NOTICE INVITING BUDGETORY OFFERS

Name of Work	"SITC of RFID Gate Access System at new MPA Gate no.9 with two years guarantee period followed by three years of Comprehensive Maintenance Contract."
Date of submission of budgetary quotation	On or Before **18.09.2023 at 11:00 Hrs.**
Address for communication:	Executive Engineer (E-P), Mechanical Engineering Department, Mormugao Port Authority, Electrical Section, 1st Floor, Admin. Building, Headland Sada, Vasco-da-Gama Goa - 403804
Contact Details	Phone : (0832) 2594221, 2594211 Email :xenproj.mgpt@gmail.com
Website	**www.mptgoa.gov.in**

EXECUTIVE ENGINEER (E-P)

MORMUGAO PORT AUTHORITY

MORMUGAO PORT AUTHORITY

ENGINEERING MECHANICAL DEPARTMENT

CME/XEN(E-P)/RFID/49   09.2023

Sub: "SITC of RFID Gate Access System at new MPA Gate no.9 with two years guarantee period followed by three years of Comprehensive Maintenance Contract.**"**

Ref: Budgetary Quotation No. CME/XEN(E-P)/quotation/2023/09

Mormugao Port Authority intends to carry out the work of "Supply, Installation, testing & commissioning of RFID Gate Access System at new MPA Gate no.9 with two years guarantee period followed by three years of Comprehensive Maintenance Contract**"**. As such, kindly furnish the budgetary quotation for the same (Scope of work enclosed as Schedule - 'A' and Price Schedule enclosed as Schedule - 'A1'.

Your budgetary quotation should reach to this office on or before

18.09.2023. Thanking you,

Yours sincerely,

EXECUTIVE ENGINEER (E-P)

TECHNICAL SPECIFICATION

1.0   General :

Mormugao Port Authority intends to take up the work of Supply, installation, testing & commissioning of RFID Gate Access System at new Gate no.9 & Gate no. 1, with two years guarantee period followed by three years of Comprehensive Maintenance Contract.

2.0   SCOPE OF WORK:

Introduction:
There are 4 lanes for Entry & Exit of vehicles (Two for ENTRY and Two for EXIT) and accompanying persons at the proposed vehicle access Gate at new gate no.9 / Toll Plaza MPA and a bi-directional IN/OUT at Gate No.1. The proposed facility will facilitate the movement of around 1000 plus vehicles along with accompanying Driver and helpers. The scope of the work will include providing Gate Pass to all users and vehicles as per the requirement.

Existing System Overview & Requirement
Presently MPA has implemented an RFID (Radio Frequency Identification) based Pass system and the same has been running since 2017 to till date, i.e. 7th year running.
The present scope of providing gate access will include design, supply, implementation and maintenance (2 years of guarantee period followed by three years comprehensive maintenance contract) of RFID gate access system at the TOLL PLAZA and Gate No.1 of MPA as per technical specifications.
Manpower support for maintenance has to be provided at site for round the clock operations.
The proposal calls for maintenance of the HEP Pass system along with supply of peripherals as mentioned below in the document.
The broad requirement put forward will include:
Must have a centralized database of all Users/ Visitors / Pass Holders
Should have a HEP (harbor entry permit) management system with ANPR for vehicles & Photo recognition for personnel. The system should be such that all movements can be tracked and seamless.
The system should have a provision to renew/extend the existing vehicle pass which have been restricted for EXIT on account of overstay, with simultaneous auto-reminder POP-UP message sent to the User login screen / email ID.

Scope of work

The proposed scope of work under this RFP will result in implementation of turnkey online fully automated system which will:
-     Significantly enhance the security at gates of the Port
-     Automate and speed up movement within the Port.
-     Control and limit access to authorized personnel at the Port
-     Track movement of persons, material, and vehicle across the Port
-     Trace movement and provide alert.
-     Record all movement of man, material and vehicle and provide historical audit trial.
-     Prevent revenue leakage.
-     Satisfy ISPS code compliance parameters.
-     User in web-based vehicle passes generation.
-     Integration with ANPR for easy access to all types of vehicles.
-     Integration with weighbridges, SAP system of the Port.
-     Integration with handheld readers.

