. However if the system is not ready within 15 minutes, the penalty will be imposed from the time the system is down, until the defect is rectified.

iii. Penalty for delay in taking over the RFID system within 15 days from the date of issue of LOA

From 16th day of issue of LOA, Rs.1000 per day for first 5 days, Rs.2000 per day from 21st day to 25th day. Rs.4000 per day

			prevailing minimum wages for each day of absence and upon non providing of substitute under similar category.	from 26th to 30th day. After 30 days, Termination of contract and forfeit of EMD. **iv. Penalty towards short supply of Manpower as per duty Roaster** Supervisor – Two times the Proportionate deduction for each day of absence as penalty upon not providing substitute under similar category. Data entry staff/Technicians – Two times the Prorata deduction as per prevailing minimum wages for each day of absence and upon non providing of substitute under similar category. **4.37.1 PLANNED MAINTENANCE:** The contractor shall be permitted to avail maximum of 1 hour planned maintenance downtime in a month. However the same shall be requested during non peak hours of traffic and prior intimation and permission has to be obtained from EIC. If the planned maintenance down time is not availed in a particular month then the same will not be carried forward to the next month and shall lapse for that month.
03	BILL OF QUANTITY PART - III	III. AUGMENT ATION REQUIREM ENT for KK Gate, Sl.No.2, Pg No.86	Face Recognisation Reader, Quantity- 6 Set	Face Recognisation Reader, Quantity - 6 Nos
04	GENERAL CONDITIONS OF CONTRACT	3.49 , TERMINATI ON OF THE CONTRACT , Pg No.39		**Included –** Termination of Contract for Employer's Failure or Convenience / Foreclosure of the Contract by Port: **Termination of Contract for Employer's Failure or Convenience / Foreclosure of the Contract by Port:** After placement of the contract, in case of any unforeseen situations compelling NMPA to cancel the contract, a notice will be issued to the contractor for cancellation of the contract, in whole or in part, for NMPAs convenience, inter alia, indicating the date with effect from which the termination will to become effective. In case of termination of contract for NMPAs

05	Schedule of Tender (SOT) Part – II	Date of closing of e-Tender for submission of Bid.	13/03/2024 at 15:00Hrs	23/03/2024 at 15:00Hrs
		Date & Time of opening of Technical Bids	14/03/2024 at 16:00Hrs	25/03/2024 at 16:00Hrs
06	Scope of Work and Technical Specification	5.4 Scope of Work, 32(i)(ii)Pg No.53		**Included –** Facial Recognition system - Technical Requirements and Features: (Refer: ANNEXURE below)

(continuation of cell above table) convenience, the engineer will certify the value of works executed, value of any materials lying at site, reasonable cost of removal of equipment, repatriation of project staff, cost of protecting and securing the works and deducting from it: (i) pending advances; (ii) other recoveries; and (iii) Taxes as due

All other terms and conditions mentioned in the tender remain unaltered.

Executive Engineer (Elec.)

NMPA, Panambur.

		5MP IP BASED BULLET VARI-FOCAL CAMERA		
SL NO	PRODUCT	DISCRIPTION	COMPLIANCE	DEVIATION IF ANY
1	Image Sensor	1/2.8" Progressive CMOS or Better		
2	Max. Resolution	2560x1920 (5MP) or better		
3	Lens Type	3.2~10mm (3.1x) or better, motorized Vari-focal for facial recognition.		
4	Iris-Type	Auto Iris		
5	Day/Night	Yes with IR Cut filter		
6	Pan/Tilt/Zoom Functionalities	required		
7	IR Illuminators	Built-in IR illuminators, effective upto50 meters or better		
8	On-board Storage	Slot type: MicroSD/SDHC/SDXC card slot		
9	Video Compression	H.265, H.264		
10	Maximum Frame Rate	4 MP or better @ 30 FPS / 2 MP or better @ 60 FPS		
11	S/N Ratio	50 dB or better		
12	Dynamic Range	110 dB or better		
13	Video Streaming	Adjustable resolution and quality		
14	Image Settings	Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight		

		compensation etc.		
15	Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, SNMP, 802.1X, UDP, ICMP,		
16	Interface	10 Base-T/100 Base-TX Ethernet (RJ-45)		
17	ONVIF	Supported		
18	Video Motion Detection	Motion detection, human detection, time filter		
19	Analytics	Intrusion detection, loitering detection, line crossing detection, unattended object detection, missing object detection, face detection, running detection		
20	Alarm Triggers	Motion detection, system boot, recording notification, camera tampering detection etc.		
21	Connectors	RJ-45 cable connector for 10/100Mbps Network/PoE connection		
22		DC 12V power input		
23	Casing	IP66, IK10 (Metal Housing) or better		
24	Text Overlay	Date & Time and a customer specific text, camera name , etc.		