The scope of the online Portal

Objectives:
   a) Providing easy, anywhere, and anytime access to MPA services (both information & transaction) to ensure reliability, efficiency, transparency, accountability & validated access.
   b) Efficient delivery of MPA services with faster turnaround time
   c) Reduce stake holders visits to MPA for availing services.
   d) Faster movement of Man, Material & vehicle
   e) Capacity building and training stake holders and MPA officials

Port Access Control System (PACS) Software
   PACS shall be required to be operated through a centralized software catering to the following requirements –
   a) Registration/ Deregistration of Firms and personnel.
   b) Application submission/ processing for Permits (personnel, Vehicle and Material)
   c) Identification of personnel through pass / photos / UHF Readers.
   d) Integration with ANPR for vehicle movement
   e) Integration with MPA e-Wallet (for enabling the payment for permit applications and other fees/ penalty)
   f) Integration with Port Operating system
   g) Modernization of Weigh Bridge system to unmanned Weigh bridge and integration with PACS
   k) 24 X 7 Helpdesk support
   l) Adherence to the Service Level Agreements (SLAs)
   m) Hosting and maintenance of the On-premises solution.
   n) Integration with Hand-held readers.

The following categories are prevalent for Harbor Entry Permit:

SL No	USER TYPE	DESCRIPTION	APPLICATION ACCESS
1	REGISTERED COMPANIES	Port Users who need to visit the Port for various activities on a regular basis.	1. REQUEST FOR PERSON – permanent users 2. VEHICLE/PERSON - ANPR/RFID PASS – Daily Users 3. PARKING PASS - both
2	DEPARTMENTAL PASS (Multiple users in single Pass)	Sub-contractors, vendors, students etc need to enter the Port for various purposes. Departments shall initiate the pass request based on their requirements.	1. VEHICLE - ANPR 2. PERSON 3. PARKING PASS - ANPR
3	PPP Operators	PPP Operators shall initiate passes for their Sub-contractors, vendors, cleaners etc.	1. REQUEST FOR PERSON Passes 2. VEHICLE: ANPR
4	USER PASS	Person or vehicle who is not registered with the port and who need to visit the port on a rare occasion.	1. VEHICLE - ANPR 2. PERSON
5	REQUEST APPROVER;	The pass section shall verify and approve request such as Company	1. Company Registration Approval

		registration, Pass approval, Card Issue etc.	2. RFID Card Issue 3. Pass approval 4. Change approval 5. Pass issued reports 6. Penalizing /Backlisting
6	SECURITY AGENCY/PORT LOGIN	Security can review the Person/Vehicle Movement and cargo movement at the Gates.	1. GATE IN/GATE OUT Reports 2. GATE IN/OUT with CARGO Report 3. Already IN or Already OUT message report 4. Number of Person/Vehicle
7	ADMINISTRATOR; Traffic and Finance Department	Port officials need to allow & review the performance and monitor the harbor entry/exit of person/vehicle. Port officials can generate various reports to view various performance parameters.	1. Pass Approval 2. All Reports – Pass Issue, Gate Entry/Exit, Cargo Linked, Revenue etc. 5. Hot listing /Backlisting

I.   Proposed System:

The proposed solution will be an integrated intelligent solution comprising of the following sub systems:
1. UHF (Ultra High Frequency) based passes for personnel, Worker, Drivers, Visitors and all other port users
2. RFID/ANPR Tagged Entry & Exit of vehicles at the Port.
3. Pass holder photo and details capturing of all port Users.
4. Online web-based Pass issuance Request system
5. Simplified system using email, SMS etc
6. ANPR based tracking for Vehicles within the Port gates and scalable within the Port premises.
7. Live control Room for round the clock tracking.
8. Distributed architecture
9. Archival and retrieval system
10. In built personnel Pass generation system
11. Integration of Payment Gateway with preferred bank for cash less transactions
12. E- wallet for hassle free transaction

II.   Web Based Pass Generation System:

MPA proposes to provide state of Art web-based Pass generation module with the following General features:
-    Online web based pass generation module.
-    Login feature for Proposers - so that they can login to upload the relevant details as required by MPA from any location of their choice based on User rights.
-    Pass generation module with provision of capturing Photo and signature at the MPA gate along with issuance of thermal label pass for spot verification based on scrutiny of documentation submitted by Port Users, by Traffic Dept. Authorities.
-    UHF Readers will be used for capturing the actual check In & OUT time at the Port gate. The validation shall be done through credentials displayed on TV screen.

- The ANPR based access will capture actual check In & OUT time of the vehicle at the Port gate. The validation shall be done through credentials displayed on TV screen.
- The same will be used to calculate the user fee for Port usage.
- The solution should be smart enough to verify the data already available in the database.
- The Pass generation process should have the following flow:
  A) It should be web based and should have provision to create any number of users on line
  B) Every User should have their unique Username and Password
  C) Using the same, the User should upload all relevant details like vehicle FC, PUC, RC, Driver details, Helper details along with details like Vessel, likely loading or unloading date, cargo type etc. as requested by MPA in the portal. The User should upload all relevant details at their end.
  D) Once the data is uploaded, suitable counter foil will be generated with a unique ID.
  E) At the gate, the Pass section should be provided with a PASS Issuance Module again web based, which will have provision to capture the Photo of Driver/ helper etc. along with signature if required. All other relevant details should be available from the data entered by the User. On verification, the Pass section will issue a thermal label pass with photo and other details while activating the tag for vehicle and photo for the driver & helper
  F) The ANPR will automatically pick up the vehicle data and the data of the driver & helper shall be picked by the UHF Readers placed at suitable height for easy access. On validation it will provide access to the vehicle and users.
  G) On exit the same ANPR & UHF based system will be available. The system will check for overstay and allow Exit in case found suitable. For Overstay the system will automatically calculate the user fee based on the slabs already fed into the system and if found to overstay will facilitate the extra amount should be paid before releasing the vehicle/ User
  H) The User should have provision to pay the fees vide Banking facilities or e- Wallet. The software should have both these options.
  I) The entire data thus generated should be available at the DB (Database) for historical audit trail. The backup data shall be furnished to Port (IT Cell/Finance department) on the first working day of every month.
  J) Customized reports shall be made available to MPA as and when sought.
  K) Distributed architecture with a local server available at each pass issuance center along with apt central server with proper backup.
  L) The master DB should have 99.99% up time with active failover configuration.
  M) Mirroring of master DB is mandatory.
  N) All data should be available for a particular period as desired by MPA.
  O) In future it should have Kiosk based self-generation integration as well.
  P) It should have provision to configure multiple types of Passes like daily, Weekly, Monthly, Yearly and Permanent along with date bar

Types of Passes:
  1.) Temporary and
  2.) Permanent: passes valid for above 6 months

Passes for Persons
  1. Regular workers – Contractual
  2. Visitors
  3. Drivers
  4. Helpers
  5. Passengers

The Vehicle Passes will be of the following types:
1. Commercial vehicles
2. Inter carting Vehicles
3. Private vehicles
4. Equipment's

The Port areas will be classified into:
1. Barge
2. Launch
3. Berth
4. Storage Area
5. Canteen
6. Admin. Area
7. Container yard
8. Miscellaneous areas

The Types of Port Entry permit (Temporary passes) will include:
1. Daily
2. Weekly
3. Monthly

Port Permit Quota Allocation.
1. Traffic Department will have provision to allot quotas for all Registered Companies for Limit of Vehicle Pass, User Pass and Driver Pass.

2. Quota Allocation for Vehicle Pass.

3. System to maintain the changes in quota allocation details.

4. System should have provision to add, block, hold & delete Pass/Users for both vehicles and Pedestrians.

Account Recharge
Upon successful registration of Company/User, Payment Wallet will be activated by the system. In which user must maintain the minimum required balance to take advantage of Port-related services. It will be required for obtaining Permit issuance for his employee, vehicles, and Drivers etc. It can be additionally used for payment of any penalties if any.
The company will have a provision to load money onto his wallet by paying through payment Gateway or through SAP system. It will have further provision to carryout Transaction wise wallet deduction for online booking of Tickets. Penalties, if any should be clearly intimated to the company officially.

Request for Card Details – Process flow
1. User Code (Auto Populated)
2. No. of Persons
3. No. of drivers/helpers
4. No. of vehicle
5. Reason for visit inside the Port
6. Pay through e wallet

Pass Rate Master
In system there will be a provision to keep pass Rate Master based on following criteria

1. Pass Type
2. Rate Per Unit
3. Net Rate

4. GST
5. Gross Rate
6. Tax if any

Approval/Rejection/Modification of Pass Request
Port officials will accept or reject the Pass request or modify the number of Passes to be issued.

Payment
Payment to be deducted from User wallet/card or net banking option as per payment portal available with Port.

Payment Confirmation
Payment confirmation should be provided by the solution to the user on successful completion of payment.