IMP: All the above-mentioned technical specifications are mandatory requirement.

Facial Recognition system - Technical Requirements and Features:	Compliance
A. General Description	
(i) The facial recognition system shall automatically detect all faces passing through the camera field of view in real-time and live video.	
(ii) The facial recognition system shall allow detection and recognition of moving and distant faces under extreme angles of view and lighting conditions	
(iii) The facial recognition system shall recognize a person of interest using a single reference image.	
(iv) System should be able to integrate with IOT devices to raise sound based alert messages	
(v) System should allow verification of faces of persons at the time of crossing the entry/exit gates on the basis of the facial analytics.	
(vi) The facial recognition system shall allow Configuration/ registration of Men permit applications with the facial analytics captured through photos from IP cameras, physical copy of photograph, photograph captured using a webcam, photograph captured using a mobile camera or any other camera, photograph received on mobile through WhatsApp or any other manner as well as from USB camera devices connected to a PC.	
(vii) The facial recognition application shall be compatible with mobile application and PACS (cloud based) for uploading of photos, registrations of users, verification, and approvals.	
(viii) Facial recognition system should display both faces available in the system and being captured by Face recognition camera at gate. In case of successful verification, the indication such as green tick should be displayed. In case of failure indication such as Red Cross should be displayed. The accuracy of system for detection/identification of registered users shall be more that 98.5%. Detailed functionality shall be shared at the SRS stage.	
(ix) The facial recognition system shall allow the assignment of one or multiple watchlists to each camera and the assignment of one or more cameras to a watchlist.	
(x) The facial recognition system shall generate a real-time visual alarm following detection or recognition.	
(xi) The facial recognition system shall include the ability to export a detailed report of all detected and matched faces based on predefined filters (cameras, watch lists, timeframe) from live, forensic and search modes.	
(xii) The facial recognition system shall automatically generate statistical data (unique appearances and watch list matches).	
(xiii) The facial recognition system provides the ability to interact with the system via RESTFUL API or Open API that is accepted by NMPA.	
B. Camera Management	
(i) The facial recognition system shall support RTSP streaming from any IP or network-based video camera.	
(ii) The facial recognition system shall allow the ability to adjust the analysis quality of each camera.	
(iii) The facial recognition system shall include ability to search for past events by a given image, detection captured by a live camera, snapshot from a connected camera or live stream.	

C. Management & Control

(i) The system shall include the ability to work in a server-client architecture where the client can be installed on a different workstation from the server components and database.	
(ii) The system shall support deployments on premise.	
(iii) The system shall support the ability to manage multiple users in different roles with their own set of permissions and restrictions based on both the app and API usage.	
(iv) The system shall support encryption of data in transit with HTTPS and TLS.	
(v) The system shall support a full audit history of all system interactions	

D. Technology Specifications

(i) The facial recognition system shall recognize persons with changes in facial hair or hairstyle.	
(ii) The facial recognition system shall recognize persons with partially covered faces (occlusions, accessories) - at least 50% of the face exposed.	
(iii) The facial recognition system shall recognize persons with all types of eyewear (including mirror lens).	
(iv) The facial recognition system shall recognize persons in extreme low light conditions.	
(v) The facial recognition system shall recognize moving persons with blurry images.	
(vi) The facial recognition system shall recognize persons under problematic weather conditions (fog, rain, snow).	
(vii) The facial recognition system shall recognize persons when a camera is using infrared (IR) illumination.	
(viii) The facial recognition system shall recognize persons of all ethnicities and skin tones.	
(ix) The facial recognition system shall recognize persons with facial masks or PPE.	
(x) The facial recognition system shall recognize facial images with a vertical rotation (yaw) of -90 to +90 degrees.	
(xi) The facial recognition system shall recognize facial images with a sideways rotation (roll) of -45 to +45 degrees.	
(xii) The facial recognition system shall recognize facial images with a horizontal rotation (pitch) angle of -45 to -45 degrees.	
(xiii) The facial recognition system shall recognize persons through a car windshield or other transparent material.	
(xiv) The facial recognition system shall recognize facial images with 45px ear-to-ear width.	
(xv) The facial recognition system shall recognize persons in full color or monochrome (grayscale) video and images.	

All other terms and conditions mentioned in the tender remain unaltered.

Executive Engineer (Elec.)

NMPA, Panambur.