Issuance of Pass with Unique Number
Upon confirmation of payment, Unique Pass number is assigned to the user. The validation will be based on scrutiny of documentation submitted by User, by Traffic Dept. Authorities.

Report of Loss Pass or Suspension of Pass Request
User will login with valid credentials and by selecting the Pass number, generate request to report loss of Pass.

Vehicle and User Entry Pass Application
This functionality will be used by the registered companies, PPP Operator, User and Port Departments for the request and issuance of Pass. Once the Individual is registered in the system/authorized to use the respective form, they can request for Port entry permit for User or vehicle. Based on the quota available.

Identification
When user request for pass, following details should be entered by individual based on configuration in the system for each pass type and User type.

Individual Pass	a. Aadhar Card Number
	b. Secondary ID like PAN or DL (Driving License) for Locals
	c. Passport and its Visa validity (Based on Duration of pass) for Foreigners.
Driver Pass	a. Aadhar Card Number
	b. Driving License Number
	c. PVC and its Validity (based on Duration of pass)
	d. Other information (Company details, pass validity etc.)
Vehicle Pass	a. Vehicle Number / ANPR No
	b. RC, PUC, FC documents with validity
	c. Insurance Details with expiry
	d. Other information (Company details, pass validity, cargo details etc.)

1. Pass Period

The user shall select the pass start date time and shall select either select number of days/month/year or the end dates. Based on the days selected, the rates are calculated as per the rate master and displayed to user. The rate master shall be visible to user via hyperlink.
As default, the pass shall expire the next day or 24 hrs time bound or as decided by MPA.

2. Rate Master

Rate Master Table

1. It will allow Port officials to decide & update the rate master as and when required

2. Rate validity from / to date will be maintained in the system, Rates as those decided by MPA.

3. Other Validations:

1. Once the application is submitted, the user can view the summary of the pass request with List of Name of the entities requesting pass and if the details are correct, user can submit for Port approval; else return to pass application screen. This feature aims to reduce the manual errors while entering vehicle numbers/ Person details.

2. System will store RC Book Validity, Fitness Certificate (FC), Pollution Under Control Certificate (PUC) and Insurance and also validate the expiry date.

3. System should issue the pass within the validity period of PUC, FC & RC period. System should have the provision to update the RC Book, Insurance details for the already issued pass, if it is expired, with the approval of Port Officials. The pass shall be suspended till the time the valid document is not uploaded. The prompt message and notification for updating the documents will be generated at least 1 week in advance. The reason for suspension of pass can be viewed while scanning the pass, while displaying on TV the date of expiry of particular document (FC, PUC, RC). This suspension should be a configuration in the system if Port want to allow the vehicle or stop the auto suspension.

4. System should not allow to issue new pass for same Aadhar Number/Vehicle number which is already having a valid Pass.

5. If any pass is requested for 7 days or more PVC (Police Verification Certificate) Document should be mandatory in the system.

III.   Request Approval

A.   Vehicle and User Entry pass Approval.
For User / Vehicle Pass approval process will be done based on configuration.
1. For registered users, the identification documents of individuals and vehicle whose configuration documents have to be verified and accepted by the Port.

2. Location based entry shall be approved by the Port.

3. For Foreign National Pass approval is required. No auto-approval is allowed.

Traffic officials and permit section can see the pass request along with the documents uploaded. If all the details are correct, they will approve the pass otherwise pass will be rejected with Reason for New User.

Once the pass is approved by the Port, the registered users will receive the Pass confirmation over mail.
There shall be a provision for pass approvers to search for number of passes issued by the company for any given organization and date time.

B.   Payment details
If Pass is selected as Non-Chargeable then payment details will not be checked and printout of pass will be allowed. RFID linked passes also shall generate a digital bill containing the photo and pass start and end dates.
For all other passes upon submission of pass details system should deduct the payment automatically from Wallet / generate payment link to make the payment by requesting party. And charges will be applied as per rate master. Integration with payment gateway is under the scope of HEP.

On basis of these the further activities are taken place i.e. pass issue data will be sent to allow entry/exit in port premises.

IV. Entry Permit Process steps :

1) Submitting User Entry Permit Request through Portal\HEP.
2) Rejection / Approval
3) Renewal/extension Request submission
4) Cancellation Request submission
5) Penalizing/Blacklisting of Vehicles/Individuals/Firms: Blacklisting details will be received from competent authorities and based on that the Vehicle/Individual/firm will be blacklisted. The blacklisted vehicles will be released as per the approval of competent authority, for vehicle necessary penalty charges will be collected.

6) **Release of Blacklisting of Vehicles/Individuals/Firms:** At the time of release of blacklisting, payment check has to be made before releasing of vehicle/individuals/firms

V. Dashboards, Software Modules and Reports

i. **Dashboard:**
Dashboard shall be available to each of the user categories.

a) Traffic Manager

b) Traffic Department Operator

c) Card issuing DEO &

d) Port Users

ii. SOFTWARE MODULES:

Vehicle Permit (Day/Week/Month/Year)
Men Permit (D/W/M/Y)
Material Permit-Export Cargo
Material Permit-Imports Cargo
Material permit- Engg Material
Free Permit Men & Vehicle
Payments-E-Vallet, Gateway
Penalty Functionality
Blacklisted firms
Help Desk - Optional
Integration to POS functionality (import/export data)
Registration of Firms & Employees
Mobile - APP for PACS
REPORTS

RFID Handheld Application
SAP & Third party application integrations
Weigh Bridge integration

iii. REPORTS

Various reports shall be available to the Pass Approver, Administrators and Security Logins to monitor and regulate the performance of Harbor Entry Permit.

The following Reports will be offered under the scope of HEP:

Sl.no	Report Title
1	Gate In/Out Report
2	Registered Person Expired Report
3	Registered Person Report
4	Pass Last Issued Report
5	Revenue Report
6	Total Pass Issued Report
7	Pass Approval Report
8	Type of Pass Issue
9	Long validity Pass Status Report
10	Gate Wise In/Out Summary
11	Gate Wise / Lane Wise In & OUT Report
12	Gate Lane Wise In/Out Summary
13	Revenue Report Summary
14	Registered User
15	Default / Overstay Vehicle Report

Note: the above reports are suggestive only. Additional report generation if required shall be provided by the Contractor during the validity of the contract.

iv. THIRD PARTY INTERFACES REQUIRED FOR HEP OPERATIONS:

SN.NO.	APPLICATION	INTEGRATION
1.	PAYMENT LINKS	BANK PAYMENT GATEWAY
2.	EMAIL	EMAIL SERVER LINK
3.	SMS	SMS GATEWAY
4.	ACCESS CONTROL	ACCESS CONTROL INTEGRATION
5.	EMPLOYEE MASTER	HR PORTAL
6.	DISPLAY	DISPLAY SERVICES
7	FINANCIAL MODULE	SAP / ERP INTEGRATION

MPA will help with the above co ordinations and arrangements. Apart from above, any other applications / integrations which may be required in future may have to be carried out by the Contractor without any cost implications to Port.

XI. Logical Architecture

As indicated at Annexure-I.

XII. TENDER SPECIFIC FEATURES & COMPLIANCE
A) Gateways

The relevant interfaces to communicate with 3rd party gateways will be developed
and deployed.

- Web gateway with necessary security features.
- SMS gateway – only authorized third party SMS service providers will be used.
- SMTP gateway will have all security features.

B) Presentation layer

The public facing web portal will have personalization features to show what is relevant to
the user roles. Be it public, agent, employer, govt official etc. All the messages and user
info will displayed based on the content expiry and user rights. In addition, CAPTCHA
based authentication will be provided for all public static images will be cached for better
response time.

C) Security Layer and Strategic control

The solution will be based on role based security control and resource level controls for
sensitive data. A detailed & customized security layer will be a part of the deployment post the
information gathering phase with MPA is completed. The security layer will be designed in line
with the Port requirement and also keeping the best industry practices & standards.

D) Data layer

The solution will include relevant data store and management mechanisms for
Storing different type of data. Be it documents storage, large dataset for Reporting or
content management. The data related features are enumerated below:

SL No	Data Type	Storage & backup
1	Web App	Cloud
2	DB	Cloud including redundancy
3	Mobile app	Cloud
4	Access data	Cloud & Local
5	Vehicle & Pedestrian Details	Cloud & Local
6	Log	Cloud – for cloud app Local – for local access control app

E) Monitoring Services

All suitable monitoring services will be provided as per the tender requirement:
  i)   For access control: all reader/ camera related data will be provided on the live view
          monitor.
  ii)   The dashboard will have auto trigger in case any camera/ reader is not syncing with
          details like last synced time.
  iii)   Data sync view option will be provided for Live dash board with ANPR, network &
          camera related option will be provided for Remote trouble shooting option will be
          provided for Data Log for all software changes/ operator changes and software health

status will be provided for the ticketing system will be inbuilt for single point support services.

iv) DB sizing and monitoring will be a part of the standard package.

F) Architectural requirements

i) All the architectural requirements including scalability, interoperability, performance. requirements are fully complied to handle increased user base subject to Server & Storage capacity.

ii) Data store etc. for interoperability the solution will have adequate API based integration.

iii) SAP, Payment Gateway, SMS, Email integration along with ANPR, UHF & Weigh bridge integration will be achieved at the local level.

iv) Integration with ANPR, Umang, e-VAHAAN, AADHAR & ULIP can be achieved at the cloud level provided MPA provided the connectivity for secured running of the solution

G) Server requirements
Suitable server for local access control will be provided at site.

i) Redundancy N + 1 will be made available with respect to hosting all critical components including Web App, Mobile App, DB and DNS in high availability mode. Also the system will be deployed with both horizontal scalability such that any increase or decrease of the server requirement can be achieved without any major change. Similarly, the vertical scalability of cloud server in terms of core, DB and RAM will be provided.

ii) Server sizing will be arrived at after the technical requirement are frozen however the suggested server specs are provided below:
     i. Central Server
     ii. Local Server

H) Security Certificate requirements
All the machine level, application level and infrastructure security concerns will be addressed. Application will be fortified with industry standard user access policies and address major vulnerabilities. As a part of the solution third party VAPT (Vulnerability Assessment & Penetration Testing) certifications will be carried out before handing over.

I) Host based security requirements:
A detailed document will be provided related to host-based security in consultation with MPA and as per industry standards. However, the below basis scopes will be covered under this proposal:

1. Install and configure a host-based firewall – MPA scope.
2. Provide SSL certificate for all web hosted applications.
3. Choose good passwords for any accounts on the system and change any default or well-known accounts on the machine.
4. Install and keep up with operating system patches and also hardware firmware patches.
5. Configure and continue to monitor logs on the device.
6. Disable services and accounts which are not being used or are no longer necessary.
7. Replace insecure services (such as TELNET, RSH, or RLOGIN) with more secure alternatives such as SSH.
8. Restrict access to services which cannot be disabled where possible.
9. Make and test backups of the system in a consistent manner.

J) Photo Detection Services:
As a part of the proposed solution ANPR & photo data will be encrypted and not only be stored

in the local DB but will also be available on the central server as well as in APP Server.

K) Training requirements:
MPA stake holders will be trained adequately to monitor, use and reporting of the proposed solution in compliance with the tender requirements.

Other Conditions:
1. The Contractor is required to offer rates as per Port's format "Schedule-A1".
2. Technical and Commercial condition shall be clearly furnished in the quotation.
3. The rate should be quoted as per unit.
4. GATE PASS: Necessary Entry Permits shall be obtained by the Contractor at their own cost.
5. The Contractor must comply with the Safety aspects as governed by the relevant edition of Indian Electricity Rules and Industrial Safety, the contractor shall be responsible for overall safety.
6. **The Tenderer shall inspect the site and assess the requirement before furnishing their offered**.
7. Issue of Radio Frequency Identification (RFID) (ISO certified) cards with pre-printed format on front side and other details on back side with terms and conditions (as advised by Port). The cards supplied shall be with the holder and lanyard (Print having MPA logo).
8. Manning at the TOLL PLAZA Admin Office, for issue of dock entry permits for individuals/persons and vehicles round the clock (24X7) and at Harbour Entry Permit (HEP) Section from 0900 to 1700hrs on all Port working days throughout the year.
9. Providing necessary equipment's and accessories as required at Entry/Exit Pass issue gate offices.
10. The premises at TOLL PLAZA and HEP including electrical fixtures, furniture's, fans and Air conditioners will be provided by the Port free of cost. The electricity shall be supplied by the Port free of cost.
11. The work mentioned is illustrative and not exhaustive and tenderer may have to carry out any other work related to issue of permits which are not included herein above. The entire work shall be done on turnkey basis and it shall be operated round the clock. The required manpower for the contract period shall be supported by the Bidder. Any technical manpower required by the tenderer including IT support executive, machine/show card, repair technician etc. shall be provided by the tenderer.
12. As and when the passes are issued, the soft copy of the details shall be uploaded / updated to the server through the network connectivity provided by the Port. The number of passes issued in each category will be arrived based on the number of records transferred to the Port's server.
13. All the hardware supplied must be in sound and good working conditions and manufactured on or after 01.04.2023.
14. *All the cost of the hardware, software and allied equipment's & spares, operation and maintenance shall be borne by the successful bidder.*
15. The successful bidder shall maintain and upkeep all the hardware and software etc. as may be required for 24 hrs round the clock operations at Port at his cost and risk.
16. The successful bidder shall also be required to arrange for the integration of the software with any other software that is presently in use at MPA or would be installed at a later date at no extra cost.
17. The successful bidder shall conduct and impart necessary training to the Port staff/officers for the operation of the RFID system.

18. At the end of the period of contract, all the equipment, software, hardware, etc. under this tender shall be handed over to the Port on as is where is basis in good working condition.
19. The hardware and software, including the source code and all related licenses thereto shall be under the ownership of the Port. The bidder shall obtain third party licenses or such other certification/documentation required for the purpose in the name of the Mormugao Port Authority.
20. A provision should be made for integration of Port's existing RFID system with Indian Port Association (IPA) as and when the pass issue data and activities are required to be centrally pooled, if required.
21. The successful bidder shall be responsible for insurance of all the manpower (health insurance) & hardware supplied and installed by vendor for risk coverage (accidental hazards, death & disability of person, material breakage due to negligence, theft, storm, fire or any other hazards which may occur due to trespassing of vehicles & /or natural adverse climatic conditions and calamities-War, Fire, Cyclone, salinity problems at shore etc).
22. In addition to the above, the successful bidder shall ensure that necessary replacement/upgradation/integration of hardware and software, as may be required for the successful implementation of this project, from time to time.
23. The successful bidder shall commission the RFID system and all other works as required under this tender, within 45 days from the 7th day of issue of LOA. The successful bidder shall conduct a trial run of the RFID system, 07 days before the go-live.
24. The period of contract shall be : two years guarantee period from the date of commissioning of RFID system followed by three years CMC period.
25. The Contractor shall keep in readiness the spares required for immediate replacement as required during the validity of the contract.

STANDARDS and CODES

The design, manufacturing, supply, installation, testing and Commissioning of the accessories covered in this specifications shall comply with relevant IS standards with latest amendments / BUREAU OF INDIAN STANDARDS (BIS) and shall be UL/CE and FCC Certified.

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PRICE SCHEDULE (BILL OF QUANTITIES)

Sr. No.	Description	HSN/ SAC Code	Unit	Qty	Rate (Rs)	Amount (Rs)
A.	**SITC of RFID Gate Access System at Toll Plaza, MPA**					
1.	Supply of Boom Barrier System		Nos.	6		
2.	Supply of LED Display		Nos.	6		
3.	Supply of APNR Cameras		Nos.	6		
4.	Supply of Card Reader System		LS	1		
5.	Supply of 3 KVA UPS		Nos.	2		
6.	Supply of Miscellaneous (Cables, poles etc.)		LS	1		
7.	Supply of Hardware for Pass Issue System		LS	1		
8.	Handheld Readers		Nos.	3		
9.	Providing Software & License		LS	1		
10.	Installation, testing and commissioning of RFID gate access system		LS	1		
11.	Supply of Pre printed RFID Cards		Nos.	10000		
12.	Supply of UHF Tags		Nos.	10000		
13.	Supply of Card Holders + Lanyards		Nos.	10000		
			Sub-total 'A'			
B.	**Manpower requirement**					
1.	Data Entry Operators at Toll Plaza		No.	5		
2.	DEO at IHEP & Gate no.1		No.	2		
3.	Project Incharge (Technical)		No.	1		
			Sub-total 'B'			
C.	**Comprehensive Maintenance Contract (after two years of GP)**					
1.	1st year		months	12		
2.	2nd year		months	12		
3.	3rd year		months	12		
			Sub-total 'C'			

TOTAL AMOUNT (A+B+C) (Exclusive of GST)	

Total (In Words)

Rupees_____only.

Date: **Signature:**

Place: **Name:**

                                                      Address:

                                                      Office Seal of firm

Note: The rates quoted shall be inclusive of transportation, lodging and boarding, out-of- pocket expenses (OPE) on conveyance, communication expenses, 3rd party expenses and subsistence expenses on site but exclusive of GST. Applicable GST shall be paid extra as applicable**.**